City of Salinas

COMMUNITY PLANNING & DEVELOPMENT * 65 W. Alisal Street * Salinas, CA 93901 * (831) 758-7206 * Fax (831) 758-7215

MEMORANDUM

DATE: April 29, 2008

TO: Responsible Agencies, Trustee Agencies and Involved Federal Agencies

FROM: Courtney Grossman, Planning Manager

SUBJECT: Notice of Preparation (NOP) of a Draft Environmental Impact Report for the Salinas Ag-Industrial Business Park Project and Notice of Scoping Meeting.

Attached you will please find a Notice of Preparation and Initial Study for the Salinas Ag-Industrial Business Park project. Due to the time limits mandated by state law, your response must be sent at the earliest possible date but not later than thirty (30) days after receipt of this NOP.

As indicated in the attached NOP, the City of Salinas will host a public scoping meeting on Friday, May 23, 2008 at 1:00 p.m. at Salinas City Hall, West Wing Conference Room, 200 Lincoln Avenue, Salinas, California.

If you have any questions, please contact me at (831) 758-7206.

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NOTICE OF PREPARATION

DATE: April 29, 2008

TO: Responsible and Interested Agencies

FROM: City of Salinas

SUBJECT: **Notice of Preparation (NOP) of a Draft Program Environmental Impact Report (EIR) for the proposed Salinas Ag-Industrial Business Park. The EIR is also being prepared in support of the City of Salinas' proposed applications to the Monterey County Local Agency Formation Commission (LAFCO) for a Sphere of Influence Amendment and Annexation as discussed herein.**

The City of Salinas needs to know the views of your agency as to the scope and content of the environmental information that is relevant to your agency's statutory responsibilities in connection with the proposed project. Your agency may need to use the EIR prepared by the City (Lead Agency) when considering agency actions in connection with the project.

The City of Salinas (City) will be the Lead Agency and will prepare an EIR for the project described below. The City has determined that the probable environmental effects of the project include, but may not be limited to, loss of prime farmland, traffic and transportation, air quality, cultural resources, hazardous materials, aesthetics, geology and soils, drainage and water quality, water demand, wastewater generation and treatment, and public services. The final determination of environmental issues to be addressed in the EIR will be resolved as a result of this NOP and consultation through a public scoping process.

The project description, location, and the potential environmental effects are contained in the attached materials. A copy of the initial study is attached.

Due to the time limits mandated by state law, your response must be sent at the earliest possible date but not later than thirty (30) days after receipt of this NOP. All written public and agency comments should be directed to the City of Salinas City of Salinas Development and Engineering Services Department, Division of Community Planning and Development, c/o Courtney Grossman, 65 West Alisal Street, Salinas, California, 93901 (phone: 831-758-7206). Please include the name of a contact person for your agency, if applicable.

Project Title
Salinas Ag-Industrial Business Park

Project Applicant
Uni-Kool Partners
Salinas, California

Send Response to:
Courtney Grossman, Planning Manager
Community Planning and Development
City of Salinas
65 West Alisal Street
Salinas, California 93901

Telephone: (831) 758-7206
Fax: (831) 758-7215
Email: courtg@ci.salinas.ca.us

Scoping Session: May 23, 2008 / 1:00 p.m.
Salinas City Hall – West Wing Conference Room
200 Lincoln Avenue
Salinas, California 93901

The scoping sessions will be conducted per Public Resources Code Section 21083.9.

PROJECT DESCRIPTION

Existing Conditions

The 257.3-acre project site consists of three parcels: Assessor's parcel number 177-133-004, 005, and 007. The site is located south of Abbott Street and west of Harris Road. Assessor's parcel number 177-133-004 (about 17 acres) is located within the Salinas city limits. The remainder of the project site is located in unincorporated Monterey County, and outside of the Salinas future growth boundary and sphere-of-influence. The project site is adjacent to the City limits to the north, west, and partially to the east. Figure 1, Regional Location, presents the location of the City of Salinas in the central California coast region. Figure 2, Project Vicinity, presents the location of the project site on the U.S.G.S. map. Figure 3, Aerial Photograph, presents the location of the project site in relation to the City of Salinas, as well as the existing and adjacent land uses (See attached Initial Study for Figures 1-3).

The project site is currently in agricultural production. Lettuce, cauliflower, and broccoli have historically been grown and cultivated on the site. Two residential structures and two detached garages are located at the corner of Harris Road and Abbott Street. Four water wells used in existing farming operations exist along or near the south project boundary. Overhead power lines run along

the entire project frontage on Harris Road and also along a portion of the project's Abbott Street frontage.

Surrounding land uses include Abbott Street, the Union Pacific Railroad, industrial uses, U.S. Highway 101, and agricultural uses to the north; agricultural uses to the south; Harris Road, business park, industrial, and agricultural uses to the east; and an industrial business park to the west.

Proposed Project

The proposed project is an agricultural industrial business park and includes the following required entitlements/approvals:

City of Salinas

- Sphere of influence amendment for ±240.3 acres- APN 177-133-005 (about 180.3 acres) and APN 177-133-007 (about 60.1 acres);
- Prezoning to City of Salinas Industrial-General (IG) with a Specific Plan (SP) overlay;
- Annexation (±240.3 acres) to the City of Salinas - Approximately 65 percent of the project perimeter is adjacent to the existing City limits;
- General plan amendment from Agriculture to General Industrial (17 acres) Assumed uses include agricultural processing, agricultural manufacturing, and agricultural support;
- General plan amendment from undesignated to General Industrial (±240.3 acres) Property is designated Farmlands-40 by Monterey County Assumed uses include agricultural processing, agricultural manufacturing, and agricultural support;
- Permanent zoning to City of Salinas Industrial-General (IG) with a Specific Plan (SP) overlay;
- Specific plan adoption (±257.3 acres);
- Parcel map (6 lots); and
- Site plan review for 500,000 square foot agricultural manufacturing project on about 50 acres.

Monterey County Local Agency Formation Commission

- Sphere of influence amendment for ±240.3 acres - APN 177-133-005 (about 180.3 acres) and APN 177-133-007 (about 60.1 acres);
- Detachment from the Salinas Rural Fire Protection District (240.3 acres);

- Detachment from the Monterey County Resource Conservation District (±240.3 acres);
- Annexation to the City of Salinas (±240.3 acres) - Approximately 65 percent of the project perimeter is adjacent to the existing city limits; and
- Annexation to the Monterey Regional Water Pollution Control Agency (240.3 acres)

Proposed Uses

The proposed subdivision includes extension of existing roads (Burton Avenue and Dayton Street) into the project site, and the creation of six parcels. Proposed uses within the specific plan area would include agricultural processing (preservation, processing, and distribution of agriculture products); agricultural manufacturing (design, manufacture, fabrication, assembly, maintenance and repair of tools, equipment, and vehicles used in growing, cultivating, harvesting, processing, packaging and transporting agricultural commodities and products); and agricultural support (research, design, development, testing, management, and sales). Other non-agricultural related commercial/retail/office businesses may be allowed within the 16.48 acres currently inside the City limits, as well as parcels for public facilities such as water wells and power substations.

Although no application has been received, the City is anticipating an application for development of the first 50 acres (Proposed Parcel F) for an agricultural processing plant, consisting of the preservation, processing, and distribution of agriculture products. Anticipated building area is approximately 500,000 square feet, with a Floor Area Ratio (FAR) of 0.25 and a building height of 50 feet. Approximately 900 employee parking stalls are anticipated.

Maps submitted to the City with the preliminary application materials are attached. The maps present the project boundaries, the existing City limit, and sphere of influence boundary, the proposed City limit and sphere of influence boundary, and a conceptual site plan.

EIR APPROACH

The general approach for preparation of the EIR is to develop a program-level EIR for adoption of the specific plan, sphere-of-influence amendment, annexation, general plan amendment, prezoning/zone change, and parcel map. Within the program-level EIR, the development of 50 acres for the first user, which is anticipated to be concurrently processed with the specific plan entitlements, will be evaluated at a more detailed level, allowing the City to consider approval of the subsequent Site Plan Review.

Attachments: Development Review Application and maps (3-pages)

Initial Study

INITIAL STUDY

City of Salinas
Community Planning and Development
65 West Alisal Street
Salinas, California 93901
(831) 758-7206 (831) 758-7215 fax

1. BACKGROUND

Project Name: Salinas Ag-Industrial Business Park

Project Location: The 257.3-acre project site consists of three parcels: Assessor's parcel number 177-133-004, 177-133-005, and 177-133-007. The site is located south of Abbott Street and west of Harris Road. Assessor's parcel number 177-133-004 (about 17 acres) is located within the Salinas City limits. The remainder of the project site is located in unincorporated Monterey County, and outside of the Salinas future growth boundary and sphere-of-influence. The project site is located adjacent to the City limits to the north, west, and partially to east. Figure 1, Regional Location, presents the location of the City of Salinas in the central California coast region. Figure 2, Project Vicinity, presents the location of the project site on the U.S.G.S. map. Figure 3, Aerial Photograph, presents the location of the project site in relation to the City of Salinas, as well as the existing and adjacent land uses.

The project site is currently in agricultural production. Lettuce, cauliflower, and broccoli have historically been grown and cultivated on the site. Two residential structures and two detached garages are located at the corner of Harris Road and Abbott Street. Four water wells used in existing farming operations exist along or near the south project boundary. Overhead power lines run along the entire Harris Road project frontage and on a portion of the project's Abbott Street frontage.

Surrounding land uses include Abbott Street, the Union Pacific Railroad, industrial uses, U.S. Highway 101, and agricultural uses to the north; agricultural uses to the south; Harris Road, business park, industrial, and agricultural uses to the east; and an industrial business park to the west.

Assessor Parcel Number(s): 177-133-004, 177-133-005, and 177-133-007

Current Land Uses: Agricultural

Surrounding Land Uses/Zoning District:

North: General Industrial, Business Park / Industrial General (IG)
South: Agricultural Land / Farmland-40 (F-40)
East: Agricultural Land, General Industrial, Business Park / Farmland-40 (F-40), Industrial Business Park (IBP), Industrial General (IG)
West: General Industrial / Industrial General (IG)

Lead Agency Contact Person: Courtney Grossman, Planning Manager
Telephone: (831) 758-7206

Project Description: The proposed project is an agricultural industrial park and includes the following required entitlements/approvals:

City of Salinas

- Sphere of influence amendment for ± 240.3 acres - APN 177-133-005 (about 180.3 acres) and APN 177-133-007 (about 60.1 acres);
- Prezoning to City of Salinas Industrial-General (IG) with a Specific Plan (SP) overlay;
- Annexation (± 240.3 acres) to the City of Salinas of approximately 65 percent of the project perimeter is adjacent to the existing City limits;
- General plan amendment from Agriculture to General Industrial (17 acres). The assumed uses include agricultural manufacturing, agricultural processing, and agricultural support;
- General plan amendment from undesignated to General Industrial (± 240.3 acres). The property is designated Farmlands 40 by Monterey County. Assumed uses include agricultural manufacturing, agricultural processing, and agricultural support;
- Permanent zoning to City of Salinas Industrial-General (IG) with a Specific Plan (SP) overlay;
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- Annexation to the City of Salinas (±240.3 acres) to approximately 65 percent of the project perimeter is adjacent to the existing City limits; and

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The proposed subdivision includes extension of existing roads (Burton Avenue and Dayton Street) into the project site, and the creation of six parcels. Proposed uses within the specific plan area would include agricultural processing (preservation, processing, and distribution of agriculture products); agricultural manufacturing (design, manufacture, fabrication, assembly, maintenance and repair of tools, equipment, and vehicles used in growing, cultivating, harvesting, processing, packaging and transporting agricultural commodities and products); and agricultural support (research, design, development, testing, management, and sales). Other non-agricultural related commercial/retail/office businesses may be allowed within the 16.8 acres currently inside the City limits, as well as parcels for public facilities such as water wells and power substations. Although no application has been received, the City of Salinas is anticipating an application for development of the first 50 acres (Proposed Parcel F) for an agricultural processing plant, consisting of the preservation, processing, and distribution of agriculture products. Anticipated building area is approximately 500,000 square feet, with a Floor Area Ratio (FAR) of 0.25 and a building height of 50 feet. Approximately 900 employee parking stalls are anticipated. Maps submitted to the City with the preliminary application materials are attached. The maps present the project boundaries, the existing City limit and sphere of influence boundary, the proposed City limit and sphere of influence boundary, and a conceptual site plan.

Environmental Factors Potentially Affected:

✓ Aesthetics	✓ Agricultural Resources	✓ Air Quality
✓ Biological Resources	✓ Cultural Resources	✓ Geology/Soils
✓ Hazards & Hazardous Materials	✓ Hydrology/Water Quality	✓ Land Use/Planning
☐ Mineral Resources	☐ Noise	☐ Population/Housing
✓ Public Services	☐ Recreation	✓ Transportation / Traffic
✓ Utilities/Service Systems	✓ Mandatory Findings of Significance	

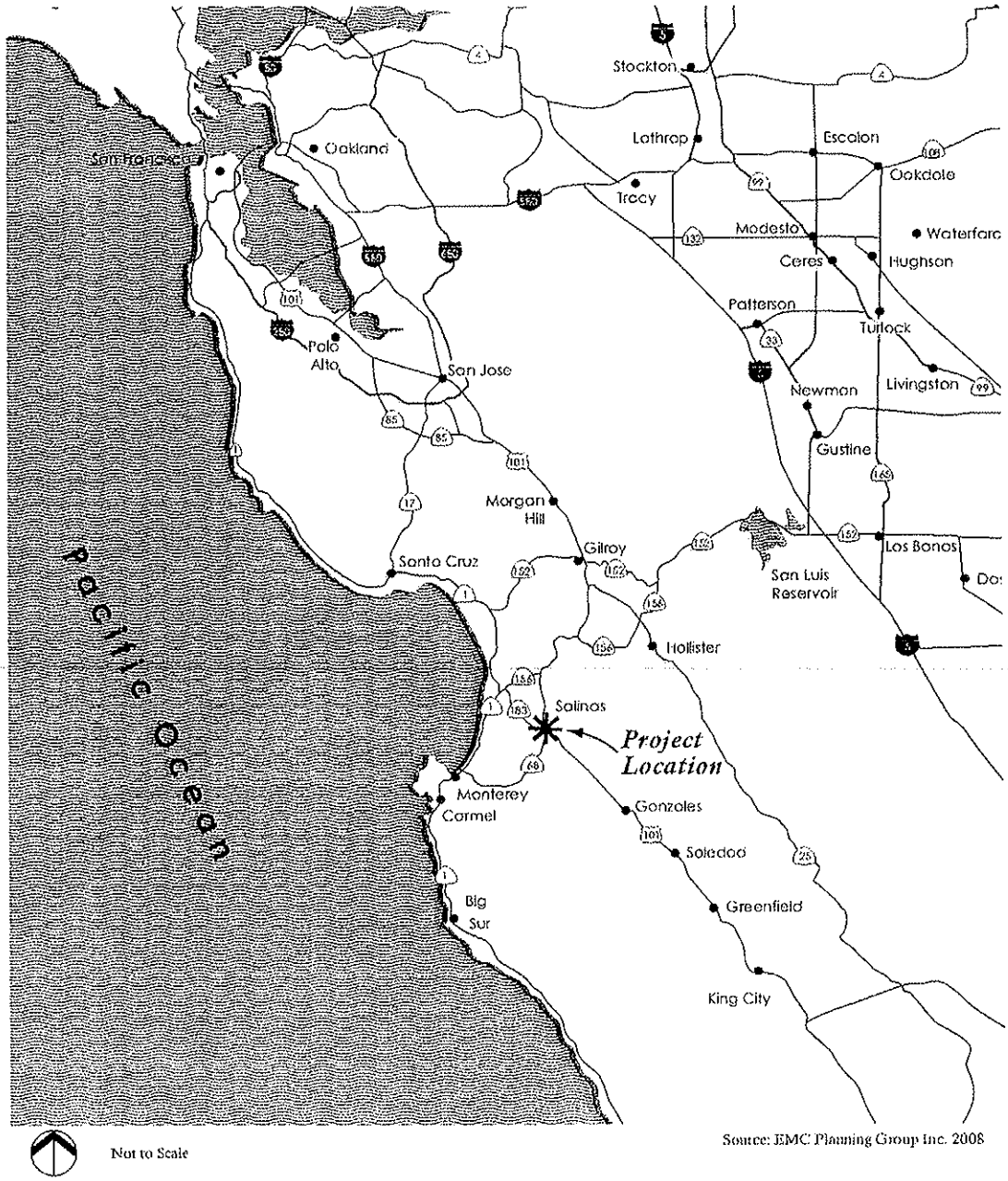
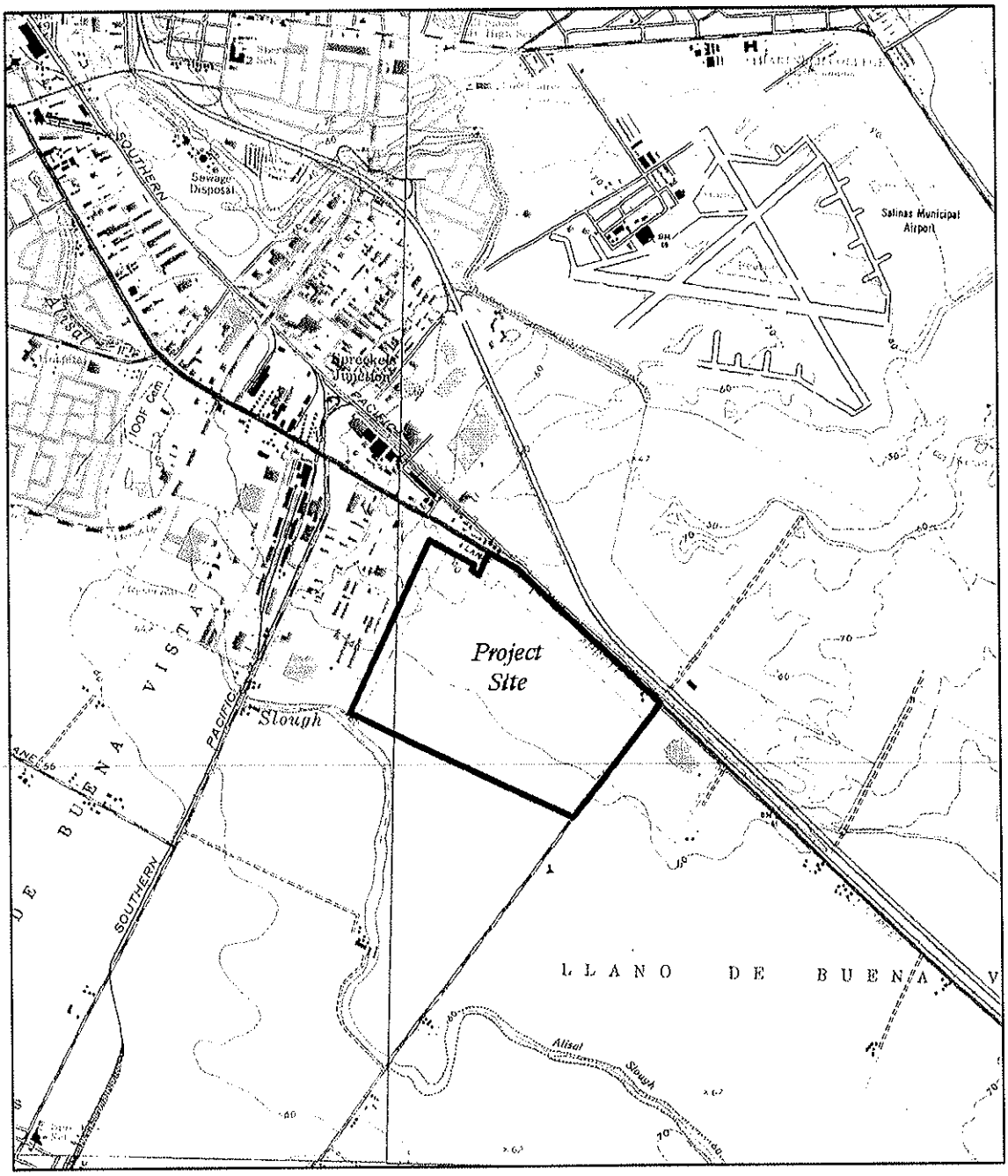
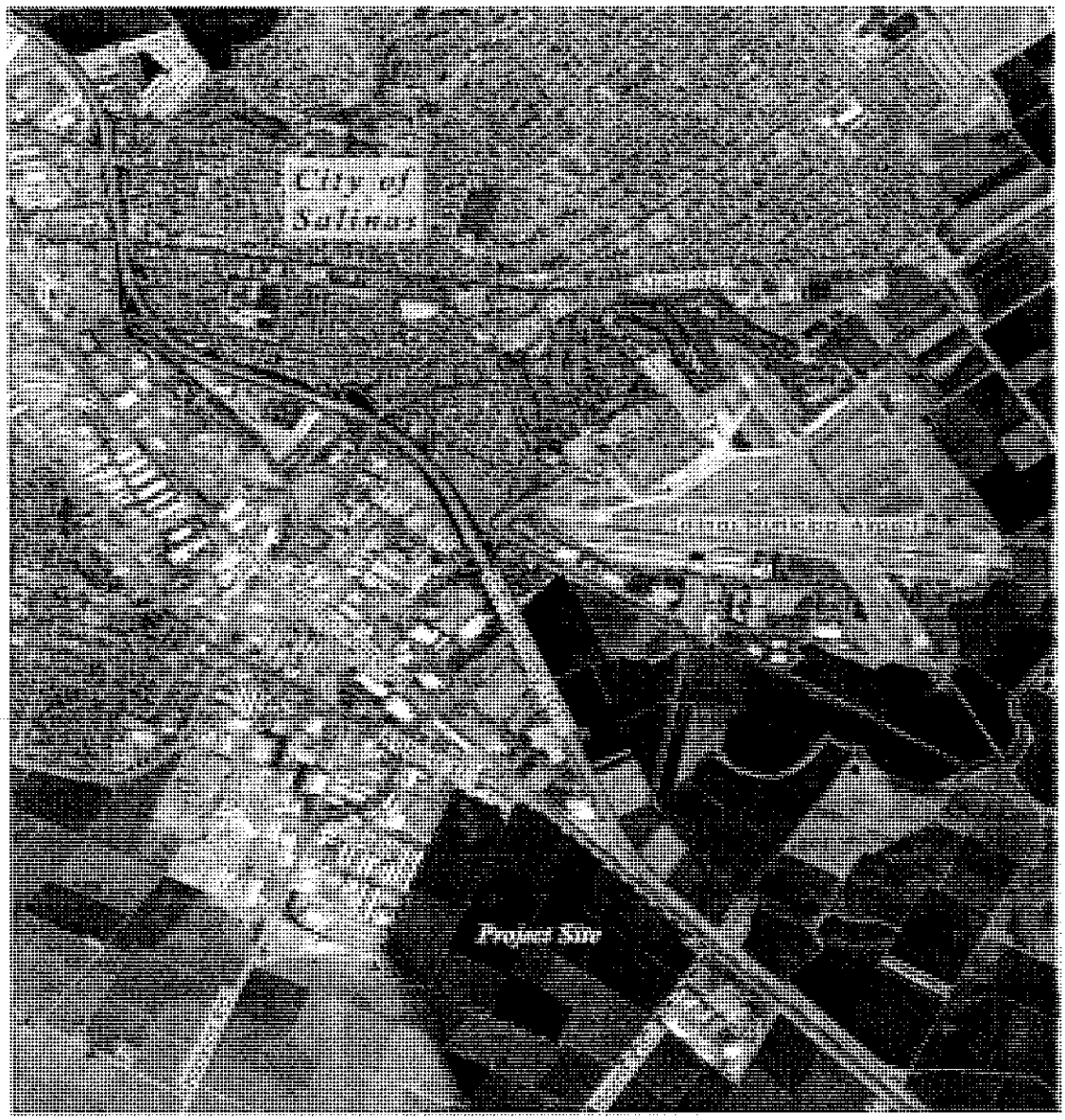


Figure 1
Regional Location
Salinas Ag-Industrial Business Park EIR NOP



Source: EMC Planning Group Inc. 2008, Monterey County GIS 2006, USGS 24k DRG Salinas and Natividad Quadrangles

Figure 2
USGS
Salinas Ag-Industrial Business Park EIR NOP



0 2,000 feet

Source: EMC Planning Group Inc. 2008, Google Earth 2008

Figure 3
Aerial Photograph
Salinas Ag-Industrial Business Park EIR NOP

2. CHECKLIST

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
1. **AESTHETICS.** *Would the proposal:*					
(a) Affect a scenic vista or scenic highway?	☐	☐	☐	✓	A1
(b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	✓	☐	☐	☐	A1, Q5
(c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	✓	A1, M1, N1
(d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	✓	Q3

Discussion: The project site is located on the southern urban-agricultural edge of the City of Salinas. It is surrounded by farmland and/or transportation corridors on approximately 50 percent of its perimeter. The remaining 50 percent is surrounded by industrial use. The project site is not located within a specified Gateway Overlay Zone (Salinas General Plan Figure CS-1 Gateway Overlay Zones) or within a specified view corridor (Salinas General Plan Figure CD-2 Highway 101 View Corridors). U.S. Highway 101 is not designated a state scenic highway. Traveling north and south bound on U.S. Highway 101 and Abbott Street, views of farmland and the Santa Lucia mountain range are provided through the project site. Traveling east and west on Harris Road, views of the project site and industrial business park to the west are provided. The project's visual impacts will be evaluated in the EIR.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
2. AGRICULTURAL RESOURCES. *Would the proposal:*					
(a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	✓	A2
(b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	✓	☐	☐	☐	Q2
(c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	✓	☐	☐	☐	Q3

Discussion: According to the Salinas General Plan EIR (Figure 5.9-1), the project site has a California Department of Conservation designation of Prime Farmland. The proposed project would result in the loss of this farmland. According to the applicant, none of the project parcels are in Williamson Act contracts.

Issue	Impact				Source *(Refer to Section 3: Source List)*
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3. AIR QUALITY. *Would the proposal:*					
(a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	✓	F1, F3, Q3
(b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	✓	F1, F3, Q3
(c) Result in cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursers)?	☐	☐	☐	✓	F1, F3, Q3
(d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	✓	F1, F3, Q3
(e) Create objectionable odors affecting a substantial number of people?	✓	☐	☐	☐	F1, F3, Q3

Discussion: The project will result in both stationary (industrial uses) and non-stationary (vehicular traffic) air quality impacts. The air quality analysis will be conducted consistent with the Monterey Bay Unified Air Pollution Control District CEQA Air Quality Guidelines (2004) and in consultation with air district staff. The project site is in an industrial/agriculture area. Any odors associated with project operations would not affect a substantial number of people. Global warming impacts will also be addressed.

Issue	Impact				Source *(Refer to Section 3: Source List)*
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4. BIOLOGICAL RESOURCES. *Would the proposal result in impacts to:*					
(a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	✓	☐	☐	Q4
(b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	✓	☐	☐	☐	Q4
(c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	✓	☐	☐	☐	Q4
(d) Interfere substantially with the movement of any					

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	✓	☐	☐	☐	Q4
(e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	✓	☐	☐	☐	Q4
(f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	✓	☐	☐	☐	Q4

Discussion: A biological report prepared for the applicant titled *Biological survey report for the Salinas Agricultural-Industrial Business Park, Abbott Street and Harris Road, Salinas, CA. APNs 177-133-004, 177-133-005, 177-133-007, Ed Mercurio, Biological Consultant, February, 29, 2008*. The report concluded that there are no sensitive habitats, sensitive plant species, or sensitive animals in or near the project site area. However, the report will need to be peer reviewed by the City's EIR consultant. Impacts to biological resources will be addressed in the EIR.

Issue	Impact				Source *(Refer to Section 3: Source List)*
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5. CULTURAL RESOURCES. *Would the proposal:*					
(a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5	☐	☐	☐	✓	Q3, Q7
(b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	✓	Q3, Q7
(c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	✓	☐	☐	☐	Q3
(d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	✓	Q3, Q7

Discussion: The project site contains existing structures. Potential impacts to historical resources will be evaluated and addressed in the EIR. A preliminary archaeological survey was conducted for the project site by Archaeological Consulting. The report is titled *Preliminary Archaeological Reconnaissance for the Salinas Ag-Industrial Business Park Project on Assessor's Parcels 177-133-004,-005, and -007, Salinas, Monterey County, California, March 28, 2008.* A records search with the Northwest Information Center and a surface reconnaissance of the project area were conducted. The report concluded that the project area contains no surface evidence of potentially significant archaeological resources. Standard conditions of project approval will be required to be implemented during construction activities.

Issue	Impact				Source *(Refer to Section 3: Source List)*
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6 **GEOLOGY/SOILS.** *Would the proposal result in or expose people to potential impacts involving:*					
(a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:					
(i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	✓	A2
(ii) Strong seismic ground shaking?	☐	☐	☐	✓	A2
(iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	✓	A2
(iv) Landslides?	✓	☐	☐	☐	Q5
(b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	✓	Q3
(c) Be located on a geologic unit or soil that is unstable,					

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	✓	A2
(d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	✓	A2

Discussion: According to the Salinas General Plan EIR (Figure 5.10-1), the project site is located in a moderately high seismic hazard zone. A geotechnical report is being prepared by the applicant to address issues associated with seismic hazards. The EIR will summarize the findings of this report.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
7. HAZARDS & HAZARDOUS MATERIALS. *Would the proposal involve:*					
(a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	✓	Q3
(b) Create a significant hazard to the public or the					

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
environment through reasonably forseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	✓	Q3
(c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	✓	Q3
(d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	✓	Q3
(e) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	✓	☐	☐	☐	N1, Q5
(f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	✓	☐	☐	☐	A-1
(g) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands					

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
are adjacent to urbanized areas or where residences are intermixed with wildlands?	✓	☐	☐	☐	A-2, Q3, Q5

Discussion: A Phase 1 Environmental Site Assessment will be conducted by O'Brien & Gere consistent with the American Society for Testing Materials (ASTM) 2005 guidance, to address possible current and historical use of hazardous materials on the project site and to identify mitigation measures, as necessary, for clean-up purposes prior to development of the site. The EIR will also address the industrial use of the site and the potential for hazardous materials to be used on-site, as well as transported to and from the site.

There is no private airstrip located in the vicinity of the project site. The project would not interfere with the City's or County's emergency response plans or emergency evacuation plans. The project site is not located in a wildlands area.

Issue	Impact				Source *(Refer to Section 3: Source List)*
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8. HYDROLOGY AND WATER QUALITY. *Would the proposal result in:*					
(a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	✓	Q6
(b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the					

Issue	Impact				Source *(Refer to Section 3: Source List)*
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local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	✓	Q6
(c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	✓	Q6
(d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☐	✓	A9, Q6
(e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	✓	Q6
(f) With regards to NPDES compliance:					
(i) Potential impact of					

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
project construction on storm water runoff?	☐	☐	☐	✓	Q6
(ii) Potential impact of project post-construction activity on storm water runoff?	☐	☐	☐	✓	Q6
(iii) Potential for discharge of storm water from material storage areas, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas or loading docks, or other outdoor work areas?	☐	☐	☐	✓	Q6
(iv) Potential for discharge of storm water to impair the beneficial uses of the receiving waters or areas that provide water quality benefit?	☐	☐	☐	✓	Q6
(v) Potential for the discharge of storm water to cause significant harm on the biological integrity of the waterways and water bodies?	☐	☐	☐	✓	A9, Q6

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
(vi) Potential for significant changes in the flow velocity or volume of storm water runoff that can cause environmental harm?	☐	☐	☐	✓	A9, Q6
(vii) Potential for significant increases in erosion of the project site or surrounding areas?	☐	☐	☐	✓	A9, Q6
(g) Otherwise substantially degrade water quality?	☐	☐	☐	✓	A9, Q6
(h) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	✓	☐	☐	☐	Q3
(i) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	✓	Q6, O1
(j) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐ ✓	☐ ☐	☐ ☐	✓ ☐	Q6
(k) Inundation by seiche, tsunami, or mudflow?					Q3

Discussion: The project site is flat with an average slope across the site of less than 0.3 percent. The natural drainage runs generally south to north. The site is approximately two to three feet lower than Abbott Street and Harris Road. Existing man-made road swales exist between the existing edge of pavements for Abbott Street and Harris Road along the project frontage. The swales appear to be created by farming operations during the winter rainy season to collect road runoff and prevent water from entering the project site. Existing Abbott Street and Harris Road along the project frontage do not have curb and gutter and currently half streets drain toward the site (Engineering Report, RJA & Associates, March 2008).

The project site is located in Zone B, areas of potential 100-year to 500-year storm events. It is not within the 100-year flood hazard area. It is in a drainage basin that drains toward the County of Monterey reclamation ditch north and east of the project site. Drainage from existing development surrounding the site is conveyed to the reclamation ditch by a 72-inch storm drain culvert located near the northwest corner of the site and a 48-inch storm drain culvert located at the northeast corner of the site. Both storm drain culverts flow by gravity and cross below the railroad tracks and Highway 101 and ultimately outflow into the reclamation ditch. The reclamation ditch is a major drainage channel owned and operated by the Monterey County Water Resources Agency. The ditch flows from east to west through the City of Salinas. Most of the City drains into the reclamation ditch and is part of a larger city-wide drainage and detention storage network (ibid).

The additional flows generated from developed impervious areas will be collected and detained on site through the use of detention basins. Other detention methods may be used such as landscape areas, which make efficient use of available land, and comply with the City of Salinas Low Impact Development (LID) guidelines. The City has adopted LID procedures with goals to effectively reduce volume, rate, and pollutant loading of new development urban runoff.

This section of the EIR will address the impacts of increased storm water run-off, the effectiveness of the proposal to mitigate the increase and whether the proposal complies with the City of Salinas LID guidelines. Storm water quality impacts will also be addressed.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
9. LAND USE AND PLANNING. *Would the proposal:*					
(a) Conflict with the Salinas General Plan?	☐	☐	☐	✓	A1
(b) Conflict with the Salinas Zoning Code?	☐	☐	☐	✓	A3
(c) Conflict with applicable precise/specific plans?	✓	☐	☐	☐	A1
(d) Conflict with the adopted sphere of influence?	☐	☐	☐	✓	A1
(e) Disrupt or divide the physical arrangement of an established community?	✓	☐	☐	☐	Q3
(f) Conflict with any applicable habitat conservation plan or natural community conservation plan?	✓	☐	☐	✓	A1,

Discussion: The proposed project includes a general plan amendment, zone change, and sphere of influence boundary change. The proposed project will be subject to a specific plan overlay district and a specific plan will be required. The project will not conflict with a habitat conservation plan or natural community conservation plan. The project is in an area with existing industrial and agricultural-related businesses/operations and would not disrupt or divide the physical arrangement of an established community.

The EIR will evaluate the project's consistency with the *City of Salinas General Plan*, the *City of Salinas Zoning Code*, the *2004 Air Quality Management Plan for the Monterey Bay Region*, the *2005 Monterey County Regional Transportation Plan*, the Greater Salinas Area Memorandum of Understanding, applicable Salinas airport land use compatibility plans, and the Monterey County Local Agency Formation Commission (LAFCO) Standards for the Evaluation of Proposals.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
10. ENERGY & MINERAL RESOURCES. *Would the proposal:*					
(a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	✓	☐	☐	☐	A1, A2
(b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	✓	☐	☐	☐	A1, A2

Discussion: There are no mineral resources located in the project vicinity.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
11. NOISE. *Would the proposal result in:*					
(a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other	☐	✓	☐	☐	

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
agencies?					A1, A2
(b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	✓	☐	☐	A1, A2
(c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	✓	☐	☐	A1, A2
(d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	✓	☐	☐	A1, A2
(e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	✓	☐	☐	☐	A1, A2
(f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	✓	☐	☐	☐	A1, A2

Discussion: For industrial uses, the acceptable Community Noise Exposure (CNEL) is 70 or lower (General Plan EIR Table 5.3-1, page 5.3-2). According to the General Plan EIR, Figure 5.3-4, Future Noise Contours, the project site is located within projected 65 CNEL and quieter noise contours. Therefore, the entire project site is located well within

the future anticipated acceptable noise levels for industrial uses.

A portion of the project site is located within the Salinas Airport land use plan; however, according to Figure 5.3-4, Future Noise Contours, in the General Plan EIR, the project site would not experience unacceptable noise levels associated with airport operations.

The EIR will evaluate construction noise impacts and it is anticipated that standard mitigation measures would be applied.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
12. POPULATION AND HOUSING. *Would the proposal:*					
(a) Cumulatively exceed official regional or local population projections?	✓	☐	☐	☐	Q3
(b) Induce substantial growth in an area either directly or indirectly *(e.g. through projects in an undeveloped area or extension of major infrastructure)*?	☐	☐	☐	✓	Q3
(c) Displace substantial numbers of existing housing, especially affordable housing, necessitating the construction of replacement housing elsewhere?	✓	☐	☐	☐	Q3
(d) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	✓	☐	☐	☐	Q3

Discussion: The proposed project is not population generating and it would not displace

substantial numbers of existing housing or people. The project is an expansion of the City of Salinas's existing urban services area and therefore, has the potential to be growth-inducing. The EIR will evaluate the proposed project's potential to induce substantial growth.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
13. PUBLIC SERVICES. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*					
(a) Fire protection?	☐	☐	☐	✓	Q3, Q6
(b) Police protection?	☐	☐	☐	✓	Q3, Q6
(c) Schools?	☐	✓	☐	☐	Q3
(d) Maintenance of public facilities, including roads?	☐	☐	☐	✓	Q3, Q6
(e) Other governmental services?	☐	☐	☐	✓	Q3, Q6

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	

Discussion: A plan for providing services will be prepared by the EIR consultant, per the Monterey County Local Agency Formation Commission (LAFCO) guidelines. The plan for providing services will be incorporated in the EIR.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
14. RECREATION. *Would the proposal:*					
(a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	✓	☐	☐	☐	Q3
(b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	✓	☐	☐	☐	Q3

Discussion: The proposed project is not population generating and therefore, would not have a significant impact on recreation.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
15. TRANSPORTATION & CIRCULATION. *Would the project:*					
(a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	☐	✓	Q3
(b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roadways or highways?	☐	☐	☐	✓	Q3
(c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	✓	☐	☐	☐	Q3
(d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	✓	Q3
(e) Result in inadequate emergency access?	☐	☐	☐	✓	Q3
(f) Result in inadequate parking capacity?	☐	☐	☐	✓	Q3

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
(g) Conflicts with vehicle trip reduction requirements in accordance with the Salinas Zoning Code?	☐	☐	☐	✓	A3, Q3
(h) Conflicts with airport operations?	✓	☐	☐	☐	Q3

Discussion: The proposed project would result in new vehicle and trucks trips in the vicinity and on the regional transportation system. The following intersections will be evaluated in the EIR:

1. State Route 68/Blanco Road
2. State Route 68/Hunter Lane
3. State Route 68 westbound ramps/Spreckels Boulevard
4. State Route 68 eastbound ramps/Spreckels Boulevard
5. Hatton Road/Spreckels Boulevard
6. Harkins Road/Hunter Lane
7. Harkins Road/Abbott Street
8. Harkins Road/Hansen Street
9. Airport Boulevard/Hansen Street
10. Airport Boulevard/Terven Avenue
11. Airport Boulevard/De La Torre Street
12. S. Sanborn Road/Abbott Street
13. Harris Road/Abbott Street
14. Firestone Driveway/Abbott Street
15. U.S. Highway 101/Gould Road
16. U.S. Highway 101/Hartnell Road Connector
17. Harkins Road/Dayton Street
18. Harkins Road/Burton Avenue
19. Abbott Street/North-South Project Road
20. Harris Road/Dayton Road Extension
21. U.S. Highway 101 northbound ramps/selected interchange
22. U.S. Highway 101 southbound ramps/selected interchange
23. Blanco Circle/Blanco Road
24. Work Street/Sanborn Road
25. U.S. Highway 101 southbound ramp/South Sanborn

26. Elvee Drive/South Sanborn
27. Fairview Avenue/South Sanborn/U.S. Highway 101 northbound ramp
28. Fairview Avenue/ U.S. Highway 101 northbound ramp
29. E-W Project Road/Harris
30. North-South (easterly) Project Road/Abbott Street
31. Abbott Street/ U.S. Highway 101

The following freeway segments will also be analyzed:

1. U.S. Highway 101 between Airport Boulevard and Gould Road
2. U.S. Highway 101 between Gould Road and Hartnell Road
3. U.S. Highway 101 between Sanborn and Airport

The following development scenarios will be evaluated:

1. Existing traffic conditions
2. Existing plus Phase 1 project conditions without the new interchange
3. Background with new interchange
4. Background plus full project with new interchange
5. General plan without project without new interchange
6. General plan without project with new interchange
7. General plan with project without new interchange
8. General plan with project with new interchange

Regional impacts, as well as project access and internal circulation, will also be addressed in the EIR.

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
16. UTILITIES & SERVICE SYSTEMS. *Would the project:*					
(a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	✓	A1, A2, Q3, Q6
(b) Require or result in the construction of new water					

Issue	Impact				Source *(Refer to Section 3: Source List)*
	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigation Incorporated	Potentially Significant Impact	
or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	✓	A1, A2, Q3, Q6
(c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	✓	A1, A2, Q3, Q6
(d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	✓	A1, A2, Q3, Q6
(e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has the adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	✓	A1, A2, Q3, Q6
(f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	✓	A1, A2,
(g) Comply with federal, state, and local statues and regulations related to solid waste?	☐	☐	☐	✓	A1, A2, A9, Q3

Discussion:

Water Demand

There are four wells currently located on the project site, which are owned and maintained by the property owners. The wells produce non-potable water and have the following capacities: 1,100 gallons per minute (gpm); 1,000 gpm; 770 gpm; and 700 gpm. The wells are currently used to provide groundwater for farming. These wells would be abandoned with implementation of the project.

Upon annexation to the City of Salinas, water supply and distribution would be the responsibility of California Water Service Company (Cal Water), a public utility corporation. Cal Water provides domestic water services to approximately 70 percent of the population in the City of Salinas. Water supply is generated from underground wells extracted from underground aquifers in the Salinas Valley known as the Pressure Area and Eastside Area.

Peak water demand is estimated to be 8.8 million gallons per day. An SB610 water supply assessment will be prepared to identify how water will be supplied to the project. The EIR will address the water demand necessary to serve the project, the net change in water use from farming to industrial, and the ability of Cal Water to provide the water. One new well would be installed on site.

Wastewater Generation and Treatment

Wastewater treatment for sanitary sewer is provided by the Monterey Regional Water Pollution Control Agency. The wastewater treatment plant is located approximately nine miles northwest of the project site, north of the City of Marina. The Salinas pump stations deliver the raw sewage to the wastewater treatment plant. The proposed project is expected to produce an average daily flow of approximately 0.50 mgd with a corresponding peak day flow of 0.75 mgd. The EIR will address the capacity of the wastewater treatment plant to accommodate the project's sanitary sewer flows.

Wastewater treatment for the industrial sewer is provided by the City of Salinas. The industrial wastewater treatment plant is located on the west side of the City. The City is currently evaluating the existing industrial wastewater treatment infrastructure, existing plant capacity, and options for expanding treatment plant capacity. The proposed project is expected to produce approximately 3.4 mgd industrial water flows (peak flow condition). The EIR will address the capacity of the industrial wastewater treatment plant to accommodate the project's industrial wastewater flows.

Mandatory Findings of Significance	No Impact	Less Than Significant Impact	Potentially Significant Unless Mitigated	Potentially Significant Impact
1. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	✓
2. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? *("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects).*	☐	☐	☐	✓
3. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	✓

3. SOURCE LIST

Source	Source Number
City of Salinas:	
Salinas General Plan, 2002.	A1
Salinas General Plan, Final Environmental Impact Report, 2002.	A2
Salinas Zoning Code, 2006: ☒ *Entire Code Section:* _____	A3
Traffic Fees - Cost Estimates and Fee Schedule, (Revised: March 1, 2005).	A4
1989 Historical and Architectural Resources Survey and Preservation Plan - Appendix, 1989.	A5
Harden Ranch Planned Community Precise Plan, 1988.	A6
Williams Ranch Planned Community Precise Plan, 1993.	A7
Multihazard Emergency Plan, 1986.	A8
City of Salinas Sewage and Drainage Master Plan, 1992.	A9
Harden Ranch Planned Community Final EIR, 1987	A10
Williams Ranch Planned Community Final EIR, 1987	A11
School Districts:	
	B1
Association of Monterey Bay Area Governments:	
2004 Regional Population and Employment Forecasts, 2004.	C1
Federal Agencies:	
2000 Census of Population and Housing, 2000.	D1
Soil Survey of Monterey County, California, 1978.	D2
Monterey County Local Agency Formation Commission:	
Standards for the Evaluation of Proposals.	E1
City of Salinas & Boronda County Water District Spheres of Influence Study.	E2
Monterey Bay Unified Air Pollution Control District:	
CEQA Air Quality Guidelines, dated June 2004	F1
2005 Report on Attainment of the California Particulate Matter Standards in the Monterey Bay Region	F2

2004 Air Quality Management Plan.	F3
Monterey County:	
Monterey County General Plan, 1987, as amended.	G1
Greater Salinas Area Plan, 1986, as amended.	G2
Boronda Neighborhood Improvement Plan, 1987.	G3
Monterey County Hazardous Waste Management Plan, 1989.	G4
Monterey County Water Resources Agency:	
Salinas Valley Ground Water Basin Seawater Intrusion Delineation/Monitoring Well Construction Program, 180-Foot Aquifer, 1993.	H1
Monterey County Drainage Study: Carr Lake and Reclamation Ditch, 1979.	H2
Monterey County Regional Water Pollution Control Agency:	
	I1
Transportation Agency for Monterey County:	
Monterey County Regional Transportation Plan, 2005.	J1
Congestion Management Program, 1994.	J2
1994 General Bikeways Plan for Monterey County, 1994	J3
Monterey-Salinas Transit:	
Short Range Transit Plan, Fiscal Year 1995-1999.	K1
Development Review Guidebook..., A Practical Guidebook for Providing Transit-Accessible Development.	K2
State of California:	
	L1
Field Inspection:	
EMC Planning Group Inc.	M1
Maps/Aerial Photography:	
Google Earth	N1
Flood Insurance Rate Map (National Flood Insurance Program):	
	O1

Consultation:	
	P1
Other:	
California Water Service Company Urban Water Management Plan, Sept. 2004.	Q1
Applicant	Q2
Project Description	Q3
Ed Mercurio, Biological Consultant, Biological survey report for the Salinas Agricultural-Industrial Business Park, Abbott Street and Harris Road, Salinas, CA. APNs 177-133-004, 177-133-005, 177-133-007, February, 29, 2008.	Q4
Consultant knowledge of area	Q5
RJA & Associates, Engineering Report for The Development of The Salinas Ag-Industrial Business Park, March 2008	Q6
Archaeological Consulting, Preliminary Archaeological Reconnaissance for the Salinas Ag-Industrial Business Park Project on Assessor's Parcels 177-133-004,-005, and -007, Salinas, Monterey County, California, March 28, 2008.	Q7

Prepared by: Signature Teri Wissler Adam Date: 4/28/08
EMC Planning Group Inc.
Consultant to City of Salinas

4. DETERMINATION

On the basis of this Initial Study:

☐ I find that the proposed project ***COULD NOT*** have a significant effect on the environment, and a ***NEGATIVE DECLARATION*** will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there ***WILL NOT*** be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A ***MITIGATED NEGATIVE DECLARATION*** will be prepared.

✓ I find that the proposed project ***MAY*** have a significant effect on the environment, and an ***ENVIRONMENTAL IMPACT REPORT*** is required.

☐ I find that the proposed project ***MAY*** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect:

(a) Has been adequately analyzed in *(Reference document)* pursuant to applicable legal standards; and

(b) Has been addressed by mitigation measures based on the earlier analysis as described in *Section 2: Checklist*, if the effect is a "Potentially Significant Impact" or a Negative Declaration: "Potentially Significant Unless Mitigation Incorporated".

An ***ENVIRONMENTAL IMPACT REPORT*** is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects:

(a) Have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and;

(b) Have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project.

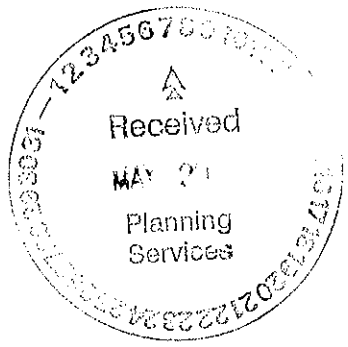
NOTHING FURTHER IS REQUIRED.

Signature  Date: 4/28/08

Courtney Grossman
Planning Manager

STATE OF CALIFORNIA Arnold Schwarzenegger, *Governor*

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



May 2, 2008

Courtney Grossman
City of Salinas
65 West Alisal Street
Salinas, CA 93901

Re: Notice of Preparation (NOP)
Salinas Ag-Industrial Park
SCH# 2008041171

Dear Ms. Grossman:

As the state agency responsible for rail safety within California, the California Public Utilities Commission (CPUC or Commission) recommends that development projects proposed near rail corridors be planned with the safety of these corridors in mind. New developments and improvements to existing facilities may increase vehicular traffic volumes, not only on streets and at intersections, but also at at-grade highway-rail crossings. In addition, projects may increase pedestrian traffic at crossings, and elsewhere along rail corridor rights-of-way. Working with CPUC staff early in project planning will help project proponents, agency staff, and other reviewers to identify potential project impacts and appropriate mitigation measures, and thereby improve the safety of motorists, pedestrians, railroad personnel, and railroad passengers.

The proposed project could result in large increases in vehicular traffic at at-grade railroad crossings over Union Pacific Railroad tracks in the vicinity, e.g., on Abbot Street and on Harkins Road. The Initial Study attached to the NOP indicates that a large number of intersections will be evaluated in the EIR. The Commission requests that the CEQA documentation for the proposed project also evaluate potential project-related rail safety impacts, and measures to reduce adverse impacts. The CEQA document should evaluate, for example, whether traffic queues would extend across railroad tracks. Such queuing increases the possibility that a motorist would stop on the tracks and be unable to clear the tracks as a train approaches, e.g., due to congestion or a stalled vehicle. In addition to the potential impacts of the proposed project itself, the CEQA document should consider cumulative rail safety-related impacts created by other projects. In general, the major types of impacts to consider are collisions between trains and vehicles, and between trains and pedestrians.

General categories of measures to reduce potential adverse impacts on rail safety include:

- Installation of grade separations at crossings, i.e., physically separating roads and railroad track by constructing overpasses or underpasses
- Improvements to warning devices at existing highway-rail crossings
- Installation of additional warning signage

- Improvements to traffic signaling at intersections adjacent to crossings, e.g., traffic preemption
- Installation of median separation to prevent vehicles from driving around railroad crossing gates
- Where soundwalls, landscaping, buildings, etc. would be installed near crossings, maintaining the visibility of warning devices and approaching trains
- Prohibition of parking within 100 feet of crossings to improve the visibility of warning devices and approaching trains
- Installation of pedestrian-specific warning devices and channelization
- Construction of pull-out lanes for buses and vehicles transporting hazardous materials
- Installation of vandal-resistant fencing or walls to limit the access of pedestrians onto the railroad right-of-way
- Elimination of driveways near crossings
- Increased enforcement of traffic laws at crossings
- Rail safety awareness programs to educate the public about the hazards of highway-rail grade crossings

Commission approval is required to modify an existing highway-rail crossing or to construct a new crossing. If the project includes a proposed new crossing, the CPUC will be a responsible party under CEQA and the impacts of the crossing must be discussed in its CEQA documentation.

Thank you for your consideration of these comments. If you have any questions in this matter, please call me at (415) 703-1306.

Sincerely,

Daniel Kevin
Regulatory Analyst
Consumer Protection and Safety Division

cc:

Terrel A. Anderson
Manager, Industry and Public Projects
Union Pacific Railroad
9451 Atkinson St.
Roseville, CA 95747

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Flex your power!
Be energy efficient!

May 7, 2008

MON-101-84.41
SCH# 2008041171

Courtney Grossman
City of Salinas Planning Department
65 West Alisal Street
Salinas, CA 93901

Dear Mr. Grossman:

COMMENTS TO UNIKOOL SALINAS AG INDUSTRIAL PARK

The California Department of Transportation (Caltrans), District 5, Development Review, has reviewed the above referenced project and offers the following comments for your consideration in preparing the traffic impact study. Based on previous discussions with the City regarding this project, Item #8 highlights some of the specific issues we anticipate being addressed in the traffic study.

1. The Department supports local development that is consistent with State planning priorities intended to promote equity, strengthen the economy, protect the environment, and promote public health and safety. We accomplish this by working with local jurisdictions to achieve a shared vision of how the transportation system should and can accommodate interregional and local travel and development.

2. To ensure the traffic study in the Draft EIR includes the information needed by the Department to analyze the impacts (both cumulative and project-specific) of this project, it is recommended that the analysis be prepared in accordance with the Department's *"Guide for the Preparation of Traffic Impact Studies."* An alternative methodology that produces technically comparable results can also be used.

3. Because the Department is responsible for the safety, operations, and maintenance of the State transportation system, our Level of Service (LOS) standards should be used to determine the significance of the project's impact. We endeavor to maintain a target LOS at the transition between LOS C and LOS D on all State transportation facilities. At times, *for mainline planning documents only*, there might be deviation from the LOS C/D standard. However, this deviation is not carried through into traffic management and operations (including design, construction, etc.) where the LOS C/D is adhered. Unfortunately, we have seen a recent trend of traffic studies incorrectly using a threshold below the standard, and justifying it by referencing the Caltrans planning documents.

4. Our future comments to this, and any subsequent EIR for the project will stress the importance of using the Association of Monterey Bay Area Governments Model for traffic analysis, and to include all impacted transportation agencies early and often in the development discussions.

5. The traffic study should include information on existing traffic volumes within the study area, including the State transportation system, and should be based on recent traffic volumes less than two

years old. Counts older than two years cannot be used as a baseline. Feel free to contact us for assistance in acquiring the most recent count data available.

6. The methodologies used to calculate the LOS should be consistent with the methods in the current version of the Highway Capacity Manual. All LOS calculations should also be included in the Draft EIR's as an appendix made available for review.

7. At any time during the environmental review and approval process, the Department retains the statutory right to request a formal scoping meeting to resolve any issues of concern. Such formal scoping meeting requests are allowed per the provisions of the California Public Resources Code Section 21083.9 [a] [1].

8. Considering the high volume of truck trips associated with a commercial facility of this size, we will be closely scrutinizing the traffic impact analysis and the disclosure of those impacts at two key locations along Highway 101. These two locations include the Sanborn Interchange and the Abbott Street access to the Highway.

   Further, since there are ongoing discussions of a potential enhancement to the southbound Sanborn off-ramp to accommodate heavy truck usage, the applicant should anticipate some financial responsibility toward this improvement as part of their mitigation.

   Lastly, a Caltrans Project Study Report at Harris Road and Highway 101 allowed an alternative which builds a 'fly-over' ramp at the location of the proposed development. Therefore, the site plan for the project should not include permanent structures that conflict with right-of-way needs of the overpass. As part of projects' overall mitigation, an irrevocable offer of right-of-way dedication may be considered.

9. Finally, the traffic study and subsequent EIR for this project should clearly indicate that in addition to mitigating project-specific impacts, the developer would be required to pay their pro-rata share of cumulative impact mitigation per the TAMC Regional Traffic Impact Fee Program.

We look forward to receiving the Draft EIR, and providing comments from a more thorough analysis. At that time, we may include comments on other pertinent issues related to the environment, water quality, and hydrology. If you have any questions, or need further clarification on items discussed above, please don't hesitate to call me at (805) 542-4751.

Sincerely,

JOHN J. OLEJNIK
Associate Transportation Planner
District 5 Development Review Coordinator

cc: Paul McClintic (D5 Traffic Ops)
David Silberberger (D5 Project Mgmt)
Mike Zeller (TAMC)

CALIFORNIA WATER SERVICE COMPANY
254 COMMISSION STREET • SALINAS, CA 93901-3737
(831) 757-3644 • FAX (831) 757-0497

SALINAS DISTRICT

May 7, 2008

Courtney Grossman, Planning Manager
Community Planning and Development
City of Salinas
65 West Alisal Street
Salinas, CA 93901

Re: Notice of Preparation (NOP) of a Draft Environmental Impact Report for the Salinas Ag-Industrial Business Park Project and Notice of Scoping Meeting (Uni-Kool Partners)

Dear Courtney:

At the request of the Carl Niizawa and the City of Salinas acting as the lead agency, California Water Service Company (Cal Water) is currently preparing a Water Supply Assessment (WSA) for the proposed development. We will forward the WSA to the City upon completion.

Should you have any questions, please call me at 831-757-3644.

Sincerely,

James E. Smith
District Manager

Pc: M. Jones
J. Yarne
T. He

DEPARTMENT OF CONSERVATION

DIVISION OF LAND RESOURCE PROTECTION

801 K STREET • MS 18-01 • SACRAMENTO, CALIFORNIA 95814

PHONE 916 / 324-0850 • FAX 916 / 327-3430 • TDD 916 / 324-2555 • WEBSITE conservation.ca.gov

May 16, 2008

Ms. Courtney Grossman, Planning Manager
City of Salinas
65 West Alisal Street
Salinas, CA 93901

RE: Notice of Preparation (NOP) Draft Environmental Impact Report (DEIR)
Salinas Ag-Industrial Business Park SCH# 2008041171

Dear Ms. Grossman:

The Department of Conservation's (Department) Division of Land Resource Protection (Division) has reviewed the NOP for the referenced project. The Division monitors farmland conversion on a statewide basis and administers the California Land Conservation (Williamson) Act and other agricultural land conservation programs. We offer the following comments and recommendations with respect to the project's impacts on agricultural land and resources.

Project Description

The project proposes development of an agricultural industrial business park for processing, manufacturing and support on 257.3-acres of prime agricultural land. The project area is currently in agricultural production. The project area is located south of Abbot Street and west of Harris Road, adjacent to the Salinas city limits to the north, west and partially to the east. Approximately 17-acres of the project area are located within the Salinas city limits, the remaining acreage is located outside of the City's future growth boundary and sphere-of-influence, in unincorporated Monterey County. Surrounding land uses include agriculture to the south and east with industrial uses to the north and west.

The project will also require approvals to amend the City's sphere-of-influence, annexation of the project area to the City, General Plan amendments, pre-zoning and adoption of a specific plan, parcel maps and site plan review.

Agricultural Setting of the Project

The DEIR should describe the project setting in terms of the actual and potential agricultural productivity of the land. The Division's Important Farmland Map for the Monterey County should be utilized to identify land within the project site and

surrounding land that may be impacted. Acreages for each land use designation should be identified. Likewise, the County's Williamson Act Map should be utilized to identify potentially impacted contracted land, Farmland Security Zone (FSZ) and agricultural preserve land by acreage and whether it is prime or nonprime agricultural land according to definition in Government Code §51201(c).

In addition, we recommend including the following items of information to characterize the agricultural land resource setting of the project.

- Describe current and past agricultural use of the project area. Include data on the types of crops grown, crop yields and farm gate sales values.
- Describe the full agricultural resource value of the soils of the site. We recommend the use of economic multipliers to assess the total contribution of the site's potential or actual agricultural production to the local, regional and state economies. University of California Cooperative Extension Service, Natural Resources Conservation Service and United States Department of Agriculture (USDA) are good sources of economic multipliers.

Project Impacts on Agricultural Land

The Department recommends that the following be included in the DEIR in the analysis of project impacts:

- A description of type, amount, and location of farmland lost to project implementation. The conversion of Prime Farmland, Unique Farmland or Farmland of Statewide Importance is considered a potentially significant adverse impact.
- Indirect impacts on current and future agricultural operations; e.g., land-use conflicts, increases in land values and taxes, vandalism, population, traffic, water availability, etc.
- Growth-inducing impacts, including whether leapfrog development is involved.
- Incremental project impacts leading to cumulatively considerable impacts on agricultural land. These impacts would include impacts from the proposed project as well as impacts from past, current and probable future projects. The Division's farmland conversion tables may provide useful historical data.
- Impacts on agricultural resources may also be quantified and qualified by use of established thresholds of significance (California Environmental Quality Act (CEQA) Guidelines §15064.7). The Division has developed a California version of the USDA Land Evaluation and Site Assessment (LESA) Model, a semi-quantitative rating system for establishing the environmental significance of project-specific impacts on farmland. The model may also be used to rate the relative value of alternative project sites. The LESA Model is recommended by CEQA and is available from the Division at the contact listed below.

Mitigation Measures

The Department recommends that feasible alternatives to the project's location or configuration that would lessen or avoid farmland conversion impacts be considered in the DEIR. In addition, the DEIR should discuss feasible mitigation measures for the conversion of agricultural land.

The Department encourages the use of agricultural conservation easements on land of at least equal quality and size as partial compensation for the direct loss of agricultural land. We highlight this measure because of its acceptance and use by lead agencies as mitigation under CEQA. It follows a rationale similar to that of wildlife habitat mitigation: The loss of agricultural land represents a permanent reduction in the State's agricultural land resources. Agricultural conservation easements will protect a portion of those remaining resources and lessen project impacts in accordance with CEQA Guideline §15370.

Mitigation using agricultural conservation easements can be implemented by at least two alternative approaches: the outright purchase of easements or the donation of mitigation fees to a local, regional or statewide organization or agency whose purpose includes the acquisition and stewardship of agricultural conservation easements. The conversion of agricultural land should be deemed an impact of at least regional significance, and the search for replacement lands conducted regionally or statewide, and not limited strictly to lands within the project's surrounding area.

Other forms of mitigation may be appropriate, including the following:

- Directing a mitigation fee to invest in supporting the commercial viability of the remaining agricultural land in the project area, County or region through a mitigation bank that invests in agricultural infrastructure, water supplies, marketing, etc.

- The Department also has available listing of approximately 30 "conservation tools" that have been used to conserve or mitigate project impacts on agricultural land. This compilation report may be requested from the Division at the address or phone number below.

Although the direct conversion of agricultural land and other agricultural impacts are often deemed to be unavoidable by an agency's CEQA analysis, mitigation measures must nevertheless be considered. The adoption of a Statement of Overriding Consideration does not absolve the agency of the requirement to implement feasible mitigation that lessens a project's impacts. A principal purpose of an EIR is to present a discussion of mitigation measures in order to fully inform decision-makers and the public about ways to lessen a project's impacts. In some cases, the argument is made that mitigation cannot reduce impacts to below the level of significance because agricultural land will still be converted by the project, and, therefore, mitigation is not required.

However, reduction to a level below significance is not a criterion for mitigation. Rather, the criterion is feasible mitigation that lessens a project's impacts. Pursuant to CEQA Guideline §15370, mitigation includes measures that "avoid, minimize, rectify, reduce or eliminate, or compensate" for the impact. For example, mitigation includes *"Minimizing impacts by limiting the degree or magnitude of the action and its implementation (§15370(b))"* or *"Compensating for the impact by replacing or providing substitute resources or environments (§15370(e))."*

All measures ostensibly feasible should be included in the DEIR. Each measure should be discussed, as well as the reasoning for selection or rejection. A measure brought to the attention of the Lead Agency should not be left out unless it is infeasible on its face.

Finally, when presenting mitigation measures in the DEIR, it is important to note that mitigation should be specific, measurable actions that allow monitoring to ensure their implementation and evaluation of success. A mitigation consisting only of a statement of intention or an unspecified future action may not be adequate pursuant to CEQA.

Information about agricultural conservation easements and provisions noted above is available on the Department's website or by contacting the Division at the address and phone number listed below. The Department's website address is:

http://www.conservation.ca.gov/dlrp/index.htm

Thank you for the opportunity to comment on this NOP. The Department looks forward to receiving your response, including a copy of the DEIR. If you have questions on our comments or require technical assistance or information on agricultural land conservation, please contact Adele Lagomarsino at 801 K Street, MS 18-01, Sacramento, California 95814; or, phone (916) 445-9411.

Sincerely,

Brian Leahy

Brian Leahy
Assistant Director

cc: Monterey County Resource Conservation District

LAFCO of Monterey County

LOCAL AGENCY FORMATION COMMISSION
P.O. Box 1369 132 W. Gabilan Street, Suite 102
Salinas, CA 93902 Salinas, CA 93901
Telephone (831) 754-5838 Fax (831) 754-5831
www.monterey.lafco.ca.gov

KATE McKENNA, AICP
Executive Officer

May 29, 2008

Courtney Grossman, Planning Manager
City of Salinas
Community Planning & Development
65 W. Alisal Street
Salinas, CA 93901

RE: Notice of Preparation of a Draft Environmental Impact Report for the proposed Salinas Ag-Industrial Business Park Project (Uni-Kool site)

Dear Mr. Grossman:

Thank you for the opportunity to comment on the Notice of Preparation for the Draft EIR for the City's upcoming application for a Sphere of Influence amendment and annexation.

As a responsible agency, LAFCO will consider the EIR when the Commission formally reviews the City's proposal for a Sphere of Influence amendment and annexation. For this reason LAFCO is making the following comments to assist the City in creating an environmental document that helps LAFCO to meet its state-mandated responsibilities.

Proposed Project

- The description of the proposed project should specify that the Sphere of Influence amendment is for the expansion of the Spheres of both the City of Salinas and the Monterey Regional County Sanitation District, which is a dependent district of the Monterey Regional Water Pollution Control Agency.

Agricultural Resources

- The document should analyze the agricultural land on the site according to the Cortese-Knox-Hertzberg definition of prime agricultural land, contained in Government Code Section 56064, as well as according to the California Department of Conservation categories.
- Mitigation for the loss of agricultural land should be consistent with the City's "Agricultural Land Preservation Program" which was adopted by the City

Council on April 8, 2008. The review should include a full assessment of recommendations for avoidance of impacts and mitigation of impacts, such as permanent conservation and agricultural buffers.

Land Use and Planning

- A review of the proposal's consistency with the Cortese-Knox-Hertzberg legislation, including consistency with the state mandated determinations and factors contained in the attached Section 56425(e) for SOI updates and Section 56668 for annexations.
- A review of the proposal's compatibility with LAFCO of Monterey County's Sphere of Influence and Annexation policies, specifically consistency with the "Sphere of Influence Policies and Criteria," in addition to the "Standards for the Evaluation of Proposals" which was mentioned in the Initial Study. (A copy of the "Sphere of Influence Policies and Criteria" is attached.)

Public Services

- A review of impacts on the delivery of municipal services including water, sewer, fire, schools, police, emergency medical services, flood protection, parks and open space.

Cumulative Impact

- The cumulative impact to the Salinas Valley of the conversion of farmland mapped as prime and of statewide importance and any required mitigations.
- The cumulative impacts to regional roadways and regional jobs/housing balance.
- The cumulative impacts to regional water supply.

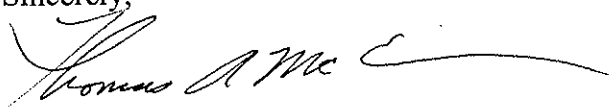
Alternatives

- Alternatives that would avoid and lessen the project's direct and cumulative impacts, particularly to agricultural resources, availability of water, regional housing needs, and regional traffic

Prior to submitting the proposal for the Sphere of Influence Update, please confer with the County to ensure compliance with the required City-County consultation process outlined in Government Code Section 56425.

Again, thank you for the opportunity to participate early in this process. If you have any questions regarding this letter please contact me at 754-5838.

Sincerely,



Thomas A. McCue, AICP
Senior Analyst

Attachment:

- "Sphere of Influence Policies and Criteria"

LOCAL AGENCY FORMATION COMMISSION
(LAFCO)
OF MONTEREY COUNTY

SPHERE OF INFLUENCE POLICIES AND CRITERIA

I. LEGISLATIVE AUTHORITY

The State Legislature has provided Local Agency Formation Commissions (LAFCO's) with the following directions in the preparation of spheres of influence:

1. "Among the purposes of a Local Agency Formation Commission are the discouragement of urban sprawl and the encouragement of the orderly formation and development of local governmental agencies based upon local conditions and circumstances. One of the objects of the Local Agency Formation Commission is to make studies and to obtain and furnish information which will contribute to the logical and reasonable development of local governmental agencies so as to advantageously provide for the present and future needs of each County and its communities..."

2. "In order to carry out its purposes and responsibilities for planning and shaping the logical and orderly development and coordination of local governmental agencies so as to advantageously provide for the present and future needs of the County and its communities, the Local Agency Formation Commission shall develop and determine the sphere of influence of each governmental agency within the County. As used in this section, "sphere of influence" means a plan for the probable ultimate physical boundaries and service area of a local governmental agency. In determining the sphere of influence of each local governmental agency, the Commission shall consider and prepare a written statement of its determinations with respect to each of the following:

    a. The present and planned land uses in the area, including agricultural and open space lands.

    b. The present and probable need for public facilities and services in the area.

    c. The present capacity of public facilities and the adequacy of public services which the agency provides or is authorized to provide.

    d. The existence of any social or economic communities of interest in the area if the Commission determines that they are relevant to the agency."

3. Every determination made by a Commission involving proposals for changes of organization or reorganization shall be consistent with the spheres of influence of the local agencies affected by those determinations.

4. The Commission may recommend governmental reorganizations to particular agencies in the County, using spheres of influence as the basis for such recommendations."

II. DEFINITIONS

1. Agricultural Lands: Land currently used for the purpose of producing an agricultural commodity for commercial purposes, land left fallow under a crop rotational program, or land enrolled in an agricultural subsidy or set-aside program (Government Code Section 56016).

2. Agricultural Preserve: Lands subject to an existing land conservation agreement established pursuant to the California Land Conservation Act of 1965 (the Williamson Act, Government Code Section 51200 et seq.).

3. County: Monterey County.

4. Essential Services: Those basic services necessary to protect the health, safety, and general well-being of a community, including but not limited to police, fire, water, sanitation, etc.

5. General Purpose Government: A City or County government.

6. LAFCO: Monterey County Local Agency Formation Commission.

7. Local Agency: A City or special district.

8. Open Space Lands: Parcel or area of land or water which is substantially unimproved and devoted to open space use as defined in Government Code Section 65560.

9. Planning Concern Area: An area established by the Local Agency Formation Commission with the assistance of the appropriate cities and the County designating a general area of concern of a city for which planning decisions and other governmental actions of the County may have an impact on the city. A "Planning Concern Area" will usually be larger than the adopted sphere of influence boundary and may take into consideration the planning area of the city as identified within their local general plans.

10. Prime Agricultural Land: (A) Land that, if irrigated, qualifies for rating as Class I or II in the USDA Natural Resources Conservation Service land-use capacity classification, whether or not the land is actually irrigated, provided that irrigation is feasible; (B) land that qualifies for rating 80-100 in the Storie Index Rating; (C) land that supports livestock used for the production of food and fiber and that has an annual carrying capacity equivalent to at least one animal unit per acre; (D) land planted with fruit or nut-bearing trees, vines, bushes, or crops that have a non-bearing period of less than five years and that will return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than four hundred dollars ($400) per acre for three of the previous five calendar years; (E) Land that has returned from the production of unprocessed agricultural plant products an annual gross

value of not less than four hundred dollars ($400) per acre for three of the previous five calendar years. (Government Code Section 56064).

11. Regional Agencies: Association of Monterey Bay Area Governments (AMBAG), Regional Water Quality Control Board, Central Coast Regional Coastal Commission, Air Pollution Control Board, etc.

12. Sphere of Influence: A plan for the probable physical boundaries and service area of a local agency. The area around a local agency eligible for annexation and extension of urban service within a twenty-year period.

13. Sphere of Influence Boundary: Boundary, adopted by the Monterey County Local Agency Formation Commission, which delineates the limits beyond which a local governmental agency will not annex territory.

14. Urban Services: Those services which are provided to an urban area including, but not limited to, police, structural fire protection, non-agricultural water, sewer, drainage, street lighting, streets and roads.

15. Urban Service Districts: Special districts which are authorized to provide public sanitary sewer services or domestic water distribution services.

16. Urban Service Area: Urban developed areas within an urban service district or city sphere of influence, which is now served by existing urban facilities, utilities, and services or is proposed to be served by urban facilities, utilities and services within the next five years.

17. Urban Transition Area: Area within the spheres of influence boundaries of a city or an urban service district which is not programmed for urban facilities or utility extensions within the next five years. This area will most likely be used for urban expansion within approximately five to twenty years.

18. Future Study Area: Territory outside of an adopted sphere of influence that may warrant inclusion in the sphere in future years. Further study would have to be completed prior to inclusion.

19. Principal County: Principal County has the meaning contained in any definition of principal county, as set forth in the principal act. If the principal act has no definition of principal county, or if there is any inconsistency between the definitions contained in two or more applicable principal acts, principal county means the county having all or the greater portion of the entire assessed value, as shown on the last equalized assessment roll of the county or counties, of all taxable property within a district or districts for which a change of organization or reorganization is proposed.

III. POLICY GUIDELINES FOR SPHERES OF INFLUENCE

The Commission will generally apply the following policy guidelines in the spheres of influence program, in addition to the local conditions and circumstances of each local agency. The Monterey County Local Agency Formation Commission will consider the particular local conditions and circumstances of each agency and community.

1. LAFCO intends that its sphere of influence determination will serve as a master plan for the future organization of local government within the County. The spheres shall be used to discourage urban sprawl; limit proliferation of local governmental agencies; encourage efficiency, economy and orderly changes in local government; promote compact, community centered urban development; and minimize adverse impacts on lands classified as prime agriculture.

2. The sphere of influence lines shall be a declaration of policy which shall be a primary guide to LAFCO in the decision on any proposal under its jurisdiction. Every determination made by the Commission shall be consistent with the spheres of influence of the agencies affected by those determinations.

3. Any proposal which is inconsistent with an agency's adopted sphere of influence shall not be approved until the Commission, at a noticed public hearing, has considered an amendment or revision to that agency's sphere of influence.

4. Inclusion within an agency's sphere of influence does not assure annexation to that agency. The Commission shall evaluate boundary change proposals as they relate to all of the relevant factors listed in the Cortese-Knox Local Government Reorganization Act of 1985 (Government Code Section 56841 et seq.).

5. When possible, a single larger general purpose agency, rather than a number of adjacent smaller ones, established for a given service in the same general area will be preferred. Where an area could be assigned to the sphere of influence of more than one agency providing a particular needed service, the following hierarchy shall apply dependent upon ability to serve.

   a. Inclusion within a City sphere of influence.

   b. Inclusion within a multi-purpose district sphere of influence.

   c. Inclusion within a single-purpose district sphere of influence.

   In deciding which of two or more equally ranked agencies shall include an area within its sphere of influence, LAFCO shall consider the agencies' service and financial capabilities, social and economic interdependence, topographic factors, and the effect that eventual service extension will have on adjacent agencies.

6. Duplication of authority to perform similar functions in the same territory will be avoided. Sphere of influence boundaries shall not create islands or corridors unless it can be demonstrated that the irregular boundaries represent the most logical and orderly service area of an agency.

7. The adopted sphere of influence shall reflect City and County General Plans, plans of regional agencies, growth management policies, annexation policies, resource management policies, and any other policies related to ultimate boundary or service area of an affected agency unless those plans or policies conflict with the legislative intent of the Cortese-Knox-Hertzberg Act of 2000 (Government Code Section 56000 et seq.).

   Where inconsistencies between plans exist, LAFCO shall rely upon that plan which most closely follows the Legislature's directive to discourage urban sprawl, direct development away from prime agricultural land and open-space lands, and encourage the orderly formation and development of local governmental agencies based upon local conditions and circumstances.

8. Extension of urban type services promotes urban development and such development belongs in cities or areas of development concentration in the unincorporated area of Monterey County. In evaluating proposals involving urban development requiring an urban level of governmental services, the Commission will discourage the formation of new special districts or premature annexation of territory within existing city spheres of influence or logical expansion area. The Commission will discourage boundary change proposals involving urban development outside adopted city spheres of influence that have the potential to negatively impact prime agriculture or open space lands, public service capacity, existing local governmental agencies, or generally represents illogical growth patterns.

9. This Commission, in recognition of the mandated requirements for considering impacts on open space lands and agricultural lands, will develop and determine spheres of influence for Cities and urban service districts in such a manner as to promote the long-term preservation and protection of this County's "Resources." The Commission believes the public interest will be best served by considering "Resources" in a broad sense to include open space, recreational opportunities, wildlife, and agricultural land. Sphere of influence determinations must conform with the Commission's Agricultural Preservation Policy adopted in November, 1979.

10. The Commission recognizes the many inter-relationships and impacts which one agency's land use, planning, and governmental decisions may have on other agencies even though they may be outside of the "sphere of influence" of the secondary agency. Consequently, this Commission, when necessary, will seek to establish and identify Areas of Planning Concern for each city within the County. The "Planning Concern Area" will seek to identify those areas which in a broad sense affect the city in terms of planning and land use decisions. Such "Planning Concern Areas" will be established with the assistance and guidance of the affected cities and the County. The "Planning Concern Area" normally will extend beyond the adopted "sphere of influence" of the city. Once established, the Commission will solicit the cooperation and involvement of the affected cities and the County to jointly involve one another in planning decisions for these areas.

IV. PROCEDURAL GUIDELINES

1. LAFCO will designate a sphere of influence for each local agency representing the agency's probable physical boundary within a zero to twenty year period.

2. LAFCO shall consider the following factors in determining or amending an agency's sphere of influence:

   a. Present and future need for agency services and the service levels specified for the subject area in applicable general plans, growth management plans, annexation policies, resource management plans, and any other plans or policies related to an agency's ultimate boundary and service area.

   b. Capability of the local agency to provide essential and urban services, taking into account evidence of resource capacity sufficient to provide for internal needs and urban expansion.

   c. The existence of agricultural preserves, agricultural lands and open space lands in the area and the effect that inclusion within a sphere of influence shall have on the physical and economic integrity of maintaining the land in non-urban use.

   d. Present and future cost and adequacy of services anticipated to be extended within the sphere of influence.

   e. Present and projected population growth, population densities, land uses, land area, ownership patterns, assessed valuations, and proximity to other populated area.

   f. The agency's capital improvement or other plans that delineate planned facility expansions and the timing of that expansion.

   g. Social or economic communities of interest in the area.

3. The Commission may establish an urban service area within an adopted sphere of influence to discourage urban sprawl and to promote compact growth patterns. Urban service areas consist of territory now served by urban facilities, utilities and services or proposed to be served within the next five years, and may include the following:

   a. Urbanized Areas. This includes all existing areas, either incorporated or unincorporated, developed to urban densities.

   b. Urban Expansion Areas. This consists of vacant land, either incorporated or unincorporated, which is capable of holding urban growth expected within the next five years.

   The territory included within urban service areas will be considered by LAFCO to be eligible for annexation within five years. Consideration will be given to city and special district capability to provide needed services with related time schedules for planned expansion of services. Cities and special districts are encouraged to develop Capital Improvement Programs and other plans for the phased extension of services to assist LAFCO in determining logical urban service area boundaries.

4. The Commission may establish urban transition areas within adopted spheres of influence to discourage premature pressure for development. Transition areas consist of the residual lands between designated urban service areas and the ultimate sphere of influence boundary. This land will most likely be used for urban expansion within approximately five (5) to twenty (20) years. Territory included within urban transition areas, but not within urban service areas, generally will not be considered eligible for annexation to receive urban services within five years.

5. LAFCO may adopt a zero sphere of influence encompassing no territory for an agency. This occurs where LAFCO determines that the public service functions of the agency are either non-existent, no longer needed, or should be reallocated to some other agency of government.

   The local agency which has been assigned a zero sphere of influence should ultimately be dissolved. Special districts that lie substantially within the boundary or sphere of influence of a general purpose government which is capable of assuming the public service responsibilities and functions of that special district may be allocated a zero sphere of influence designation.

6. Territory not in need of urban services, including open space, agriculture, recreational, rural lands or residential rural areas, shall not be assigned to an agency's sphere of influence unless the area's exclusion would impede the planned, orderly and efficient development of an area.

7. LAFCO may adopt a sphere of influence that excludes territory currently within that agency's boundaries. This occurs where LAFCO determines that the territory consists of agricultural lands, open space lands or agricultural preserves whose preservation would be jeopardized by inclusion within the agency's sphere of influence. Exclusion of these areas from an agency's sphere of influence indicates that detachment is appropriate.

8. Two or more local agencies providing the same service(s) may be allocated a consolidated sphere of influence to include the areas served by both agencies. This would be the case where LAFCO believes that the particular service(s) should be provided to the entire area by a single local agency.

9. LAFCO may establish future study areas outside of adopted spheres of influence. These areas indicate territory which may ultimately be appropriate for inclusion within an agency's sphere upon future study or modified conditions.

10. LAFCO shall adopt, amend or revise sphere of influence determinations following the procedural steps set forth in the Cortese-Knox-Hertzberg Act of 2000 (Government Code Section 56076 et seq.).

11. LAFCO shall review sphere of influence determinations not less than every five years. If a local agency or the County desires amendment or revision of an adopted sphere of influence, the local agency by resolution may file such a request with the Executive Officer. The request shall state the nature of the proposed amendment and the reasons

for the request, include a map of the proposed amendment, and contain additional data and information as may be required by the Executive Officer.

12. The Commission encourages any private individual desiring a revision of an adopted sphere of influence to request that the affected local agency initiate sphere reconsideration by resolution to promote consultation between the parties.

13. At least 30 days prior to submitting an application to the Commission for a determination of a new sphere of influence, or to update an existing sphere of influence for a city, representatives from the city shall meet with county representatives to discuss the proposed sphere, and its boundaries, and explore methods to reach agreement on the boundaries, development standards, and zoning requirements within the sphere to ensure that development within the sphere occurs in a manner that reflects the concerns of the affected city and is accomplished in a manner that promotes the logical and orderly development of areas within the sphere. If no agreement is reached between the city and county within 30 days, then the parties may, by mutual agreement, extend discussions for an additional period of 30 days. If an agreement is reached between the city and county regarding the boundaries, development standards, and zoning requirements within the proposed sphere, the agreement shall be forwarded to the Commission, and the Commission shall consider and adopt a sphere of influence for the city consistent with the policies adopted by the Commission pursuant to this section, and the Commission shall give great weight to the agreement in the Commission's final determination of the city sphere.

14. If the Commission's final determination is consistent with the agreement reached between the city and county pursuant to subdivision 13, the agreement shall be adopted by both the city and county after a noticed public hearing. Once the agreement has been adopted by the affected local agencies and their respective general plans reflect that agreement, then any development approved by the county within the sphere shall be consistent with the terms of that agreement.

15. If no agreement is reached pursuant to subdivision 13, the application may be submitted to the Commission and the Commission shall consider a sphere of influence for the city consistent with the policies adopted by the Commission pursuant to this section.

16. When adopting, amending, or updating a sphere of influence for a special district, the Commission shall do all of the following:

    a. Require existing districts to file written statements with the Commission specifying the functions or classes of services provided by those districts.

    b. Establish the nature, location, and extent of any functions or classes of services provided by existing districts.

17. In order to prepare and to update spheres of influence in accordance with Section 56425, the Commission shall conduct a service review of the municipal services provided in the county or other appropriate area designated by the Commission. The Commission shall include in the area designated for service review the county, the region, the subregion, or

any other geographic area as is appropriate for an analysis of the service or services to be reviewed, and shall prepare a written statement of its determinations with respect to each of the following:

a. Infrastructure needs or deficiencies.

b. Growth and population projections for the affected area.

c. Financing constraints and opportunities.

d. Cost avoidance opportunities.

e. Opportunities for rate restructuring.

f. Opportunities for shared facilities.

g. Government structure options, including advantages and disadvantages of consolidation or reorganization of service providers.

h. Evaluation of management efficiencies.

i. Local accountability and governance.

18. In conducting a service review, the Commission shall comprehensively review all of the agencies that provide the identified service or services within the designated geographic area.

19. The Commission shall conduct a service review before, or in conjunction with, but no later than the time it is considering an action to establish a sphere of influence in accordance with Section 56425 or Section 56426.5 or to update a sphere of influence pursuant to Section 56425.

20. Individuals desiring LAFCO to initiate revision or amendment of an existing sphere of influence shall file a written request with the Executive Officer. The request shall state the nature of the proposed amendment and the reasons for the request, include a map of the proposed amendment area, and contain additional data and information as may be required by the Executive Officer.

21. The Executive Officer shall review each request for amendment, prepare a report and recommendation, and place the request on the agenda of the next meeting of the Commission for which notice can be given after determining conformance with the California Environmental Quality Act. Copies of the Executive Officer report shall be provided to the person(s) making the request, each affected local agency, and each person who has filed a request for a report.

22. Any local agency, county, or private individual making such a request shall reimburse the Commission for the actual and direct costs incurred by the Commission. The

Commission may waive such requirement if it finds that the request may be considered as part of its periodic review of spheres of influence.

23. The Monterey County Local Agency Formation Commission shall adopt, amend, or revise spheres of influence after a public hearing called and held for that purpose. At least 15 days prior to the date of any such hearing, the Executive Officer shall give mailed notice of the hearing to each affected local agency and the County, and to any interested party who has filed a written request for such notice with the Executive Officer. In addition, at least 15 days prior to the date of any such hearing, the Executive Officer shall cause notice of the hearing to be published in a newspaper of general circulation which is circulated within the territory affected by the sphere of influence proposed to be adopted or amended.

    LAFCO may continue from time to time any sphere of influence hearing. At any sphere of influence hearing, LAFCO shall hear and consider oral or written testimony presented by any affected local agency, the County, or any interested person who wishes to appear.

24. On the date and time set for hearing and provided in the notice, the Commission may, without further notice, consider the amendments to a sphere of influence or set a future date for the hearing on the request.

25. For annexations and Sphere of Influence applications, Monterey County LAFCO shall consider as part of its decision whether the proposal mitigates it regional traffic impacts by, for example, monetary contribution to a regional transportation improvement fund as established by the Transportation Agency of Monterey County or otherwise.

26. For annexations and Sphere of Influence applications, Monterey County LAFCO shall consider as part of its decision whether the city in which the annexation or Sphere of Influence amendment is proposed has included certain goals, policies, and objectives into its General Plan that encourages mixed uses, mixed densities, and development patterns that will result in increased efficiency of land use, and that encourages and provides planned, well-ordered, efficient urban development patterns.

Revised October 23, 2006

MONTEREY BAY
Unified Air Pollution Control District
serving Monterey, San Benito, and Santa Cruz counties

AIR POLLUTION CONTROL OFFICER
Douglas Quetin

24580 Silver Cloud Court • Monterey, California 93940 • 831/647-9411 • FAX 831/647-8501

May 29, 2008

Mr. Courtney Grossman
City of Salinas
Division of Community Planning and Development
Development and Engineering Services Dept.
65 West Alisal Street
Salinas, CA 93901

Sent Electronically to:
courtg@ci.salinas.ca.us
Original Sent by First Class Mail.

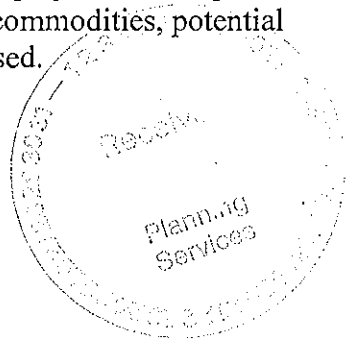
SUBJECT: SALINAS AG-INDUSTRIAL PARK - NOP

Dear Mr. Grossman:

The Air District's concerns include emissions of fugitive dust and diesel exhaust from heavy-duty engines during construction, emissions from direct and indirect operational sources, permits for stationary sources and portable equipment, and consistency with the 2008 Air Quality Management Plan that is scheduled for adoption by the Air Board in June; which are reflected in the comments that follow.

Program-Level EIR for Specific Plan / Project EIR for First Project ("Lot F")
The Project Description specifies that a program-level EIR will be prepared for the Ag-Industrial Park, with more detailed analysis of the first user (Page 4 of Notice of Preparation). The Program EIR should provide sufficient description and analysis of "program-level issues" to allow subsequent projects to tier off the program-level EIR.

Operational Emissions: VOC and NOx
Direct and indirect source emissions (VOC and NOx) from all proposed operational activities should be quantified and assessed. URBEMIS 2002 Version 8.7 for the North Central Coast (Monterey Bay Region) should be used to estimate emissions.
As discussed at the early consultation meeting with District staff, the existing environment likely includes fugitive dust from agricultural tilling, vehicular travel on unpaved roads, emissions from ag pumps and mobile equipment, pesticides, as well as traffic that might be redistributed as a result of implementation of the Specific Plan and the first proposed project. This baseline should be described and analyzed against the proposed project. If the Specific Plan would accommodate projects that would preserve agricultural commodities, potential emissions of ammonia from refrigeration facilities should be addressed.



PM_{10} Emissions
If emissions would exceed 82 lb/day, the project would have a significant impact on air quality. However, PM_{10} modeling could be undertaken to verify or dispute this finding per the District's CEQA Air Quality Guidelines.

Diesel Health Risk Assessment
This should reflect the impacts associated with the diesel equipment to be used in the various stages of the project, and should include a discussion of how emissions were determined (including horsepower and load factors).

Chronic Cancer Risk
Given the phasing of the Ag-Industrial Park, each stage of the project should include a description and health risk assessment of the direct and indirect sources of diesel emissions, including diesel truck trips. A map showing cancer risk isopleths should be included with the analysis.
In addition to diesel trucks, other sources of emissions may result from project operations, including:

Stationary sources of power generation such as boilers, engines, turbines;
Gasoline dispensing operations;
Diesel engine repair shops;
Stainless steel welding operations; and
Painting operations.

If these operations become part of the build-out of the Specific Plan, associated acute, chronic and cumulative impacts should be assessed.

Acute Risk from Acrolein Emissions
In addition to the cancer risk, the acute hazard index associated with acrolein emissions from diesel trucks should be determined. The diesel truck emissions should be determined as the trucks 1) travel through the area (a) onsite and (b) to Highway 101; and 2) idle (a) onsite and (b) while waiting to enter sites.

Anti-Idling Regulation
Please see Title 13, California Code of Regulations, Section 2485 regarding idling of commercial vehicles, which follows:

California Code of Regulations
Title 13. § 2485. Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling (a) Purpose. The purpose of this airborne toxic control measure is to reduce public exposure to diesel particulate matter and other air contaminants by limiting the idling of diesel-fueled commercial motor vehicles. (b) Applicability. This section applies to diesel-fueled commercial motor vehicles that operate in the State of California with gross vehicular weight ratings of greater than 10,000 pounds that are or must be licensed for operation on highways. This specifically includes: (1) California-based vehicles; and (2) Non-California-based vehicles. (c) Requirements. On or after February 1, 2005, the driver of any vehicle subject to this section: (1) shall not idle the vehicle's primary diesel engine for greater

than 5.0 minutes at any location, except as noted in Subsection (d); and (2) shall not operate a diesel-fueled auxiliary power system (APS) to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in a sleeper berth for greater than 5.0 minutes at any location when within 100 feet of a restricted area, except as noted in Subsection (d).

Construction Emissions of Volatile Organic Compounds and NOx

VOC and NOx emissions need not be quantified for "typical" construction activity. Staff should be consulted regarding potential construction equipment to be used on the project.

Construction Impacts: Dust and Diesel Exhaust

Fugitive Dust

Given the Air Basin's non-attainment status for PM_{10}, the District suggests that the County consider the following measures to adequately address the impacts of fugitive dust:

- Water graded / excavated areas at least twice daily. Frequency should be based on the type of operations, soil and wind exposure.
- Prohibit all grading activities during periods of high wind (over 15 mph)
- Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days)
- Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations, and hydro-seed area.
- Haul trucks shall maintain at least 2'0" of freeboard.
- Cover all trucks hauling dirt, sand, or loose materials.
- Plant vegetative ground cover in disturbed areas as soon as possible.
- Cover inactive storage piles.
- Install wheel washers at the entrance to construction sites for all exiting trucks.

Diesel Exhaust

David Craft of the District's Engineering Division will contact you to discuss the diesel equipment to be used in the project. If mitigation appears necessary, he will discuss suggested measures with you.

Carbon Monoxide "Hotspots"

If a project or cumulative traffic would cause LOS to decline from D or better to E or F, dispersion modeling should be undertaken to determine if carbon monoxide.

Odors, Nuisances and Sensitive Receptors

If the project would revise land use designations that might result in development of odors or nuisances in adjacent land uses, the Draft EIR should include an assessment of those impacts. District Rule 402, Nuisances, should be reviewed for applicable requirements.

Climate Change / AB 32 Requirements

Please note that during the period that the EIR would be prepared, the District plans to propose a new chapter to its CEQA Air Quality Guidelines, which would establish a methodology to address the impacts of development projects on climate

change. (The City of Salinas has addressed the impacts of future growth on climate change in its Future Growth Area DSEIR.)

Air District Permits

Permits to Construct and Permits to Operate are required for all stationary sources subject to the District's permitting authority. Based on the Project Description, potential sources include:

Painting Operations
Cogeneration Units
Commercial Boilers
Vehicle Fueling Operations (gasoline)
Solvent Cleaning Operations
Process Heaters/Dryers
Fermentation Operations

Source List. Page 33 of Initial Study.

"F1" in the Source List, CEQA Air Quality Guidelines, dated June 2004" was updated in April 2008.

Sincerely,

Jean Getchell
Supervising Planner
Planning and Air Monitoring Division

MONTEREY COUNTY
RESOURCE MANAGEMENT AGENCY

PLANNING DEPARTMENT, Mike Novo, Director

168 W. ALISAL ST., 2ND FLOOR
SALINAS, CA 93901

(831) 755-5025
FAX (831) 757-9516

June 4, 2008

Courtney Grossman, Planning Manager
Community Planning and Development
City of Salinas
65 W. Alisal Street
Salinas, CA 93901

SUBJECT: Notice of Preparation, Salinas Ag-Industrial Business Park (PD080528)

Dear Mr. Grossman:

Thank you for the opportunity to comment on the Notice of Preparation (NOP) for the proposed Salinas Ag-Industrial Business Park. In the future, please provide the notice to my attention and I will get it distributed to our county land use departments.

We are providing several comments for consideration in addressing the potential environmental effects of the proposed project:

1. The NOP states that this is a Program EIR. Will additional environmental review be conducted to allow development of the project site? It is important for us to understand whether more detailed, site specific, environmental documents will be prepared later or if this document will allow actual construction on the site and for needed infrastructure improvements.

2. In addition to providing a consistency analysis with local plans, please analyze consistency of the project, and any required mitigation measures, with the Greater Salinas Area Memorandum of Understanding dated August 2006.

3. The project needs to be designed to provide well-defined agricultural buffers as set forth in Section 21.66.030.F.2 of the County Zoning Ordinance (Title 21) and as found at the following website:

   http://www.co.monterey.ca.us/planning/docs/ordinances/Title21/21.66.030%20Agricultural%20Uses.htm.

4. The EIR should analyze the project's potential effects on 1) the loss of farmland identified by the State Department of Conservation as prime land, 2) the continued viability of surrounding agricultural land and land uses as a result of the construction of the project, and 3) Williamson Act contracts in the area. In addition, compatibility between uses proposed by the project and surrounding

agricultural uses needs to be analyzed to disclose whether conflicts or significant environmental effects will occur.

5. We have reviewed the project list you provided to our Public Works Department for analyzing cumulative projects. For the list of cumulative projects to be analyzed in this document, please consider adding the following projects:

   Rogge Commons (east of the city limits)
   Butterfly Village (north of the city limits)
   Nestech (Boronda area)
   Laguna Seca Villas (Laguna Seca Office Park)

   We have attached the project description for each of these projects, except Butterfly Village. That description will be sent to you early next week.

6. The EIR should include a preliminary drainage analysis that includes calculations certifying there will be adequate stormwater detention facilities to limit the 100-year post development runoff rate to the 10-year pre-development rate. The drainage analysis should include a discussion of potential impacts to existing drainage facilities including the Reclamation Ditch. The EIR should also include a drainage plan showing the existing and proposed primary drainage facilities.

7. The EIR should analyze potential impacts to county road facilities from the potential release of hazardous materials from transportation, storage, or upset conditions.

8. The EIR should describe the likely areas where employees would reside, and identify the commute patterns and related impacts of travel to and from this site. Adequate mitigation should be identified for potential significant impacts.

9. County Public Works appreciates the opportunity to participate with the City in the preparation of the traffic study for the Salinas Ag-Industrial Business Park / UniKool project, and looks forward to continued coordination with the City. The County acknowledges the City's objectives of seeking additional facilities for the local agricultural industry. In achieving these goals, attention must be paid to providing the improvements to existing roadways and new roadway facilities necessary for access between the project site and the surrounding regions, and to ensure acceptable service levels on the local and regional circulation systems that would serve our communities.

   The EIR/Traffic Study should address the project's impacts on all county, regional, and city roadways. The geographic area covered in the scope of the traffic study should be of sufficient size to adequately identify all of the project's impacts. Because existing County roadway facilities appear to be access routes for the proposed planning area, and given the size of the project area, both geographically and in terms of traffic generation, attention should be paid to the effect this growth will have on the County roadway system, and particularly those roads in the vicinity of the project site. Impacts to the City and County roadway systems must be determined, and any mitigation measures warranted by these impacts must be identified to ensure sufficient street networks with acceptable levels of service are available to serve the community. County Public Works has already

been included in several meetings with the City and the applicant in developing the scope for the traffic analysis, and welcomes continued participation with the City.

10. A thorough pavement condition analysis and corresponding mitigation measures need to be included in the EIR, should the project generate a significant amount of heavy truck traffic on County roads, i.e. increases in the Traffic Index (TI).

11. The report should address the needs and benefits of providing pedestrian/bicycle facilities. The project should also strive to provide carpool/vanpool and other alternative modes of transportation that will reduce the peak demand on roadways in the project area.

12. The EIR should address the direct impacts to trash disposal and recycling facilities and providers, and the impacts related to those increased operations. The project should be analyzed for "green" (sustainable) design components and mitigation measures should consider "green" options. The alternatives analysis should include a project design using sustainable construction materials and methods.

In addition to considering our comments on the NOP, please ensure that the project application is submitted through the Airport Land Use Commission process, if applicable.

Should you have any questions, please call me at 755-5192 or email me at novom@co.monterey.ca.us.

Sincerely,

Mike Novo

cc: Monterey County Public Works Department
Monterey County Water Resources Agency
Monterey County Agricultural Commissioner
Monterey County Environmental Health
Local Agency Formation Commission

TAMC
TRANSPORTATION AGENCY
FOR MONTEREY COUNTY

Regional Transportation Planning Agency • Congestion Management Planning
Local Transportation Commission • Monterey County Service Authority for Freeways & Expressways

June 5, 2008

Mr. Courtney Grossman
Planning Manager
Community Planning and Development
City of Salinas
65 West Alisal Street
Salinas, California 93901

SUBJECT: Comments on the Notice of Preparation of a Draft Environmental Impact Report for the Salinas Ag-Industrial Business Park Project

Dear Mr. Grossman:

The Transportation Agency for Monterey County is the Regional Transportation Planning Agency and Congestion Management Agency for Monterey County. Transportation Agency staff has reviewed the proposed Notice of Preparation of a Draft Environmental Impact Report for the Salinas Ag-Industrial Business Park Project.

The project involves the subdivision of 257 acres located south of Abbott Street and west of Harris Road to create six parcels for use in agricultural processing, manufacturing, agricultural support, and related commercial, retail, and office businesses, including an extension of Burton Avenue and Dayton Street. Transportation Agency staff appreciates the City's and project development team's prior coordination and discussion of this project early in the process and offers the following comments for your consideration:

Regional Road & Highway Impacts

1. With the project developing support facilities that will service agriculture-related activities in the Salinas Valley, it can be expected that the development will act as a regional draw, particularly for truck traffic, via Highway 101, State Route 156, State Route 68, and State Route 183. The traffic study for the draft Environmental Impact Report should fully consider the impacts this project will have on the aforementioned regional facilities at both site-specific and cumulative levels (including the proposed Fresh Express expansion project in the development scenarios), with special consideration given to the impacts from truck traffic. In addition to the listed study points, the traffic study should also include an analysis of the project impacts to the proposed US-101/Harris Road interchange and existing US-101/Airport Boulevard interchange, with feasible site-specific and cumulative mitigation measures identified for all impacts.

2. The Transportation Agency supports fair-share payments of the City of Salinas' comprehensive Traffic Impact Fee as contribution to mitigation for project-specific impacts to local streets and roads. Cumulative impacts will also need to be mitigated, which can be accomplished through a contribution to our agency's regional development impact fee program. Our agency is in the process of seeking approval from our member jurisdictions to implement regional fees, and the City of Salinas has indicated its support for the program. The Transportation Agency is expecting, adoption status of the fee program notwithstanding, that this project will mitigate its cumulative impacts through the regional fee program. Payment of the regional development impact fee is supported by Caltrans and allows new development to adequately mitigate cumulative impacts to state highways and regional roads while remaining California Environmental Quality Act-compliant. The document should indicate that payment of the regional development impact fees is the preferred mitigation measure for cumulative transportation impacts.

3. The traffic analysis for the draft Environmental Impact Report should include information on existing traffic volumes within the study area, especially for those roadway segments and intersections on state highways and principal arterials. This information should be based upon recent traffic counts (no more than two years old). The existing level of service for each roadway segment and intersection should also be calculated and included in the draft document.

4. When complete, the Transportation Agency requests that a copy of the traffic study for this project be provided to our agency for review along with the draft Environmental Impact Report.

Pedestrian, Bicycle, & Transit Travel

5. The Transportation Agency supports accommodation of alternative forms of transportation (rail, bus transit, bicycle and pedestrian transportation), both through the design of transportation facilities, and through the design and orientation of land uses. The Transportation Agency supports projects that seek to maintain and promote non-automotive travel within the community by providing adequate bicycle and pedestrian facilities, connecting sidewalks to surrounding developments, and ensuring sufficient right-of-way for bike lanes. With the amount of truck traffic that can be expected from this development, special consideration should be given to employees, visitors, and passers-by utilizing bicycle and pedestrian routes for access and safety:

   a) Our agency requests that existing bicycle and pedestrian facilities, proposed facilities, and facilities that the project applicant will construct be interconnected, particularly to the existing Class II and III bike lanes on Abbott Street, Harkins Road and Hansen Street/Schilling Place as well as the proposed facility on Airport Boulevard. Also, the document should address the need for new roadways to be designed to accommodate bicycles with adequate pavement for bike travel, with specific dimensions clearly identified, particularly along major arterials.

   b) The environmental review and development planning should place a premium on safe and accessible pedestrian access to the site from intersections and crosswalks, sidewalks, and bicycle facilities. Our agency recommends that proper striping be

included for all pedestrian crosswalks to clearly identify areas of pedestrian travel and ensure safe transitions for vehicles and pedestrians. Consideration should be given to the inclusion of intelligent crosswalks, which provide flashing notification lights when a pedestrian enters the crosswalk to increase visibility and alert drivers of their presence. The project site should also be designed with sidewalks that connect to external facilities, provide access to transit stops, and do not include the use of cul-de-sacs without a cut-through for pedestrian travel.

c) A map depicting both existing and planned bicycle and pedestrian facilities (specifically how planned facilities will link to existing facilities in surrounding areas) with the type of facility (lane, path, or route) and cross-sections should be provided in the draft document. The map should also indicate the location of bicycle racks and lockers and our agency encourages the inclusion of adequate lighting at those locations for safety. The Transportation Agency also encourages the project developer to apply for our Bicycle Protection Program, which provides grant funding for bicycle parking facilities (racks and lockers) for local businesses, governments, and school districts.

6. Monterey-Salinas Transit is in discussion with the South County cities of Gonzales, Soledad, Greenfield, and King City on the possibility of assuming transit service in these areas. Our agency recommends that the development work closely with Monterey-Salinas Transit to ensure that the development will provide adequate access to any planned transit routes as well as to the routes that currently exist for Lines 21, 23, and 29. In addition, Monterey-Salinas Transit's *Designing for Transit* Guideline Manual should be used as a resource for accommodating any future transit access to the project site.

Thank you for the opportunity to review this document. If you have any questions, please contact Michael Zeller of my staff at (831) 775-0903.

Sincerely,

Debra L. Hale
Executive Director

CC: Dave Murray, California Department of Transportation (Caltrans) District 5
Ron Lundquist, Monterey County Department of Public Works
Carl Sedoryk, Monterey-Salinas Transit
Nicholas Papadakis, AMBAG
Douglas Quetin, Monterey Bay Unified Air Pollution Control District

AMBAG
ASSOCIATION OF MONTEREY BAY AREA GOVERNMENTS

March 4, 2009

Richard James, AICP
Principal Planner
EMC Planning Group Inc.
301 Lighthouse Avenue, Suite C
Monterey, CA 93940

Dear Mr. James:

This letter is in response to your December 16, 2008 request (from Hillary Bird) for a determination of consistency of the Unikool/Salinas Agricultural Park project with the *2008 Air Quality Management Plan for the Monterey Bay Region* (AQMP).

Consistency of the commercial portion of this project is determined by comparing the estimated current population of the area in which the project is located with the applicable population forecast in the AQMP. The *2008 Population, Housing Unit, and Employment Forecasts* adopted by the AMBAG Board of Directors on June 11, 2008 has been incorporated into the 2008 Air Quality Management Plan for the North Central Coast Air Basin (August 2008), which is the document used project consistency. If the estimated current population does not exceed the forecast, indirect emissions associated with the project are deemed to be consistent with the AQMP.

The current population of the City of Salinas is 150,898 (1/1/08 Department of Finance estimate). The forecasted population of the City of Seaside in the year 2010, the next forecasted year, is 153,779. As the current population of the City of Salinas is less than the forecasted population, the commercial portion of the Unikool/Salinas Agricultural Park project is **consistent** with the AQMP.

Please feel free to contact me if you have any questions about this determination.

Sincerely,

David Roemer
Associate Planner
droemer@ambag.org

cc: Jean Getchell, MBUAPCD

SERVING OUR REGIONAL COMMUNITY SINCE 1968
445 RESERVATION ROAD, SUITE G ✦ P. O. BOX 809 ✦ MARINA, CA 93933-0809
(831) 883-3750 ✦ FAX (831) 883-3755 ✦ www.ambag.org

Land Evaluation Worksheet-Site - 1

Land Capability Classification (LCC) and Storie Index Scores

A	B	C	D	E	F	G	H
Soil Map Unit	Project Acres	Proportion of Project Area	LCC	LCC Rating	LCC Score	Storie Index	Storie Index Score
CnA	179.32	.6914	IIs	80	55.3	51	35.26
Cg	36.95	.1425	IIw	80	11.4	43	6.13
SbA	42.69	.1646	I	100	16.5	85	13.99
SaA	0.38	.0015	I	100	0.2	100	0.15
Xc	0.010	.00	VIe	20	0	0	0
Totals	259.35	(Must Sum to 1.0)		***LCC Total Score***	83.4	***Storie Index Total Score***	55.5

Site Assessment Worksheet 1.

Project Size Score

	I	J	K
	LCC Class I - II	LCC Class III	LCC Class IV - VIII
	179.32		
	36.95		
	42.69		
	0.38		
			.01
Total Acres	259.34	0	.01
Project Size Scores	100	0	0

Highest Project Size Score 100

Site Assessment Worksheet 2. - Water Resources Availability

A	B	C	D	E
Project Portion	Water Source	Proportion of Project Area	Water Availability Score	Weighted Availability Score (C x D)
1	Ground water	1	100	100
2				
3				
4				
5				
6				
		(Must Sum to 1.0)	***Total Water Resource Score***	100

Site Assessment Worksheet 3.
Surrounding Agricultural Land and Surrounding Protected Resource Land

A	B	C	D	E	F	G
Zone of Influence						
Total Acres	Acres in Agriculture	Acres of Protected Resource Land	Percent in Agriculture (A/B)	Percent Protected Resource Land (A/C)	Surrounding Agricultural Land Score (From Table)	Surrounding Protected Resource Land Score (From Table)
1782.2	1454.3	117.7	81%	6.6%	90	0

- Zone of influence: land within one quarter mile (1320 ft) of the project site.
- Percentage of land in agricultural use estimated using aerial photographs and site investigations.

NOTES

Final LESA Score Sheet

Calculation of the Final LESA Score:

(1) Multiply each factor score by the factor weight to determine the weighted score and enter in Weighted Factor Scores column.
(2) Sum the weighted factor scores for the LE factors to determine the total LE score for the project.
(3) Sum the weighted factor scores for the SA factors to determine the total SA score for the project.
(4) Sum the total LE and SA scores to determine the Final LESA Score for the project.

	Factor Scores	Factor Weight	Weighted Factor Scores
LE Factors			
Land Capability Classification	<1> 83.4	0.25	20.85
Storie Index	<2> 55.5	0.25	13.88
LE Subtotal		***0.50***	34.86
SA Factors			
Project Size	<3> 100	0.15	15
Water Resource Availability	<4> 100	0.15	15
Surrounding Agricultural Land	<5> 90	0.1	13.5
Protected Resource Land	<6> 0	0.05	0
SA Subtotal		***0.50***	43.5
		Final LESA Score	78.36

For further information on the scoring thresholds under the California Agricultural LESA Model, consult Section 4 of the Instruction Manual.

2/12/2009 9:52:56 AM

Urbemis 2007 Version 9.2.0

Combined Annual Emissions Reports (Tons/Year)

File Name: I:\Projects\ENV Projects\500 Series\ENV-515 (Salinas Ag-Ind Business Park EIR)\Technical Reports and Plans\Project Specific Techni Reports\Air Quality - URBEMIS\ENV-515 Urbemis February 2009.urb9

Project Name: Salinas Ag Project 2nd Run Feb 2009

Project Location: Monterey County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

ical

2/12/2009 9:52:56 AM

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	PM10 Dust	PM10 Exhaust	PM10	CO2
2010 TOTALS (lbs/day unmitigated)	114.07	95.86	1,285.01	4.68	1,289.69	9,106.62
2011 TOTALS (lbs/day unmitigated)	113.61	32.95	0.31	1.52	1.82	7,924.61
2012 TOTALS (lbs/day unmitigated)	113.17	30.21	0.31	1.39	1.69	7,922.70
2013 TOTALS (lbs/day unmitigated)	112.73	27.46	0.31	1.25	1.56	7,921.13
2014 TOTALS (lbs/day unmitigated)	112.32	24.79	0.31	1.11	1.42	7,919.85

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	PM10	CO2
TOTALS (tons/year, unmitigated)	6.00	0.15	0.00	176.63

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	PM10	CO2
TOTALS (tons/year, unmitigated)	121.42	1,082.30	354.43	330,202.57

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	PM10	CO2
TOTALS (tons/year, unmitigated)	127.42	1,082.45	354.43	330,379.20

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Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

	ROG	NOx	PM10 Dust	PM10 Exhaust	PM10	CO2
Time Slice 1/4/2010-1/8/2010 Number Active Days: 5	5.62	46.60	0.01	2.23	2.24	4,264.33
Demolition 01/04/2010-01/08/2010	5.62	46.60	0.01	2.23	2.24	4,264.33
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Demo Off Road Diesel	5.54	46.44	0.00	2.22	2.22	4,132.45
Demo On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00
Demo Worker Trips	0.08	0.16	0.01	0.01	0.01	131.88
Time Slice 1/11/2010-3/26/2010 Number Active Days: 55	11.36	95.86	**1,285.01**	4.68	**1,289.69**	9,106.62
Mass Grading 01/11/2010-03/26/2010	11.36	95.86	1,285.01	4.68	1,289.69	9,106.62
Mass Grading Dust	0.00	0.00	1,285.00	0.00	1,285.00	0.00
Mass Grading Off Road Diesel	11.19	95.53	0.00	4.66	4.66	8,842.87
Mass Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading Worker Trips	0.17	0.33	0.01	0.01	0.02	263.76
Time Slice 3/29/2010-4/30/2010 Number Active Days: 25	11.36	95.86	**1,285.01**	4.68	**1,289.69**	9,106.62
Fine Grading 03/29/2010-04/30/2010	11.36	95.86	1,285.01	4.68	1,289.69	9,106.62
Fine Grading Dust	0.00	0.00	1,285.00	0.00	1,285.00	0.00
Fine Grading Off Road Diesel	11.19	95.53	0.00	4.66	4.66	8,842.87
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.17	0.33	0.01	0.01	0.02	263.76

Time Slice 5/3/2010-5/28/2010 Number Active Days: 20	15.70	72.25	0.22	3.81	4.03	8,030.94
Asphalt 05/03/2010-05/28/2010	15.70	72.25	0.22	3.81	4.03	8,030.94
Paving Off-Gas	8.42	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	3.20	19.17	0.00	1.68	1.68	1,418.81
Paving On Road Diesel	4.00	52.92	0.22	2.13	2.34	6,480.24
Paving Worker Trips	0.08	0.16	0.01	0.01	0.01	131.88
Time Slice 6/1/2010-6/30/2010 Number Active Days: 22	2.13	17.82	0.01	0.88	0.89	1,820.14
Trenching 06/01/2010-06/30/2010	2.13	17.82	0.01	0.88	0.89	1,820.14
Trenching Off Road Diesel	2.06	17.69	0.00	0.88	0.88	1,714.64
Trenching Worker Trips	0.07	0.13	0.01	0.00	0.01	105.50
Time Slice 7/5/2010-9/6/2010 Number Active Days: 46	5.86	35.52	0.30	1.62	1.92	7,793.82
Building 07/05/2010-12/31/2014	5.86	35.52	0.30	1.62	1.92	7,793.82
Building Off Road Diesel	1.77	9.46	0.00	0.59	0.59	941.22
Building Vendor Trips	1.86	21.67	0.12	0.88	0.99	3,309.29
Building Worker Trips	2.23	4.39	0.18	0.15	0.33	3,543.31
Time Slice 9/7/2010-12/31/2010 Number Active Days: 84	114.07	35.69	0.31	1.63	1.93	7,926.94
Building 07/05/2010-12/31/2014	5.86	35.52	0.30	1.62	1.92	7,793.82
Building Off Road Diesel	1.77	9.46	0.00	0.59	0.59	941.22
Building Vendor Trips	1.86	21.67	0.12	0.88	0.99	3,309.29
Building Worker Trips	2.23	4.39	0.18	0.15	0.33	3,543.31
Coating 09/07/2010-12/05/2014	108.20	0.17	0.01	0.01	0.01	133.13
Architectural Coating	108.12	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.08	0.17	0.01	0.01	0.01	133.13

Time Slice 1/3/2011-12/30/2011 Number Active Days: 260	113.61	32.95	0.31	1.52	1.82	7,924.61
Building 07/05/2010-12/31/2014	5.41	32.80	0.30	1.51	1.81	7,791.57
Building Off Road Diesel	1.64	8.92	0.00	0.57	0.57	941.22
Building Vendor Trips	1.74	19.84	0.12	0.79	0.91	3,309.38
Building Worker Trips	2.04	4.04	0.18	0.15	0.33	3,540.97
Coating 09/07/2010-12/05/2014	108.20	0.15	0.01	0.01	0.01	133.04
Architectural Coating	108.12	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.08	0.15	0.01	0.01	0.01	133.04
Time Slice 1/2/2012-12/31/2012 Number Active Days: 261	113.17	30.21	0.31	1.39	1.69	7,922.70
Building 07/05/2010-12/31/2014	4.98	30.07	0.30	1.38	1.68	7,789.73
Building Off Road Diesel	1.52	8.41	0.00	0.52	0.52	941.22
Building Vendor Trips	1.60	17.96	0.12	0.71	0.83	3,309.45
Building Worker Trips	1.85	3.71	0.18	0.15	0.33	3,539.06
Coating 09/07/2010-12/05/2014	108.19	0.14	0.01	0.01	0.01	132.97
Architectural Coating	108.12	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.07	0.14	0.01	0.01	0.01	132.97

Time Slice 1/1/2013-12/31/2013 Number Active Days: 261	112.73	27.46	0.31	1.25	1.56	7,921.13
Building 07/05/2010-12/31/2014	4.55	27.33	0.30	1.24	1.54	7,788.22
Building Off Road Diesel	1.40	7.87	0.00	0.46	0.46	941.22
Building Vendor Trips	1.47	16.06	0.12	0.63	0.75	3,309.52
Building Worker Trips	1.68	3.40	0.18	0.15	0.33	3,537.49
Coating 09/07/2010-12/05/2014	108.18	0.13	0.01	0.01	0.01	132.91
Architectural Coating	108.12	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.06	0.13	0.01	0.01	0.01	132.91
Time Slice 1/1/2014-12/5/2014 Number Active Days: 243	112.32	24.79	0.31	1.11	1.42	7,919.85
Building 07/05/2010-12/31/2014	4.14	24.68	0.30	1.11	1.41	7,786.99
Building Off Road Diesel	1.29	7.31	0.00	0.41	0.41	941.22
Building Vendor Trips	1.33	14.26	0.12	0.56	0.67	3,309.57
Building Worker Trips	1.52	3.10	0.18	0.15	0.33	3,536.20
Coating 09/07/2010-12/05/2014	108.18	0.12	0.01	0.01	0.01	132.86
Architectural Coating	108.12	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.06	0.12	0.01	0.01	0.01	132.86
Time Slice 12/8/2014-12/31/2014 Number Active Days: 18	4.14	24.68	0.30	1.11	1.41	7,786.99
Building 07/05/2010-12/31/2014	4.14	24.68	0.30	1.11	1.41	7,786.99
Building Off Road Diesel	1.29	7.31	0.00	0.41	0.41	941.22
Building Vendor Trips	1.33	14.26	0.12	0.56	0.67	3,309.57
Building Worker Trips	1.52	3.10	0.18	0.15	0.33	3,536.20

Phase Assumptions

Phase: Demolition 1/4/2010 - 1/8/2010 - Demo of existing buildings

Building Volume Total (cubic feet): 0

Building Volume Daily (cubic feet): 0

On Road Truck Travel (VMT): 0

Off-Road Equipment:

3 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

2 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

Phase: Fine Grading 3/29/2010 - 4/30/2010 - Fine Site Grading

Total Acres Disturbed: 257

Maximum Daily Acreage Disturbed: 64.25

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

3 Scrapers (313 hp) operating at a 0.72 load factor for 8 hours per day

3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Mass Grading 1/11/2010 - 3/26/2010 - Grade site

Total Acres Disturbed: 257

Maximum Daily Acreage Disturbed: 64.25

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

3 Scrapers (313 hp) operating at a 0.72 load factor for 8 hours per day

3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Trenching 6/1/2010 - 6/30/2010 - Trenching

Off-Road Equipment:

2 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

1 Other General Industrial Equipment (238 hp) operating at a 0.51 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 0 hours per day

Phase: Paving 5/3/2010 - 5/28/2010 - Asphalt

Acres to be Paved: 64.25

Off-Road Equipment:

1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day

2 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day

2 Rollers (95 hp) operating at a 0.56 load factor for 6 hours per day

Phase: Building Construction 7/5/2010 - 12/31/2014 - Building Construction

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 5 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 3 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 3 hours per day

1 Welders (45 hp) operating at a 0.45 load factor for 2 hours per day

Phase: Architectural Coating 9/7/2010 - 12/5/2014 - Architectural Coating

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Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 100

Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

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Urbemis 2007 Version 9.2.0

Combined Summer Emissions Reports (Pounds/Day)

File Name: I:\Projects\ENV Projects\500 Series\ENV-515 (Salinas Ag-Ind Business Park EIR)\Technical Reports and Plans\Project Specific Techni Reports\Air Quality - URBEMIS\ENV-515 Urbemis February 2009.urb9

Project Name: Salinas Ag Project 2nd Run Feb 2009

Project Location: Monterey County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

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Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust
2010 TOTALS (lbs/day unmitigated)	114.07	95.86	76.61	0.06	1,285.01	4.68	1,289.69	268.36
2011 TOTALS (lbs/day unmitigated)	113.61	32.95	71.29	0.06	0.31	1.52	1.82	0.11
2012 TOTALS (lbs/day unmitigated)	113.17	30.21	66.17	0.06	0.31	1.39	1.69	0.11
2013 TOTALS (lbs/day unmitigated)	112.73	27.46	61.20	0.06	0.31	1.25	1.56	0.11
2014 TOTALS (lbs/day unmitigated)	112.32	24.79	56.45	0.06	0.31	1.11	1.42	0.11

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	32.94	0.83	2.23	0.00	0.01	0.01	969.25

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	640.16	5,765.10	5,984.05	16.65	1,942.08	522.37	1,812,039.59

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	673.10	5,765.93	5,986.28	16.65	1,942.09	522.38	1,813,008.84

PM2.5 Exhaust	PM2.5	CO2
4.30	272.66	9,106.62
1.38	1.49	7,924.61
1.26	1.37	7,922.70
1.13	1.24	7,921.13
1.01	1.12	7,919.85

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.06	0.81	0.68	0.00	0.00	0.00	966.44
Hearth - No Summer Emissions							
Landscape	0.12	0.02	1.55	0.00	0.01	0.01	2.81
Consumer Products	0.00						
Architectural Coatings	32.76						
TOTALS (lbs/day, unmitigated)	32.94	0.83	2.23	0.00	0.01	0.01	969.25

Area Source Changes to Defaults

Percentage of residences with wood stoves changed from 35% to 0%

Percentage of residences with wood fireplaces changed from 10% to 0%

Percentage of residences with natural gas fireplaces changed from 55% to 0%

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Industrial park	640.16	5,765.10	5,984.05	16.65	1,942.08	522.37	1,812,039.59
TOTALS (lbs/day, unmitigated)	640.16	5,765.10	5,984.05	16.65	1,942.08	522.37	1,812,039.59

Operational Settings:

Does not include correction for passby trips

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Does not include double counting adjustment for internal trips

Analysis Year: 2015 Temperature (F): 70 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Industrial park		63.11	acres	257.00	16,219.27	998,636.68
					16,219.27	998,636.68

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	64.0	0.2	99.6	0.2
Light Truck < 3750 lbs	0.0	3.7	90.8	5.5
Light Truck 3751-5750 lbs	0.0	0.9	98.6	0.5
Med Truck 5751-8500 lbs	0.0	1.1	98.9	0.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	75.0	25.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	14.4	0.0	23.1	76.9
Heavy-Heavy Truck 33,001-60,000 lbs	21.6	0.0	0.0	100.0
Other Bus	0.0	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	77.1	22.9	0.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	0.0	10.0	80.0	10.0

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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.8	8.3	7.1	11.8	152.0	152.0
Rural Trip Length (miles)	11.8	8.3	7.1	11.8	4.4	4.4
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Industrial park				64.5	17.8	17.8

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Urbemis 2007 Version 9.2.0

Combined Winter Emissions Reports (Pounds/Day)

File Name: I:\Projects\ENV Projects\500 Series\ENV-515 (Salinas Ag-Ind Business Park EIR)\Technical Reports and Plans\Project Specific Techni Reports\Air Quality - URBEMIS\ENV-515 Urbemis February 2009.urb9

Project Name: Salinas Ag Project 2nd Run Feb 2009

Project Location: Monterey County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

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Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust
2010 TOTALS (lbs/day unmitigated)	114.07	95.86	76.61	0.06	1,285.01	4.68	1,289.69	268.36
2011 TOTALS (lbs/day unmitigated)	113.61	32.95	71.29	0.06	0.31	1.52	1.82	0.11
2012 TOTALS (lbs/day unmitigated)	113.17	30.21	66.17	0.06	0.31	1.39	1.69	0.11
2013 TOTALS (lbs/day unmitigated)	112.73	27.46	61.20	0.06	0.31	1.25	1.56	0.11
2014 TOTALS (lbs/day unmitigated)	112.32	24.79	56.45	0.06	0.31	1.11	1.42	0.11

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	32.82	0.81	0.68	0.00	0.00	0.00	966.44

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	715.61	6,261.11	6,034.23	16.66	1,942.08	522.37	1,803,908.22

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	748.43	6,261.92	6,034.91	16.66	1,942.08	522.37	1,804,874.66

PM2.5 Exhaust	PM2.5	CO2
4.30	272.66	9,106.62
1.38	1.49	7,924.61
1.26	1.37	7,922.70
1.13	1.24	7,921.13
1.01	1.12	7,919.85

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.06	0.81	0.68	0.00	0.00	0.00	966.44
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping - No Winter Emissions							
Consumer Products	0.00						
Architectural Coatings	32.76						
TOTALS (lbs/day, unmitigated)	32.82	0.81	0.68	0.00	0.00	0.00	966.44

Area Source Changes to Defaults

Percentage of residences with wood stoves changed from 35% to 0%

Percentage of residences with wood fireplaces changed from 10% to 0%

Percentage of residences with natural gas fireplaces changed from 55% to 0%

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Industrial park	715.61	6,261.11	6,034.23	16.66	1,942.08	522.37	1,803,908.22
TOTALS (lbs/day, unmitigated)	715.61	6,261.11	6,034.23	16.66	1,942.08	522.37	1,803,908.22

Operational Settings:

Does not include correction for passby trips

2/16/2009 7:37:55 AM

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Temperature (F): 50 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Industrial park		63.11	acres	257.00	16,219.27	998,636.68
					16,219.27	998,636.68

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	64.0	0.2	99.6	0.2
Light Truck < 3750 lbs	0.0	3.7	90.8	5.5
Light Truck 3751-5750 lbs	0.0	0.9	98.6	0.5
Med Truck 5751-8500 lbs	0.0	1.1	98.9	0.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	75.0	25.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	50.0	50.0
Med-Heavy Truck 14,001-33,000 lbs	14.4	0.0	23.1	76.9
Heavy-Heavy Truck 33,001-60,000 lbs	21.6	0.0	0.0	100.0
Other Bus	0.0	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	77.1	22.9	0.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	0.0	10.0	80.0	10.0

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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.8	8.3	7.1	11.8	152.0	152.0
Rural Trip Length (miles)	11.8	8.3	7.1	11.8	4.4	4.4
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Industrial park				64.5	17.8	17.8

DAVIS ROAD/BLANCO ROAD
CO SCREENING WORKSHEET

PM PEAK HOUR PROTOCOL APPENDIX A

A 2.1 Inputs

4x6 lanes

Coastal

40 mph cruise speed (Table B.10)

50% red time

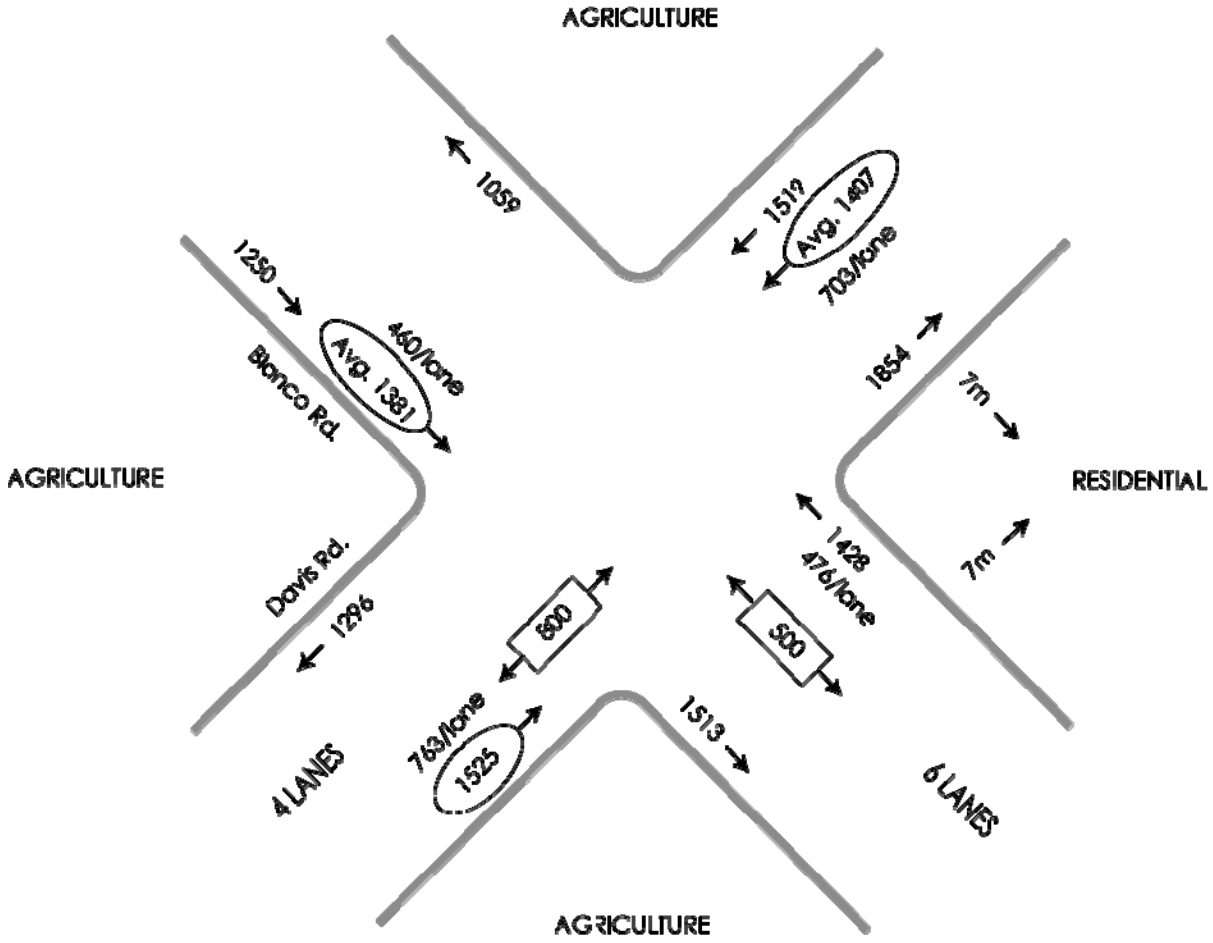
20% cold starts (Table B.6, Outer Arterial PM Peak 15-30 Range)
(.17 factor)

2010 analysis year

Traffic volumes per HMM (Higgins) Ex 42 buildout – cumulative w/o interchange

7m to receptor (residential property line to North)

1 ppm background CO (Salinas Hig School – monitoring station #3)



A 2.2 Base

Table A.4

	Approach	Depart
4 lane @ 7 m	40.6	24.0
6 lane @ 7 m	53.9	28.3

A 2.3 Volume Correction

Table A.5

4 lane (800/lane)	40.6 x .85 = 24.0 x .85 =	34.51 approach 20.40 depart
6 lane (500/lane)	53.9 x .58 = 28.3 x .58 =	31.26 approach 16.41 depart

A 2.4 Intersection Performance

Table A.6 Approach 40 mph/50% red /800/lane
Table A.7 Depart 40 mph/50% red/500/lane

A6	34.51 x 1.00 = 34.5
A7	20.40 x .20 = 4.1
A6	31.26 x .31 = 9.7
A7	16.41 x .11 = 1.8

A 2.5 Total

50.1

A 2.6 Wind

Adjust for wind speed of 1 m/s:

50.1 x .7 = 35.1

A 2.7 Cold Starts

Table A.8 Correction factor 0.17

35.1 x .017 = 6.0

A 2.8 SCAQMD

N/A

A 2.9 Volume Ratio

$$\frac{1525}{1428} = 1.07 \quad \text{Table A.9} \rightarrow .91$$

6.0 x .91 = 5.46

Contribution to
1 Hour CO = 5.46 ppm

A 2.10 Background CO

1 ppm per MBWAPCD data from Salinas #3

A 2.11 Total 1 Hour CO

5.46
+1.10
6.46 ppm

A 2.12 8 Hour CO

Using generalized persistence factor for suburban areas

6.46
x.6
3.88 ppm

Standards	**State**	**Federal**
1 hour	20	35
8 hour	9	9

Less than standard – no significant impact.

Revised
Salinas Ag-Industrial Center
Greenhouse Gas Analysis

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July 10, 2009

Table of Contents

List of Figures and Tables

Acronyms Used in this Report

AB – (California) Assembly Bill
AG – (California) Attorney General
ARB – (California) Air Resources Board
ASHRAE- American Society of Heating, Refrigeration and Air-Conditioning Engineers
CAPCOA – California Air Pollution Control Officers Association
CAT – Climate Action Team
CEQA – California Environmental Quality Act
CFC - chlorofluorocarbons
CO_2 – carbon dioxide
CO_2e – carbon dioxide equivalent
CH_4 - methane
EIR – environmental impact report
GBP – Salinas Ag-Industrial Center Green Building Plan
GHG – greenhouse gas
GWP – global warming potential
HVAC&R – heating, ventilation, air conditioning, and refrigeration
IPCC – Intergovernmental Panel on Climate Change
LCFS – Low Carbon Fuels Standard
LED – light emitting diode
LEED – Leadership in Energy and Environmental Design
MBUAPCD – Monterey Bay Unified Air Pollution Control District
OPR – (California) Office of Planning and Research
N_2O – nitrous oxide
SB – (California) Senate Bill
TAC – toxic air contaminant
UNFCCC – United Nations Framework Convention on Climate Change

Executive Summary

The proposed Salinas Ag-Industrial Center (Center) consists of a planned 257 acre development. Seventeen acres are located within the City of Salinas, California. The remaining 240 acres are located within unincorporated Monterey County, adjacent to Salinas' southern boundary, but outside of Salinas' future growth boundary and sphere-of-influence. The project includes 235 acres consisting of five master parcels and 22 acres of right-of-way for streets and associated right-of-way.

The project is currently in agricultural production. For several years, lettuce, cauliflower, and broccoli have been grown on the site.

This report examines the Center's greenhouse gas (GHG) emissions. The report first describes how GHGs cause climate change, along with goals and policies that have been adopted to combat climate change. The report then estimates the project's GHG emissions under two representative buildout scenarios, and compares them to GHG emissions at the local, state, national, and international level.

Table ES-1 summarizes the Center's GHG emissions. The Center would generate 6,444 metric tons of CO_2e during the six year construction period (2010-2014).

Once the project is fully built-out (expected by 2015), the project would generate 383,949 metric tons CO2e per year for Scenario 2, and 389,017 metric tons for Scenario 1. These estimates are without any GHG reduction measures. With GHG reduction measures, the project would generate 227,604 metric tons CO2e per year for Scenario 2, and 280,678 metric tons for Scenario 1. GHG reductions assume implementation of measures included in the Salinas Ag-Industrial Center Specific Plan's Green Building Plan plus recently enacted state measures to reduce GHG emissions from California's transportation sector.

Table ES-1 also shows emissions excluding field and line haul truck emissions. These trucks generate approximately 70% of the Center's total CO_2e emissions and represent a component of the project's emissions over which neither the applicant nor the City of Salinas have control.

In December 2008, the California Air Resources Board enacted a truck efficiency rule designed to reduce emissions from line haul trucks. That rule would take effect by 2015 and would reduce line haul truck CO_2e emissions by 10 percent. In April 2009, the California Air Resources Board approved a Low Carbon Fuels Standard (LCFS), which will reduce motor vehicle emissions by 10% by 2020. This report assumes that by 2015, LCFS will reduce motor vehicle emissions by an additional 2.5%.

Table ES-1 compares the Center's GHG emissions to emissions for California, the United States, and worldwide. When fully built out and operating, the Center would generate

Table ES-1. Salinas Ag-Industrial Center Greenhouse Gas Construction and Operational Emissions

Project or Area	Metric Tons/Year CO_2e
Construction Cumulative (2010-2014)	6,445
Operational without GHG reduction measures (2015)	383,949 – 389,017
Operational with GHG reduction measures (2015)	277,604 – 280,678
Operational w/o GHG reduction measures and w/o field and line haul trucks (2015)	110,954 – 116,011
Operational w/ GHG reduction measures and w/o field and line haul trucks (2015)	58,379 – 61,454
California (2004)	523,900,000
United States (2006)	6,326,491,790
Worldwide (2006)	36,000,000,000

Notes:
Construction emissions are cumulative over the 5 year construction period.
Operational emissions are annual for 2015, the first full year of expected buildout.
Emissions for California from California Air Resources Board's Draft California Greenhouse Gas Inventory (California Air Resources Board, 2007).
U.S emissions based on Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990 – 2006 (U.S. EPA, 2008a)
Worldwide emissions based on World Resources Institute (2008).

approximately 0.05 percent of total California GHG emissions, and a substantially lower percentage of national and worldwide emissions.

The Center's Green Building Plan contains an extensive set of GHG reduction strategies. They represent a "state of the art" Plan that is the first known attempt to incorporate a comprehensive set of GHG reducing energy efficiency standards into an agricultural industrial planning area anywhere in the United States.

The Plan ensures that development within the Center will meet strict energy efficiency and refrigerant standards that minimize GHG emissions. When combined with California's truck emission rules, the Green Building Plan will reduce GHG emissions by up to 28 percent compared to business as usual. When line-haul and field trucks are omitted from the calculations, the Plan will reduce GHG emissions by up to 47 percent.

The Green Building Plan, by requiring a wide-ranging set of GHG reducing strategies, places the Center solidly in the forefront as a state and national leader for agricultural industrial developments.

Introduction

The proposed Salinas Ag Industrial Center (Center) project consists of a planned 257 acre development. Seventeen acres are located within the City of Salinas, California. The remaining 240 acres are located within unincorporated Monterey County, adjacent to Salinas' southern boundary, but outside of Salinas' future growth boundary and sphere-of-influence. The project includes 235 acres consisting of five master parcels and 22 acres of right-of-way for streets and associated utilities.

Figure 1 shows the project's regional location with respect to the City of Salinas and surrounding areas. Figure 2 shows a closer view of the project location with respect to the southern part of Salinas.

The project is currently in agricultural production. For several years, lettuce, cauliflower, and broccoli have been grown on the site. The project site is completely outside of the 100-year flood boundaries as defined by the Federal Emergency Management Agency (FEMA). Consequently, the proposed Center's land uses would not be vulnerable to increased flooding that could result from global warming.

The Center's location is adjacent to compatible industrial uses and is not near existing or proposed sensitive receptors such as residences, schools, hospitals, or parks. Many existing ag-industrial land uses that are currently located in Salinas near sensitive receptors may relocate to the Center. These relocated businesses would reduce human exposure to criteria pollutants and toxic air contaminants, which is an added benefit of this project.

This report examines the Center's greenhouse gas (GHG) emissions. The report first describes how GHGs cause climate change, along with goals and policies that have been adopted to combat climate change. The report then estimates the project's GHG emissions, and compares them to GHG emissions at the local, state, national, and international level.

Figure 1. Regional Project Location

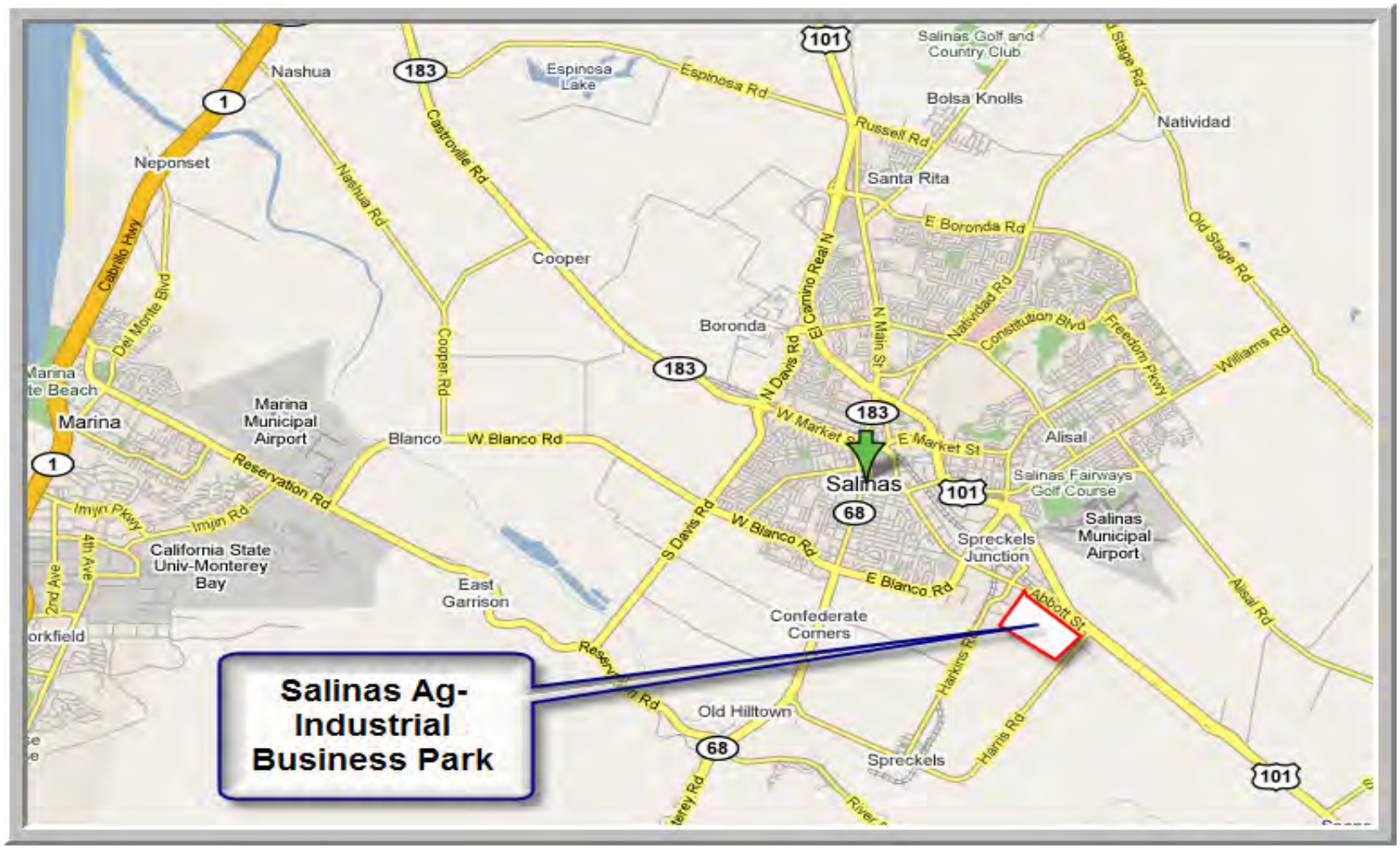
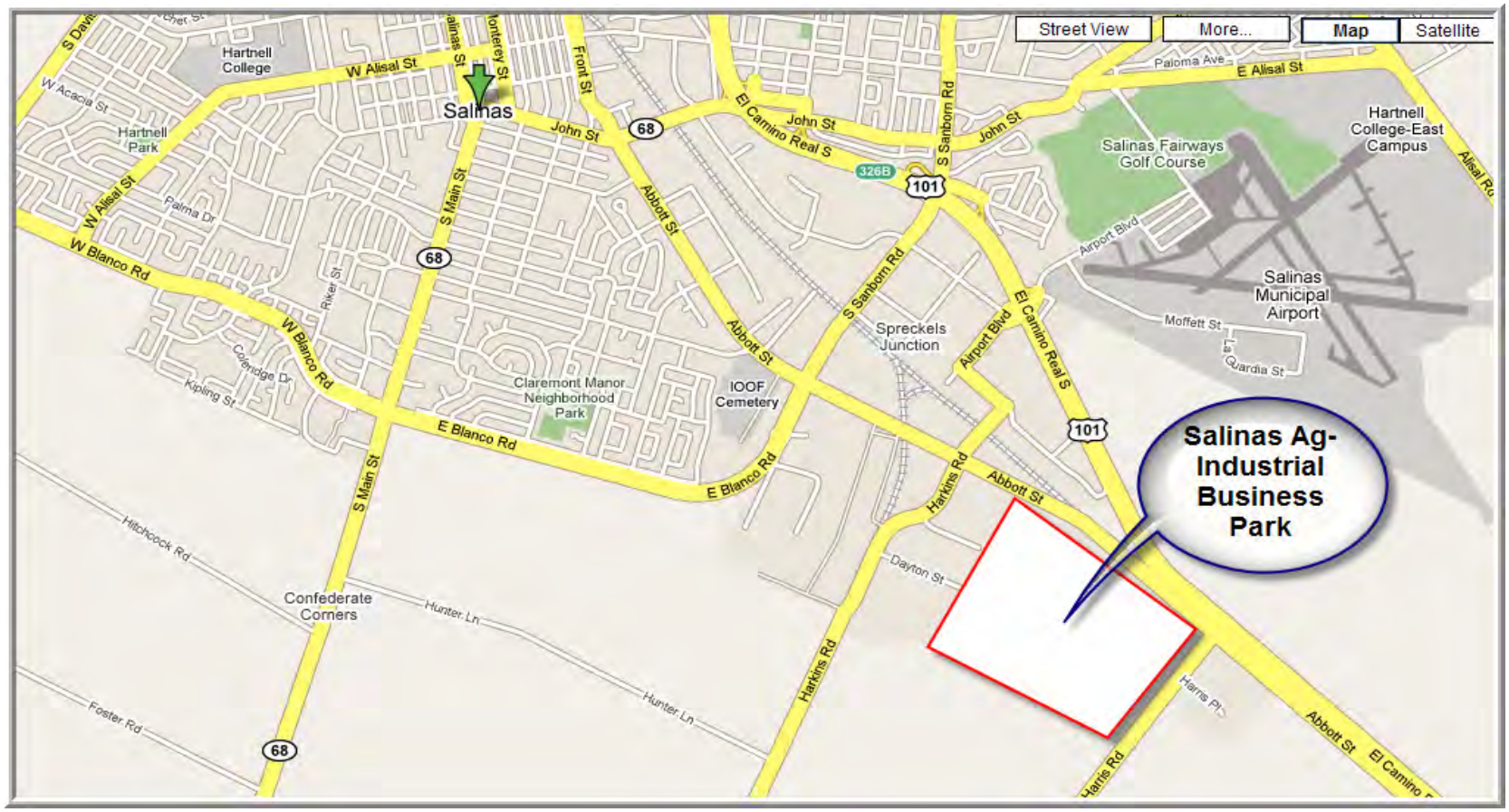


Figure 2. Project Location within Salinas



Emissions are analyzed for two representative buildout scenarios, as shown in Table 1. For the purpose of this analysis, proposed uses are separated into five categories:

- major agricultural processing,
- minor agricultural processing (coolers),
- agricultural manufacturing,
- agricultural support, and
- retail.

For the two scenarios, all land use assumptions are identical except for the Ag Support category. In Scenario 1, Ag Support uses are assumed to be entirely office and visitor space (retail, classroom, educational). In contrast, Scenario 2 assumes that Ag Support has 213,550 square feet dedicated to office and visitor space with the remaining 854,201 square feet dedicated to other uses such as warehousing or manufacturing.

Table 1. Square Footage Assumptions for Salinas Ag-Industrial Center

Scenario 1 (Higher percentage office/visitor)				
	Total Acreage	Total Building (sf)	Office/Visitor (sf)	Remainder (sf)
Major Ag Processing	101	1,319,868	237,576	1,082,292
Minor Ag Processing (Coolers)	33	711,834	142,367	569,467
Ag Manufacturing	41	889,793	177,959	711,834
Ag Support	49	1,067,751	1,067,751	0
Retail	11	249,142	249,142	0
Total	235	4,238,388	1,874,795	2,363,593
			44%	56%
Scenario 2 (Higher percentage non-office/visitor)				
	Total Acreage	Total Building (sf)	Office/Visitor (sf)	Remainder (sf)
Major Ag Processing	101	1,319,868	237,576	1,082,292
Minor Ag Processing (Coolers)	33	711,834	142,367	569,467
Ag Manufacturing	41	889,793	177,959	711,834
Ag Support	49	1,067,751	213,550	854,201
Retail	11	249,142	249,142	0
Total	235	4,238,388	1,020,594	3,217,794
			24%	76%

Greenhouse Gases and Climate Change

Global climate change is caused by GHG emissions, which are caused by several activities, including combustion of fossil fuels, deforestation, and land use change.

GHGs play a critical role in the Earth's radiation budget by trapping infrared radiation emitted from the Earth's surface, which could have otherwise escaped to space. Prominent GHGs contributing to this process include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O),

and certain refrigerants that include chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), and hydrofluorocarbons (HFCs). This phenomenon, known as the "greenhouse effect", keeps the Earth's atmosphere near the surface warmer than it would be otherwise and allows for successful habitation by humans and other forms of life.

Global warming potential (GWP) is a measure of how much a given mass of GHG is estimated to contribute to global warming. It is a relative scale which compares the gas in question to that of the same mass of carbon dioxide (whose GWP is by definition 1). In this analysis, CH_4 is assumed to have a GWP of 21 and N_2O has a GWP of 310 (California Climate Action Registry, 2007). Refrigerants have GWP's that range from 76 up to 12,240 (U.S. Green Building Council, 2007). Consequently, using each pollutant's GWP, emissions of CO_2, CH_4, N_2O, CFCs, HCFCs, and HFCs can be converted into CO_2 equivalence, also denoted as CO_2e.

Fossil fuel combustion removes carbon stored underground and releases it into the active carbon cycle, thus increasing concentrations of GHGs in the atmosphere. Emissions of GHGs in excess of natural ambient concentrations are theorized to be responsible for the enhancement of the greenhouse effect and contribute to what is termed "global warming", a trend of unnatural warming of the Earth's natural climate. Increases in these gases lead to more absorption of radiation and warm the lower atmosphere further, thereby increasing evaporation rates and temperatures near the surface. Climate change is a global problem, and GHGs are global pollutants, unlike criteria pollutants (such as ozone, carbon monoxide, and particulate matter) and toxic air contaminants (TACs), which are pollutants of regional and local concern.

The Intergovernmental Panel on Climate Change (IPCC) was established by the World Meteorological Organization and United Nations Environment Programme. IPCC's mission is to assess scientific, technical, and socioeconomic information relevant to the understanding of climate change, including the potential impacts and options for adaptation and mitigation. IPCC predicts substantial increases in global temperatures of between 1.1 to 6.4 degrees Celsius, depending on the scenario (Intergovernmental Panel on Climate Change 2007).

Climate change could impact California's natural environment in the following ways (California Energy Commission 2005):

- Rising sea levels along the California coastline, particularly in San Francisco and the Sacramento-San Joaquin River Delta due to ocean expansion;

- Extreme heat conditions, such as heat waves and very high temperatures, which could last longer and become more frequent;

- An increase in heat-related human deaths and infectious diseases and a higher risk of respiratory problems caused by deteriorating air quality;

- Reduce snow pack and stream flow in the Sierra Nevada mountains, affecting winter recreation and water supplies;

- Potential increase in the severity of winter storms, affecting peak stream flows and flooding;

- Changes in growing season conditions that could affect California agriculture, causing variations in crop quality and yield; and

- Changes in distribution of plant and wildlife species due to changes in temperature, competition of colonizing species, changes in hydrologic cycles, changes in sea levels, and other climate-related effects.

These changes in California's climate and ecosystems could occur at a time when California's population is expected to increase from 34 million to 59 million by the year 2040 (California Energy Commission 2005).

Consequently, for a "business as usual" scenario, increases are expected in the amount of anthropogenic GHG emissions and the number of people potentially affected by climate change. Similar changes as those noted above for California would also occur in other parts of the world.

Transportation generates 41 percent of California's GHG emissions, followed by the industrial sector (23%), electricity generation (20%), agriculture and forestry (8%), and other sources (8%). Emissions of CO_2 and N_2O are byproducts of fossil fuel combustion, among other sources. Methane, a highly potent GHG, results from off-gassing associated with agricultural practices and landfills. Sinks of carbon dioxide include uptake by vegetation and dissolution into the ocean. In 2004, California generated 524 million metric tons of GHG measured as CO_2 equivalent (CO_2e) emissions (California Air Resources Board, 2007).

Greenhouse Gas Regulatory Environment

International and National Regulation of Greenhouse Gases

International and Federal legislation has been enacted to deal with climate change issues. The Montreal Protocol was originally signed in 1987 and substantially amended in 1990 and 1992. In 1988, the United Nations and the World Meteorological Organization established the Intergovernmental Panel on Climate Change (IPCC) to assess the scientific, technical, and socioeconomic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation.

In October 1993, President Clinton announced his Climate Change Action Plan, which had a goal to return GHG emissions to 1990 levels by 2000. On March 21, 1994, the United States joined with several countries to sign the United Nations Framework Convention on Climate Change (UNFCCC). Under the Convention, governments agreed to gather and share information on GHG emissions, national policies, and best practices, and to launch national strategies for addressing GHG emissions (CAPCOA 2008).

The Kyoto Protocol is a protocol to the United Nations Framework Convention on Climate Change with the objective of reducing GHG that cause climate change. The protocol was agreed

to at the 3rd Conference of the Parties in Kyoto, Japan in December 1997. As of November 2007, 175 parties had ratified the protocol. Of these, 36 developed countries are required to reduce GHG emissions to the levels specified for each of them in the treaty (representing over 61.6% of emissions from Annex I countries). One hundred and thirty-seven (137) developing countries have ratified the protocol, including Brazil, China and India, but have no obligation beyond monitoring and reporting emissions. Several subsequent international conventions have been held by the United Nations Framework Convention on Climate Change, including a 2007 conference in Bali, Indonesia and a 2008 conference in Bangkok, Thailand (United Nations Framework on Climate Change, 2008).

State Regulation of Greenhouse Gases

Executive Order S-3-05

On June 1, 2005, Governor Schwarzenegger issued Executive Order S-3-05. It included the following GHG emission reduction targets: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; by 2050, reduce GHG emissions to 80 percent below 1990 levels. To meet the targets, the Governor directed several state agencies to cooperate in the development of a Climate Action Plan. The Secretary of CalEPA leads a Climate Action Team (CAT) whose goal is to implement global warming emission reduction programs identified in the Climate Action Plan and to report on the progress made toward meeting the emission reduction targets established in the Executive Order.

The first report to the Governor and the Legislature was released in March 2006 and will be issued bi-annually thereafter. The CAT Report to the Governor contains recommendations and strategies to help ensure the targets in Executive Order S-3-05 are met (California EPA 2006).

California Global Warming Solutions Act of 2006 (AB32)

In 2006, the California state legislature adopted the California Global Warming Solutions Act of 2006. AB32 establishes a cap on statewide GHG emissions and sets forth the regulatory framework to achieve the corresponding reduction in statewide emission levels. Under AB32, GHG are defined as CO_2, CH_4, N_2O, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

AB32 requires that ARB:

- Adopt early action measures to reduce GHG;
- Establish a statewide GHG emissions cap for 2020 based on 1990 emissions;
- Adopt mandatory report rules for significant GHG sources;
- Adopt a scoping plan indicating how emission reductions will be achieved via regulations, market mechanisms, and other actions; and
- Adopt regulations needed to achieve the maximum technologically feasible and cost-effective reductions in GHGs.

Senate Bill 97

Senate Bill (SB) 97, signed in August 2007, acknowledges that climate change is an important environmental issue that requires analysis under the California Environmental Quality Act (CEQA). The bill directs the California Office of Planning and Research (OPR) to prepare,

develop, and transmit to the Resources Agency guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, by July 1, 2009. The Resources Agency is required to certify or adopt those guidelines by January 1, 2010.

Actions Taken by California Office of Planning and Research

In June 2008, OPR issued a Technical Advisory on CEQA and Climate Change (OPR 2008). For projects subject to CEQA, this document recommends that emissions be calculated and mitigation measures be identified to reduce those emissions. The OPR Technical Advisory does not identify emission thresholds for GHGs, but instead recommends that each lead agency develop their own thresholds.

On April 13, 2009, OPR submitted to the Secretary for Natural Resources its proposed amendments to the state CEQA Guidelines for greenhouse gas emissions, as required by Senate Bill 97 (Chapter 185, 2007). These proposed CEQA Guideline amendments would provide guidance to public agencies regarding the analysis and mitigation of the effects of greenhouse gas emissions in draft CEQA documents. The Natural Resources Agency will conduct formal rulemaking in 2009, prior to certifying and adopting the amendments, as required by Senate Bill 97 (California Office of Planning and Research, 2009).

Actions Taken by California Attorney General's Office

The California Attorney General (AG) has filed comment letters under CEQA about a number of proposed projects. The AG has also filed several complaints and obtained settlement agreements for CEQA documents covering general plans and individual programs that the AG found either failed to analyze GHG emissions or failed to provide adequate GHG mitigation. The AG's office has prepared a report that lists measures that local agencies should consider under CEQA to offset or reduce global warming impacts. The AG's office also has prepared a chart of modeling tools to estimate GHG emissions impacts of projects and plans. Information on the AG's actions can be found on at the California Department of Justice Office of Attorney General web site (California Department of Justice 2008).

California Air Pollution Control Officers Association (CAPCOA) Guidance

The California Air Pollution Control Officers Association (CAPCOA) released a report in January 2008 that describes methods to estimate and mitigate GHG emissions from projects subject to CEQA. The CAPCOA report evaluates several GHG thresholds that could be used to evaluate the significance of a project's GHG emissions. The CAPCOA report, however, does not recommend any one threshold. Instead, the report is designed as a resource for public agencies as they establish agency procedures for reviewing GHG emissions from projects subject to CEQA (California Air Pollution Control Officers Association, 2008).

Local Regulation of Greenhouse Gases

Monterey Bay Unified Air Pollution Control District

The project is within the jurisdiction of the Monterey Bay Unified Air Pollution Control District (MBUAPCD). The MBUAPCD has not yet adopted any CEQA based air quality significance thresholds for GHGs (Monterey Bay Unified Air Pollution Control District, 2008; Getchell, J., pers. com.).

City of Salinas

In its Final Supplement for the Salinas General Plan Final Program EIR (SEIR), the City of Salinas adopted nine mitigation measures to development projects throughout the City where feasible to reduce the cumulatively significant incremental contribution to global climate change (City of Salinas, 2007). These measures and their applicability to the Center are described in Appendix A of this report.

Salinas Ag-Industrial Center Greenhouse Gas Footprint

This section describes the Center's GHG emissions, and includes measures designed to reduce the generation of those emissions. The project's construction emissions are described, followed by the project's operational emissions. A detailed description of the methodologies and tools used to estimate GHG emissions is included in Appendix B.

Construction GHG Footprint

The project's construction-related GHG emissions are summarized in Table 2. Construction emissions would not differ between Scenarios 1 and 2. The project's infrastructure would be constructed by the end of 2010. Infrastructure related construction includes demolition, mass and fine site grading, paving of roads, and trenching with electric, gas, and water utility installation. Construction emissions would remain relatively steady between 2010 and 2014, primarily because this analysis assumes a relatively constant amount of building construction during this period, once the Center's basic infrastructure is completed. Construction GHG emissions are based on information provided in Appendix B.

Table 2. Salinas Ag-Industrial Center Greenhouse Gas Emissions from Construction

Year	Metric Tons (CO2e)	Phase
2010	1,168	Demolition, Mass Grading, Fine Grading, Road/Parking Lot Paving, Trenching (and Wet and Dry Utilities)
2011	1,316	Building Construction, Road/Parking Lot Paving
2012	1,320	Building Construction, Road/Parking Lot Paving
2013	1,320	Building Construction, Road/Parking Lot Paving
2014	1,320	Building Construction, Road/Parking Lot Paving
Total	6,445	

Notes: Estimates based on URBEMIS2007 model. Detailed URBEMIS results found in Appendix B.
Emission estimates assume the following phasing:
Demolition for 1 week beginning January 2010;
Mass Grading for 2.5 months beginning in mid January 2010;
Fine Grading for 1 month in April 2010;
Trenching and Utilities Installation for 1 month in June 2010;
Building for 4.5 years from July 2010 through December 2014;
Asphalt Paving for 1 month in May 2010, 2011, 2012, 2013, and 2014;
A total of 125 acres assumed to be paved, with an average of 25 acres paved per year. The majority of paving in 2010 expected to be roads, while majority of paving in subsequent years expected to be parking lots.

Operational GHG Footprint – Without Reductions

Operational GHG emissions consist of area source emissions and transportation emissions. Area emissions include combustion of natural gas needed for manufacturing processes, and for space and water heating. Area source GHG emissions also include the emissions produced by the electricity generation used to supply the project. Electricity used to pump water and to treat wastewater is also considered an area source. Finally, the use of refrigerants is often considered an area source, although refrigerant use and associated emissions are shown as a separate category in the emission estimates that follow. Transportation GHG emissions consist of exhaust emissions for all vehicles that would travel to and from the land uses constituting the project.

The proposed Center would be built on land currently used for agriculture. Lettuce, cauliflower, and broccoli have historically been grown and cultivated on the site. The GHG emissions associated with these agricultural crops include tilling, planting, and harvesting with diesel powered farm equipment. The GHG emissions associated with these operations equal approximately 22 metric tons CO_2e per year, which represents less than one percent of the project's total emissions.

Table 3 summarizes the project's operational GHG emissions for Scenarios 1 and 2 in 2015, which represents the year when the project would likely be fully built-out and operating. Emissions are shown for water use, refrigerant use, area source type – natural gas and electricity – and for three types of vehicle trips: employees, field truck trips, and line haul trips. The Table 3 emissions are illustrated in Figure 3.

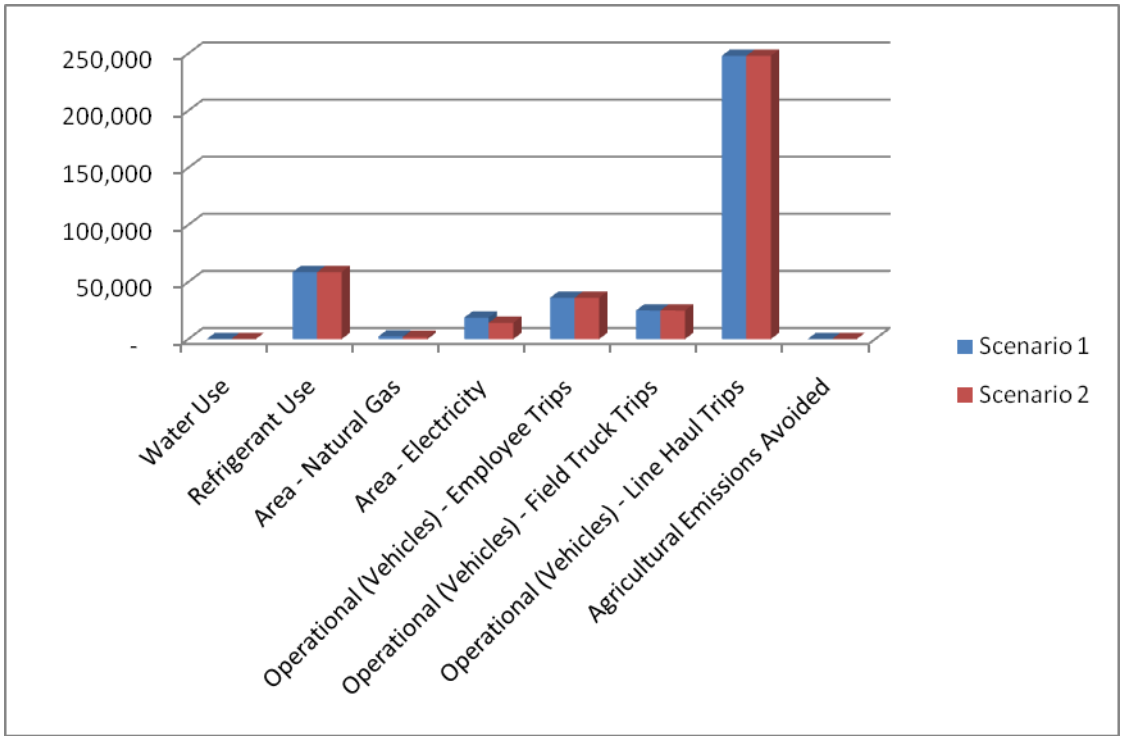
Table 3 and Figure 3 show that vehicles are the largest source of emissions. The majority of the vehicle emissions are associated with truck trips, and the majority of truck trip emissions are the result of line haul trips. Line haul trips are those that haul agricultural products to points throughout the United States. Table 3 also shows that with regard to area sources, refrigerant use is the largest source of GHG emissions. Scenario 2 has slightly lower emissions that Scenario 1, primarily because Scenario 2 has less office/visitor square footage for the agricultural support land use. The office/visitor square footage typically uses more energy than the other category, which for this land use would likely be warehouse and storage uses.

Table 3. Salinas Center Scenario 1 and 2 Operational Greenhouse Gas Emissions (without reductions)

Emission Category	Scenario 1 Metric Tons CO_2e/year Totals	Scenario 2 Metric Tons CO_2e/year Totals
Water Use	2	2
Refrigerant use	58,671	58,671
Area - Natural Gas	2,349	1,849
Area – Electricity	18,798	14,229
Operational (Vehicles) - Employee Trips	36,213	36,213
Operational (Vehicles) - Field Truck Trips	25,027	25,027
Operational (Vehicles) - Line Haul Trips	247,980	247,980
Subtotal	389,040	383,972
Agricultural Emissions Avoided	22	22
Total (Area + Operational - Agricultural)	389,017	383,949

Notes:
Emissions for 2015.
Natural gas emissions based on average natural gas use per land use type (Itron, 2006).
Electricity use based on average electricity use per land use type (Itron, 2006).
Natural gas and electricity emissions based on California Climate Action Registry Protocol (2007).
Operational vehicle trips based on URBEMIS2007 model and use building square footages and trip generation rates as reported in the project traffic report (Higgins Associates, 2008).
Operational vehicle truck only emissions use traffic report for trip generation (Higgins Associates, 2008) and Uni-Kool Partners estimates for trip lengths (Kovacich, pers. comm.).
Agricultural emissions based on emission inventory data (California Air Resources Board, 2003).

Figure 3. Comparison of Scenario 1 and 2 GHG Emissions (without reductions, metric tons CO_2e/year)



Operational GHG Footprint – With GHG Reductions

This section focuses on operational measures that can reduce GHG emissions. As noted in the previous discussion, the majority of the project's GHG emissions are associated with truck trips, especially line-haul trips. The project applicant would have no direct control over this largest source of emissions.

The project applicant has the most control over the project's water use, refrigerant use, and area source emissions, which consist of natural gas combustion and electricity use. This section focuses on ways to reduce emissions from these categories.

Relationship to Salinas General Plan

The City of Salinas' Final Supplement for the Salinas General Plan Final Program EIR (Salinas, 2007) addresses global climate change. The document recommends that nine mitigation measures "be applied to development projects throughout the City of Salinas where feasible to reduce the cumulatively significant incremental contribution to global climate change." Appendix A discusses the applicability of the Salinas General Plan to the Ag-Industrial Center.

GHG Reduction Measures Included in the Ag-Industrial Center Specific Plan

For most land use development projects, energy efficiency improvements have the potential to substantially reduce GHG emissions. For the proposed project, improvements in refrigerant use also have the potential to reduce GHG emissions. The measures shown in Table 4 are taken from the Salinas Ag-Industrial Center Specific Plan's Green Building Plan, and have been applied to the representative buildout Scenarios shown in Table 1.

Table 4. Ag-Industrial Center Specific Plan GHG Reduction Measures

Measure	Quantification Method
1) Individual developers within the Plan Area will be required to perform fundamental commissioning of the building energy systems for the office employee/visitor areas of the building.	This measure is designed to verify that the building's energy related systems are installed, calibrated, and perform according to the owner's project requirements, basis of design, and construction documents. As such, this measure itself would not result in GHG emission reductions, but would ensure that the building meets its estimated emission target. Consequently, GHG emission reductions were not quantified for this measure.
2) All heating, ventilation, air conditioning, and refrigeration (HVAC&R) units within the Specific Plan Area will use zero CFC-based refrigerants. This excludes small HVAC&R units such as refrigerators, small water coolers, and other cooling equipment that	GHG emission reductions were quantified for this measure. The analysis assumes that without this measure, there would be 5 major users of CFC's using a total of 70,000 pounds

Measure	Quantification Method
contains less than 0.5 pounds of refrigerant	CFC's per year with a leakage rate of 24.5%. With this measure in place, the analysis assumes that 3 major users would use non-GWP refrigerants and that 2 users would use HFC refrigerants. By prohibiting CFCs, and by encouraging non-GWP refrigerants, such as ammonia, the project would reduce the amount of GHG gases that could potentially be emitted during operation.
3) Install light emitting diodes (LEDs) and fluorescent lighting for indoor lighting in all employee/visitor areas, where feasible in other building areas and for outdoor lighting.	GHG emission reductions were estimated by assuming 90% of office/visitor space would be illuminated by fluorescent lighting and 10% by LED's. LED's are assumed to result in a 50% reduction in energy demand compared to fluorescent lighting (TheDailyGreen.com, 2007). The analysis also assumes that 5% of the "remainder" areas will use LEDs and that 10% of all outdoor lighting will use LEDs.
4) Natural lighting shall be used, where feasible, to reduce indoor lighting requirements.	GHG emission reductions were not quantified for this measure. To estimate potential energy savings associated with natural lighting, detailed energy estimates would need to be conducted for individual buildings that are in the design stage. Such estimates are not possible at a Specific Plan level of analysis.
5) The office employee/visitor areas of buildings within the Plan Area will achieve optimized energy performance by complying with the prescriptive measures of the ASHRAE Advanced Energy Design Guide for Small Office Buildings (2004).	A total building area of 1,874,794 square feet is assumed to be employee/visitor office space for Scenario 1, and 1,020,594 square feet for Scenario 2. For this area, the analysis assumes a 30% reduction in energy use (electricity and natural gas) based on AHRAE's guidance (2004).
6) The installation of photovoltaic panels, wind turbines, solar water heaters, fuel cells, and other renewable energy sources are allowed on roofs and in other areas	At this time it is not known which, if any, land uses will install renewable energy sources. Potential applicants

Measure	Quantification Method
of the sites.	would need to evaluate the financial feasibility of renewable resources before installing them. Appendices C and D of this report describe the financial feasibility of using solar power and wind power for the Center. These analyses show that neither solar nor wind power are viable options for meeting the Center's estimated energy requirements. Consequently, GHG emission reductions were not quantified for this measure.
7) Food processing and related facilities shall utilize Industrial Best Practices as discussed in "California's Food Processing Industry Energy Efficiency Initiative: Adoption of Industrial Best Practices", California Energy Commission publication CEC 400-2008-006 (California Energy Commission, 2008a). This document encourages adoption of Industrial Best Practices to advance energy efficiency in the food processing industry. The California League of Food Processors works with investor and publicly owned utilities to hold training workshops and support the delivery of energy system assessments to their customers.	Industrial Best Practices include energy efficiency training workshops, and energy system assessments of motors, pumps, and fans; and steam, process heating, and compressed air systems. Best Practices require reviewing and updating food processing facilities on a regular basis to ensure that they are up-to-date with regard to the latest developments in energy efficiency. GHG emission reductions were not quantified for this measure due to the difficulty in estimating how much energy savings would result from these Best Practices.
8) Planting within the Landscape Buffer Areas to provide shade for public sidewalks	The GHG emissions sequestered by tree plantings were quantified for this analysis.
9) Planting within the employee/visitor parking lots to shade portions of the paved areas. Tree planting can be used to remove or sequester CO_2 from the atmosphere. The project developer(s) will plant a minimum of 400 trees on site. These 400 trees will be placed within the enhanced streetscape described in the Specific Plan.	The GHG emissions sequestered by tree plantings were quantified for this analysis using a methodology developed by the U.S. Department of Energy (2006).
10) Light colored, solar reflecting roofing materials and/or coatings have a reflectance of 0.3 or higher shall be used for the individual, flat-roofed industrial buildings with roof area of 5,000 square feet or more.	Cool roofs are estimated to reduce emissions by 2.6 Btu per square foot per year (Levinson, et. al. 2005). This reduction is included in the GHG reduction estimates.
11) Water conservation measures to reduce water usage in all restrooms and break rooms by a minimum of 30%	Reduced water use reduces electrical energy demand associated with water

Measure	Quantification Method
through the use of water conserving fixtures.	pumping, water treatment, and wastewater treatment. GHG emission reductions were quantified for this measure using water use estimates included in the Water Supply Assessment for the Center (Yarne, J., 2009).
12) Measures to encourage alternative commuter transportation to work, such as Class 2 bicycle lanes, two new Monterey-Salinas Transit bus shelters and bus stops, and preferential parking.	These measures would reduce the number of automobile work commute trips. GHG emission reductions were quantified for this measure using the URBEMIS2007 model (see Appendix B).
13) Transportation emission reductions associated with the California Air Resources Board's proposed AB32 Truck Efficiency Rule, enacted in December 2008. This rule would require that all long haul trucks be installed with SmartWay approved technologies capable of reducing GHG emissions by 8 to 11 percent. The rule would require that all long haul trucks doing business in California comply by 2014. This analysis assumes a 10% reduction in GHG because all long haul trucks operating in California would be required to comply with this proposed rule (U.S. Environmental Protection Agency, 2008b; California Air Resources Board, 2008b). (Note: This is a proposed statewide rule and would not be an enforcement responsibility of either the City of Salinas or the Ag-Industrial Center).	This measure, though not part of the Ag-Industrial Center Specific Plan, would reduce emissions from long-haul trucks and is included in the GHG reduction calculations. A 10% reduction in long haul truck emissions is assumed.
14) Transportation emission reductions associated with the California Air Resources Board's Low Carbon Fuels Standard (LCFS), enacted in April, 2009. The LCFS will reduce carbon emissions from all motor vehicles by 10% by 2020. The analysis assumes a 2.5% reduction from all vehicles by 2015, the assumed buildout year for the Industrial Center.	This measure, though not part of the Ag-Industrial Center Specific Plan, would reduce emissions from all vehicles – employee trips, field trucks, and line-haul trucks - and is included in the emission calculations. A 2.5% reduction in vehicle emissions is assumed for 2015, based on the ramp-in provisions of the LCFS.
15) The project's location on the southern outskirts of Salinas would result in the consolidation of agricultural processing facilities from locations throughout the Salinas area. The Center would be located closer to the primary agricultural producing areas of the Salinas Valley. Consequently, by reducing travel distance, the	Based on truck travel distances stated in the traffic analysis, the average one-way truck travel distance for field trucks and line haul trucks was assumed to be reduced by 4 miles. This was applied to the average truck travel distance,

Measure	Quantification Method
Center would reduce field truck and line haul truck vehicle miles traveled.	resulting in a reduction of 11.4 percent in one way trip travel distance for field truck trips and a 2.9 percent reduction for line haul truck trips.

Table 5 shows reduced emissions for Scenarios 1 and 2, which are based on the measures discussed above in Table 4.

Table 5. Salinas Center Scenario 1 and 2 Operational Greenhouse Gas Emissions (GHG reduction measures applied)

	Scenario 1	Scenario 2
	Metric Tons CO_2e/year	Metric Tons CO_2e/year
Emission Category	Totals	Totals
Water Use	2	2
Refrigerant Use	11,547	11,547
Area - Natural Gas	1,901	1,618
Area – Electricity	14,026	11,235
Operational (Vehicles) - Employee Trips	34,011	34,011
Operational (Vehicles) - Field Truck Trips	20,123	20,123
Operational (Vehicles) - Line Haul Trips	199,101	199,101
Agricultural Emissions Avoided	22	22
Total (Area + Operational - Agricultural)	280,690	277,615
Carbon Sequestration from Trees	11	11
Total (Area + Operational -Ag) – Sequestration	280,678	277,604
Percent Reduction	28%	28%

Notes:

Water use in this table assumes 30% reduction in kitchen and restroom water use only.

Refrigerant estimates in Table 3 assume all 5 major users would use CFCs. Refrigerant use in this table assumes that 2 of 5 major users use HFC refrigerants and 3 of 5 use refrigerants having no global warming potential.

Natural gas and electricity emissions adjusted to account for "Cool Roofs" and compliance with ASHRAE Advanced Energy Design Guide for Small Office Buildings.

Electricity use also assumes a reduction in GHGs for the use of LED lighting indoors and outdoors.

Operational vehicle trips based on URBEMIS2007 model and use building square footages and trip generation rates as reported in the project traffic report (Higgins Associates, 2008).

Operational vehicle truck only emissions use traffic report for trip generation (Higgins Associates, 2008) and Uni-Kool Partners estimates for trip lengths (Kovacich, pers. comm.).

Operational emissions in this table assume 80.2% of VMT is line-haul and that a 10% reduction is achieved for line-haul based on ARB's truck efficiency rule.

Operational emissions in this table also assume that all vehicular emissions reduced by 2.5% by 2015 based on ARB's Low Carbon Fuels Standard.

Employee trip emissions in this table assume a reduction as calculated by URBEMIS2007 associated with measures to encourage alternative commuter transportation to work, including Class 2 bicycle lanes, two new Monterey-Salinas Transit bus shelters and bus stops, and preferential parking.

Detailed emission estimates are included in Appendix B.

Carbon sequestration based on U.S. Department of Energy, Energy Information Administration Urban Forestry Carbon Sequestration Worksheet

Figure 4 shows a bar graph that compares both scenarios with and without GHG reductions. Scenario 1 would have slightly higher electricity and natural gas use compared to Scenario 2. Under both scenarios, the largest percentage of emission reductions results from reduced use of refrigerants with a high global warming potential. Proposed reduction measures will reduce GHG emissions by 28 percent for Scenarios 1 and Scenario 2, as compared to the measurements without reductions.

Figure 4. Comparison of Scenario 1 and 2 GHG Emissions with and without Reductions (metric tons CO_2e/year)

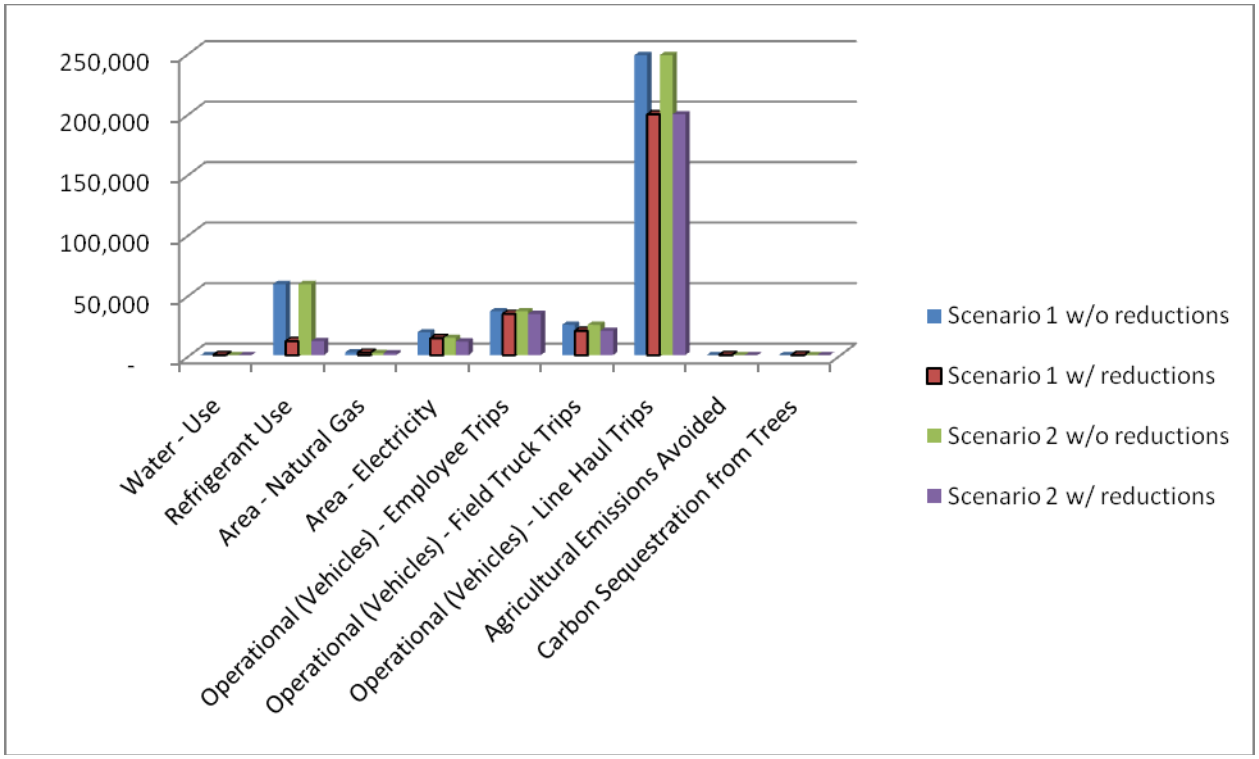


Table 6 contains the same information as Tables 3 and 5 except that line field truck and haul truck emissions have been removed. Field and line haul trucks represent almost 80 percent of the Center's total emissions. Measures included in the Ag-Industrial Center Specific Plan, combined with the Center's location in the southern portion of Salinas, would result in an overall GHG emission reduction ranging from 47 percent for Scenario 1 and 47.4 percent for Scenario 2, when field and line haul trucks are omitted from the total.

Note that the reductions are calculated using two representative buildout scenarios. The reductions shown in this analysis are intended to demonstrate the potential savings that can be achieved at ag-industrial facilities. The Salinas Ag-Industrial Center Specific Plan's Land Use chapter identifies allowable uses within the Plan Area while providing flexibility in the mix and intensity of those uses. All project applicants within the Center will be subject to the Specific Plan's Green Building Plan, and GHG reductions will vary based on the actual uses operating at the site. Consequently, reductions calculated for Scenarios 1 and 2 in this analysis cannot be used as a threshold, or for comparative measure.

Table 6. Salinas Ag Industrial Center Scenario 1 and 2 With and Without Reductions, Without Field and Line Haul Trucks (CO2e metric tons/year)

	Scenario 1			Scenario 2		
	Without GHG Reductions	With GHG Reductions	% Reduction	Without GHG Reductions	With GHG Reductions	% Reduction
Water Use	2	2	2.7%	2	2	2.7%
Refrigerant Use	58,671	11,547	80.3%	58,671	11,547	80.3%
Area - Natural Gas	2,349	1,901	19.1%	1,849	1,618	12.5%
Area - Electricity	18,798	14,026	25.4%	14,229	11,235	21.0%
Operational (Vehicles) - Employee Trips	36,213	34,011	6.1%	36,213	34,011	6.1%
Agricultural Emissions Avoided	22	22		22	22	0.0%
Total (Area + Operational - Agricultural)	116,011	61,465	47.0%	110,943	58,390	47.4%
Carbon Sequestration from Trees	-	11	0.0%	11	11	0.0%
Total (Area + Operational) - Sequestration	116,011	61,454	47.0%	110,954	58,379	47.4%
Notes: Emissions identical to Table 5 except that field truck and line-haul truck emissions have been removed.						

Global climate change represents a worldwide concern. No single project generates GHG emissions in sufficient amounts to cause climate change. Instead, climate change is attributable to the cumulative emissions of millions of sources throughout the world.

Table 7 compares the Center's GHG emissions (shown in Tables 2, 3, 5, and 6) to emissions for California, the United States, and worldwide. When fully built out and operating, the Center would generate approximately 0.05 percent of total California GHG emissions, and a substantially lower percentage of national and worldwide emissions.

Table 7. Comparison of the Center's Greenhouse Gas Emissions to State, National, and Worldwide Estimates

Project or Area	**Metric Tons/Year CO_2e**
Construction Cumulative (2010-2014)	6,445
Operational without GHG reductions (2015)	383,949 – 389,017
Operational with GHG reductions (2015)	277,604 – 280,678
Operational w/o GHG reductions and w/o field and line haul trucks (2015)	110,954 – 116,011
Operational w/ GHG reductions and w/o field and line haul trucks (2015)	58,379 – 61,454
California (2004)	523,900,000
United States (2006)	6,326,491,790
Worldwide (2006)	36,000,000,000
Notes: Emissions for California from California Air Resources Board's Draft California Greenhouse Gas Inventory (California Air Resources Board, 2007). U.S emissions based on Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990 – 2006 (U.S. EPA, 2008a) Worldwide emissions based on World Resources Institute (2008).	

The Center's Green Building Plan contains an extensive set of GHG reduction strategies. They represent a "state of the art" Plan that is the first known attempt to incorporate a comprehensive set of GHG reducing energy efficiency standards into an agricultural industrial planning area anywhere in the United States.

The Plan ensures that development within the Center will meet strict energy efficiency and refrigerant standards that minimize GHG emissions. The Green Building Plan, by requiring a wide-ranging set of GHG reducing strategies, places the Center solidly in the forefront as a state and national leader for agricultural industrial developments.

Uni-Kool wants to assist the City of Salinas in meeting its GHG reduction goals. Consequently, Uni-Kool will work closely with its clients to ensure that they comply with the Green Building Plan described in the Salinas Ag-Industrial Specific Plan. By doing so, the Ag-Industrial Center's GHG emission footprint will be reduced to the maximum extent possible.

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Appendix A. Applicability of the Salinas General Plan Final Program EIR to the Salinas Ag-Industrial Center

This appendix lists each of the nine greenhouse gas mitigation measures included in the Salinas General Plan Supplemental Environmental Impact Report (SEIR) and discusses the applicability of each measure to the Salinas Ag-Industrial Center Specific Plan.

Measure 1. Within 36 months, the City shall establish a global climate change action plan that includes a baseline inventory of all GHG emissions associated with all residences, businesses, industries, agriculture, municipal operations, and other sources within the City limits, establishment of a GHG emissions reduction target; development of enforceable, feasible emissions reduction measures to meet the established target; and performance monitoring of the GHG emissions reduction measures shall occur every 3 years to ensure the emission reductions are being achieved.

Applicability of Measure 1 to Project:

Measure 1 describes the City of Salinas' climate change action plan goals and is not applicable to the Salinas Ag-Industrial Center.

Measure 2. Prioritized parking within new commercial and retail areas shall be given to electric vehicles, hybrid vehicles, and alternative fuel vehicles.

Applicability of Measure 2 to Project:
Measure 2 applies to the entire project area, including agricultural-industrial land uses. Specific Plan Section 7.5.1.3 establishes, for sites with 10 or more required visitor/employee parking spaces, a 10% minimum requirement for preferred use by carpool, vanpool and alternative fuel vehicles and requires provision of an alternative fueling system, such as an electric vehicle charging area, for at least one employee visitor vehicle. The GHG emission reductions associated with this measure were included in the analysis, as described in Table 4, measure 12.

Measure 3. The City shall require that new or major rehabilitation (additions of 25,000 square feet of office/retail commercial or 100,000 square feet of industrial floor area) or residential projects of 6 units or more comply with at least one of the following:

- **Participate in the CEC's New Solar Homes Partnership (this program provides rebates to developers of 6 units or more who offer solar power in 50 percent of new units), or a similar program with solar power requirements equal to or greater than those of the CEC's New Solar Homes Partnership as demonstrated to the City by the project applicant.**
- **Design and construct 50 percent of the square footage of the building(s) to be capable of being certified under either the Leadership in Energy and Environmental Design (LEED) or equivalent building rating system: LEED for New Construction; LEED for Existing Buildings, LEED for Homes, LEED for Core and Shell, or any Application**

Guides of these rating systems. However, no formal LEED certification shall be required, and the City Manager or his/her designee shall make the determination that the potential for LEED certification has been achieved. All credits used to demonstrate capability to meet one of the above certifications must directly or indirectly result in a reduction in GHG emissions.

Applicability of Measure 3 to Project:
Measure 3 requires that fifty percent of the Project's building square footage be required to meet LEED building rating systems. The Specific Plan anticipates that the majority of the Center's uses will be processing and/or cooling facilities which include large areas for operations and a small proportion of office space. This configuration will make it impossible to achieve the applicable LEED certification.

The Specific Plan's Green Building Plan (GBP) identifies measures to reduce GHGs within the Ag-Industrial Center. The GBP is tailored to the uses within the Plan Area, and requires that users optimize energy performance within office employee/visitor areas of buildings. The GHG analysis assumed an emission reduction credit of 30% for the office/visitor square footage portion of total Center square footage. For Scenario 1, this includes 44% of total building square footage, while for Scenario 2, this includes 24% of total building square footage. Please refer to Table 4, measure 5.

Measure 4. The City shall require that new or major rehabilitation (additions of 25,000 square feet of office/retail commercial or 100,000 square feet of industrial floor area) of commercial, office, or industrial development greater than or equal to 25,000 square feet in size must incorporate renewable energy generation (on- or off-site) to provide 15 percent or more of the project's energy needs.

Applicability of Measure 4 to Project:
The Specific Plan allows renewable energy generation projects within the Center and permits photovoltaic panels, wind turbines, solar water heaters, fuel cells, and other renewable energy sources to be installed on roofs of individual projects or in other areas of sites outside of the required yards. None of these applications are required within the Center, primarily because of the cost of these systems. Appendix C evaluates the feasibility of using solar power to supply 15% of the Center's anticipated energy demand Appendix D evaluates the feasibility of using wind power to supply 15% of the Center's energy demand. Appendices C and D demonstrate that neither solar nor wind power can be used to cost-effectively meet 15% of the Center's large expected energy demand.

Measure 5. The City shall require that new development in excess of 10 acres in size be capable of meeting the certification requirements of the LEED for Neighborhood Development Rating System Pilot Version (February 2007) ("LEED ND"). However, no formal certification shall be required, and the City Manager or his/her designee shall make the determination that the potential for certification has been achieved. All credits used to demonstrate capability to meet the LEED ND certification must directly or indirectly result in a reduction in GHG emissions.

Applicability of Measure 5 to Project:
Measure 5 is not applicable to the project. LEED ND, though not designed to be exclusively applied to residential, is primarily for residential and mixed use developments that include residential and commercial-retail.

Measure 6. The City shall require that the design or purchase of any new street lights and water and wastewater pumps and treatment systems achieve a 10 percent reduction beyond an estimated baseline energy use for this infrastructure. All new traffic lights installed within Salinas shall use LED technology.

Applicability of Measure 6 to Project:
Measure 6 is the City of Salinas' responsibility and not directly applicable to the Project. The Specific Plan proposes formation of a Landscape and Lighting Maintenance District which will implement this Measure as it installs and maintains street lighting within the District (Plan Area). Existing City policy requires the use of LED technology for new traffic lights.

In addition, the Green Building Plan requires that LEDs and/or fluorescent lighting be installed in all employee/visitor areas, whenever practicable in other building areas, and for outdoor lighting, when feasible. The GHG emission reductions associated with this measure were included in the analysis, as described in Table 4, measure 3.

Measure 7. The City shall require all new development or major rehabilitation (additions of 25,000 square feet of office/retail commercial or 100,000 square feet of industrial floor area) projects to recycle and/or salvage at least 50 percent of nonhazardous construction and demolition debris. To implement this requirement, a construction waste management plan identifying materials to be diverted from disposal and whether the materials will be stored on-site or commingled shall be developed and implemented by the applicant for said development or rehabilitation. Excavated soil and land-clearing debris do not contribute to this credit. Calculation can be done by weight or volume but must be consistent throughout.

Applicability of Measure 7 to Project:
Measure 7 is applicable to the Plan Area and has the potential to reduce GHG emissions during construction. The Specific Plan includes measures designed to ensure that at least 50% of non-hazardous construction waste is recycled, when feasible. Although this measure would potentially reduce vehicle trips and associated GHG emissions, the exact amount of GHG emissions reduced cannot be calculated because of the difficulty in estimating how many vehicle trips would be avoided.

Measure 8. The City shall require all new development and major rehabilitation (additions of 25,000 square feet of office/retail commercial or 100,000 square feet of industrial floor area) projects to incorporate any combination of the following strategies to reduce heat gain for 50 percent of the non-roof impervious site landscape (including roads, sidewalks, courtyards, parking lots, and driveways):

- **Shaded (Within 5 years of occupancy)**
- **Paving materials with a Solar Reflective Index (SRI) of at least 29**
- **Open grid pavement system**
- **Parking spaces under cover (defined as underground, under deck, under roof, or under building.) Any roof used to shade or cover parking must have an SRI of at least 29.**

Applicability of Measure 8 to Project: Although all buildings within the Center will be installed with cool roofs, the Center would not include significant amounts of shading. Specific Plan policies will result in some shading of non-roof impervious surfaces but the extent of shading will be minimal relative to the expected total amount of impervious area. The Specific Plan does not provide for open grid pavement systems or parking spaces under cover, nor does it require paving materials with an SRI of at least 29 for 50% of non-roof impervious vehicular travel, parking, or loading areas. Using paving materials with an SRI of at least 29, such as concrete, would triple the costs required to pave the parking areas. This represents an unaffordable cost increase because of the large parking areas that will be needed to accommodate field trucks and line haul trucks. Appendix E documents the added costs of using concrete instead of asphalt for the Center.

Measure 9. The City shall require all new development and major rehabilitation (additions of 25,000 square feet of office/retail commercial or 100,000 square feet of industrial floor area) projects incorporate "green building" points in construction plans prior to issuing a permit to build. Such points may be achieved through checklists identified by New Home Construction Green Building Guidelines available at www.builditgreen.org, or through a similar list that distinguishes specific measures targeting efficiencies in energy, resource use, or other measures that would also directly or indirectly result in GHG emission reductions. Specific efficiencies that would reduce GHG emissions shall be implemented where feasible for all project areas including site design, landscaping, foundation, structural frame and building envelope, exterior finishing, plumbing, appliance use, insulation, heating, venting and air conditioning, building performance, use of renewable energy, finishes, and flooring.

Applicability of Measure 9 to Project: The BuilditGreen web site referenced in this measure applies only to residential construction and thus provides no guidance for the uses proposed in the Plan Area. Section 7.5 of the Specific Plan requires that the commercial and industrial projects within the Plan Area incorporate energy efficient design and allows renewable energy generation facilities that are appropriate to Plan Area land uses. These measures are described in Table 4 of this analysis (see measures 3, 4, 5, 6, 7, 10, 11, and 12). Emission reductions are shown in Table 5.

Appendix B. Construction and Operational GHG Emission Estimates

Section Appendix B-

Appendix B -

Construction Emissions

Construction Emissions Estimation Methodology

Construction emission estimates are summarized in the table below. These emissions were based on the URBEMIS2007 model, version 9.2.4. The detailed modeling assumptions and emission results are summarized in the URBEMIS output shown below.

Year	Metric Tons (CO2e)	Annual Construction Activities
2010	1,168	Demolition, Mass Grading, Fine Grading, Road Asphalt Paving, Trenching (and Wet and Dry Utilities)
2011	1,316	Building Construction, Road/Parking Lot Paving
2012	1,320	Building Construction, Road/Parking Lot Paving
2013	1,320	Building Construction, Road/Parking Lot Paving
2014	1,320	Building Construction, Road/Parking Lot Paving
Total	6,445	

Notes: Estimates based on URBEMIS2007 model. Assumes default construction equipment list by phase as generated by URBEMIS2007.
Emission estimates assume the following phasing:
Demolition for 1 week beginning January 2010;
Mass Grading for 2.5 months beginning in mid January 2010;
Fine Grading for 1 month in April 2010;
Trenching and Utilities Installation for 1 month in June 2010;
Building for 4.5 years from July 2010 through December 2014;
Asphalt Paving for 1 month in May 2010, 2011, 2012, 2013, and 2014;
A total of 125 acres assumed to be paved, with an average of 25 acres paved per year. The majority of paving in 2010 expected to be roads, while majority of paving in subsequent years expected to be parking lots.

Construction Emission URBEMIS Results

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\Tim Rimpo\Application Data\Urbemis\Version9a\Projects\Uni-Kool Revised Construction Only.urb924
Project Name: Salinas Ag-Industrial Revised Construction GHG
Project Location: Monterey County
On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006
Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES		Metric
	CO2	CO2
2010 TOTALS (tons/year unmitigated)	1,287.54	1,168.37
2011 TOTALS (tons/year unmitigated)	1,450.50	1,316.24
2012 TOTALS (tons/year unmitigated)	1,454.81	1,320.16
2013 TOTALS (tons/year unmitigated)	1,454.83	1,320.17
2014 TOTALS (tons/year unmitigated)	1,454.84	1,320.18

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

		CO2	
2010			1,287.54
	Demolition 01/04/2010-01/09/2010		12.13
	Fugitive Dust	0.00	
	Demo Off Road Diesel	10.33	
	Demo On Road Diesel	1.47	
	Demo Worker Trips	0.33	
	Mass Grading 01/11/2010-03/26/2010		250.43
	Mass Grading Dust	0.00	
	Mass Grading Off Road Diesel	243.18	
	Mass Grading On Road Diesel	0.00	
	Mass Grading Worker Trips	7.25	
	Fine Grading 03/29/2010-04/30/2010		113.83
	Fine Grading Dust	0.00	
	Fine Grading Off Road Diesel	110.54	
	Fine Grading On Road Diesel	0.00	
	Fine Grading Worker Trips	3.30	
	Asphalt 05/03/2010-05/28/2010		331.79
	Paving Off-Gas	0.00	

	Paving Off Road Diesel	12.72	
	Paving On Road Diesel	317.75	
	Paving Worker Trips	1.32	
	Trenching 06/01/2010-06/30/2010		20.02
	Trenching Off Road Diesel	18.86	
	Trenching Worker Trips	1.16	
	Building 07/05/2010-12/31/2014		559.31
	Building Off Road Diesel	146.85	
	Building Vendor Trips	399.91	
	Building Worker Trips	12.55	
	Coating 09/07/2010-12/05/2014		0.02
	Architectural Coating	0.00	
	Coating Worker Trips	0.02	
2011			1,450.50
	Building 07/05/2010-12/31/2014		1,118.64
	Building Off Road Diesel	293.71	
	Building Vendor Trips	799.85	
	Building Worker Trips	25.08	
	Coating 09/07/2010-12/05/2014		0.07
	Architectural Coating	0.00	
	Coating Worker Trips	0.07	
	Asphalt 05/02/2011-05/27/2011		331.79
	Paving Off-Gas	0.00	
	Paving Off Road Diesel	12.72	
	Paving On Road Diesel	317.75	
	Paving Worker Trips	1.32	
2012			1,454.81
	Building 07/05/2010-12/31/2014		1,122.95
	Building Off Road Diesel	294.84	
	Building Vendor Trips	802.96	
	Building Worker Trips	25.16	
	Coating 09/07/2010-12/05/2014		0.07
	Architectural Coating	0.00	
	Coating Worker Trips	0.07	
	Asphalt 05/07/2012-06/01/2012		331.79
	Paving Off-Gas	0.00	
	Paving Off Road Diesel	12.72	
	Paving On Road Diesel	317.75	
	Paving Worker Trips	1.32	
2013			1,454.83
	Building 07/05/2010-12/31/2014		1,122.97
	Building Off Road Diesel	294.84	
	Building Vendor Trips	802.99	
	Building Worker Trips	25.15	
	Coating 09/07/2010-12/05/2014		0.07
	Architectural Coating	0.00	
	Coating Worker Trips	0.07	

	Asphalt 05/06/2013-05/31/2013		331.79
	Paving Off-Gas	0.00	
	Paving Off Road Diesel	12.72	
	Paving On Road Diesel	317.75	
	Paving Worker Trips	1.32	
2014			1,454.84
	Building 07/05/2010-12/31/2014		1,122.99
	Building Off Road Diesel	294.84	
	Building Vendor Trips	803.01	
	Building Worker Trips	25.14	
	Coating 09/07/2010-12/05/2014		0.06
	Architectural Coating	0.00	
	Coating Worker Trips	0.06	
	Asphalt 05/05/2014-05/30/2014		331.79
	Paving Off-Gas	0.00	
	Paving Off Road Diesel	12.72	
	Paving On Road Diesel	317.75	
	Paving Worker Trips	1.32	

Phase Assumptions

Phase: Demolition 1/4/2010 - 1/9/2010 - Type Your Description Here
Building Volume Total (cubic feet): 50000
Building Volume Daily (cubic feet): 10000
On Road Truck Travel (VMT): 138.89
Off-Road Equipment:
3 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
2 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

Phase: Fine Grading 3/29/2010 - 4/30/2010 - Type Your Description Here
Total Acres Disturbed: 257
Maximum Daily Acreage Disturbed: 64.25
Fugitive Dust Level of Detail: Default
20 lbs per acre-day
On Road Truck Travel (VMT): 0
Off-Road Equipment:
1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day
3 Scrapers (313 hp) operating at a 0.72 load factor for 8 hours per day
3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day
1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Mass Grading 1/11/2010 - 3/26/2010 - Default Fine Site Grading Description
Total Acres Disturbed: 257
Maximum Daily Acreage Disturbed: 64.25
Fugitive Dust Level of Detail: Default
20 lbs per acre-day

On Road Truck Travel (VMT): 0
Off-Road Equipment:
1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
1 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day
1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day
3 Scrapers (313 hp) operating at a 0.72 load factor for 8 hours per day
3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day
1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Trenching 6/1/2010 - 6/30/2010 - Includes Wet and Dry Utilities
Off-Road Equipment:
2 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
1 Other General Industrial Equipment (238 hp) operating at a 0.51 load factor for 8 hours per day
1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 0 hours per day

Phase: Paving 5/3/2010 - 5/28/2010 - Paving Road Network
Acres to be Paved: 25
Off-Road Equipment:
1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day
2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day
2 Rollers (95 hp) operating at a 0.56 load factor for 6 hours per day

Phase: Paving 5/2/2011 - 5/27/2011 - Type Your Description Here
Acres to be Paved: 25
Off-Road Equipment:
1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day
2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day
2 Rollers (95 hp) operating at a 0.56 load factor for 6 hours per day

Phase: Paving 5/7/2012 - 6/1/2012 - Type Your Description Here
Acres to be Paved: 25
Off-Road Equipment:
1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day
2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day
2 Rollers (95 hp) operating at a 0.56 load factor for 6 hours per day

Phase: Paving 5/6/2013 - 5/31/2013 - Type Your Description Here
Acres to be Paved: 25
Off-Road Equipment:
1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day
2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day
2 Rollers (95 hp) operating at a 0.56 load factor for 6 hours per day

Phase: Paving 5/5/2014 - 5/30/2014 - Type Your Description Here
Acres to be Paved: 25
Off-Road Equipment:
1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day
2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day
2 Rollers (95 hp) operating at a 0.56 load factor for 6 hours per day

Phase: Building Construction 7/5/2010 - 12/31/2014 - Default Building Construction Description
Off-Road Equipment:
1 Cranes (399 hp) operating at a 0.43 load factor for 7 hours per day
3 Forklifts (145 hp) operating at a 0.3 load factor for 8 hours per day
1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day
3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
1 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 9/7/2010 - 12/5/2014 - Default Architectural Coating Description
Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 100
Rule: Residential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250
Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250
Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Operational Emissions – Vehicles

The URBEMIS2007 model was used to estimate CO_2 emissions associated with all vehicle trips. The trip generation rates input into URBEMIS were based the rates included in the project traffic report (Higgins and Associates, 2008).

The average one way distance for each of these truck trips was estimated by determining the percentage of trips originating from zones around the proposed project. Table B-1 shows those distances, the percentage originating from each distance, and the average one-way truck trip distance for line haul trucks, while Table B-2 shows distances for field trucks. Table B-3 shows the weighted average distances for line-haul and field trucks. This weighted average trip distance was input into URBEMIS as the average truck trip length.

Table B-1. Average One-Way Truck Travel Distances for Line Haul Trucks

Trip Distance - Line Haul	One Way Miles	Maximum Daily One Way Miles	% of Trips	Trip Distance Weighted One-Way
Salinas – LA	312	312	0.35	109.2
Salinas - San Fran	100	100	0.5	50
Salinas - St. Louis	2050	480	0.15	72
			1	231.2

Table B-2 Average One-Way Truck Travel Distances for Field Trucks

Trip Distance - Field Trucks	One Way Miles	% of Trips	Average One-Way
0-10	5	0.25	1.25
10-50	30	0.5	15
50-100	75	0.25	18.75
		1	35

Table B-3. Weighted Average Truck Trip Travel Distance

Field Trip Distance Weighted Average (40%)	14.0
Line Haul Distance Weighted Average (60%)	138.7
Sum of Weighted Average	152.7

Table B-4 shows the total vehicle miles traveled for truck trips. These values are used to calculate methane and nitrous oxide emissions associated with diesel fuel use. Total VMT/year assumes 365 days per year, although actual number of days per year is expected to be lower.

Table B-4. Truck Trip Travel Distance

Daily Trips Line Haul	Daily Trips Field Trucks	VMT/day Field Trucks	VMT/Day Line Haul	Total VMT/Day	Total VMT/Year
3503	2336	81,745	809,877	891,722	325,478,709

Table B-5 summarizes greenhouse gas emissions in metric tons per year. CO_2 emissions are based on URBEMIS modeling results in tons per year, converted to metric tons per year. CH_4 emissions assume 0.06 grams methane per mile traveled while N_2O emissions assume 0.05 grams nitrous oxide per mile traveled. CH_4 is converted to CO_2 equivalence by multiplying CH_4 metric tons per year by 21, while N_2O is converted to CO_2 equivalence by multiplying N_2O metric tons per year by 310 (California Climate Action Registry, 2009).

Table B-5. Transportation Greenhouse Gas Emissions (metric tons/year)

	CO_2	CH_4	N2O
Emission Rates	from EMFAC2007	0.06 grams/mile	0.05 grams/mile
metric tpy	303,045	22.11	18.42
CO_2e unmitigated	309,220		

Total CO2e emissions were then divided into emissions by the three vehicle classes based on VMT as follows:

Emissions Itemized by Trip Type	Daily VMT	CO2e Emissions (Unmit)	% of Total
Employee Trips	118,284	36,213	11.71%
Field Trucks	81,745	25,027	8.09%
Line Haul	809,977	247,980	80.20%
	1,010,006	309,220	100.00%

Table B-6 shows the first step in the vehicle emissions mitigation. First, mitigated VMT for trucks were estimated using the reduction in average trip length of 4 miles per trip.

Table B-6. Mitigated VMT assumes 4 mile reduction for field truck trips and line haul truck trips.

Daily Trips Line Haul	Daily Trips Field Trucks	Total Trips/day Line+Field	VMT/day Field Trucks	VMT/Day Line Haul	Total VMT/Day	Total VMT/Year	Average VMT/trip into URBEMIS
3,503	2,336	5,839	81,745	809,977	891,722	325,478,709	
		Mitigated	72,403	795,964	868,367	316,953,860	148.72

The average truck trip length was reduced from 153 to 149 miles (Kovacich, pers. comm.). URBEMIS was then rerun using 149 miles as the average truck trip length. The revised URBEMIS run also included mitigation to account for employee trip reductions associated with enhanced transit services, bike lanes, and sidewalks. The mitigated

URBEMIS results of 276,779 metric tons per year (shown in Table B-7 and in URBEMIS modeling printout shown below) were then split into emissions for employee trips, field trucks, and line haul trucks, and those emissions were reduced further to account for low carbon fuels (2.5% reduction applied to all vehicles) and ARB's truck efficiency rule (10% reduction applied to line haul trucks only)

Table B-7. Mitigated Transportation Emissions After Accounting for Employee Trip Reductions, Low Carbon Fuels, and ARB's Truck Efficiency Fleet Rule

	Mitigated CO2 Emissions from URBEMIS (metric tpy)	CH4 (metric tpy)	N20 (metric tpy)	CO2e (metric tpy)	% Reduction	Emission Reduction Assumptions
Employee Trips	33,331.69	2.4	2.0	34,010.9	7.96	Employee Trip Emissions Reduced 2.5% for Low Carbon Fuels
Field Truck Trips	19,721.22	1.4	1.2	20,123.1	21.20	Field Truck Trip Emissions Reduced 2.5% for Low Carbon Fuels
Line Haul Trips	195,125.57	14.2	11.9	199,101.4	21.31	Line Haul Truck Trip Emissions Reduced 10% for ARB Truck Efficiency Rule and 2.5% for Clean Fuels
Totals	276,778.57	18.1	15.1	253,235.3	10.49	

Operational Emissions – Unmitigated URBEMIS Modeling Results w/TDM Mitigation Only

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\Tim Rimpo\Application Data\Urbemis\Version9a\Projects\Uni-Kool Operational Only.urb924

Project Name: Salinas Ag-Industrial Transportation GHG

Project Location: Monterey County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	CO2
TOTALS (tons/year, unmitigated)	333,955.66
TOTALS (tons/year, mitigated)	310,942.97
Percent Reduction	6.89

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	CO2
TOTALS (tons/year, unmitigated)	333,955.66

Both Area and Operational Mitigation must be turned on to get a combined mitigated total.

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	CO2
Industrial park	333,955.66
TOTALS (tons/year, unmitigated)	333,955.66

Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Mitigated

Source	CO2
Industrial park	310,942.97
TOTALS (tons/year, mitigated)	310,942.97

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Industrial park		63.11	acres	257.00	16,219.27	1,010,006.39
					16,219.27	1,010,006.39

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	64.0	0.2	99.6	0.2
Light Truck < 3750 lbs	0.0	0.6	95.6	3.8
Light Truck 3751-5750 lbs	0.0	0.5	99.5	0.0
Med Truck 5751-8500 lbs	0.0	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	73.3	26.7
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	55.6	44.4
Med-Heavy Truck 14,001-33,000 lbs	14.4	0.0	23.1	76.9
Heavy-Heavy Truck 33,001-60,000 lbs	21.6	0.0	0.0	100.0
Other Bus	0.0	0.0	50.0	50.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	0.0	51.4	48.6	0.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	0.0	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.8	8.3	7.1	11.8	152.0	152.0
Rural Trip Length (miles)	11.8	8.3	7.1	11.8	4.4	4.4
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land						

use)			
Industrial park	64.0	18.0	18.0

Operational Emissions –Mitigated URBEMIS Modeling Results with adjusted trip lengths and TDMs

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\Tim Rimpo\Application Data\Urbemis\Version9a\Projects\Uni-Kool Operational Only with adjusted trip lengths and tdms.urb924
Project Name: Salinas Ag-Industrial Transportation GHG
Project Location: Monterey County
On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006
Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

OPERATIONAL (VEHICLE) EMISSION ESTIMATES		Metric
	CO2	CO2
TOTALS (tons/year, unmitigated)	327,593.21	297,272
TOTALS (tons/year, mitigated)	305,009.98	276,779
Percent Reduction	6.89	

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES	
	CO2
TOTALS (tons/year, unmitigated)	327,593.21

Both Area and Operational Mitigation must be turned on to get a combined mitigated total.

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	CO2
Industrial park	327,593.21
TOTALS (tons/year, unmitigated)	327,593.21

Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Mitigated

Source	CO2
Industrial park	305,009.98
TOTALS (tons/year, mitigated)	305,009.98

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Industrial park		63.11	acres	257.00	16,219.27	990,737.88
					16,219.27	990,737.88

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	64.0	0.2	99.6	0.2
Light Truck < 3750 lbs	0.0	0.6	95.6	3.8
Light Truck 3751-5750	0.0	0.5	99.5	0.0

lbs				
Med Truck 5751-8500 lbs	0.0	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	73.3	26.7
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	55.6	44.4
Med-Heavy Truck 14,001-33,000 lbs	14.4	0.0	23.1	76.9
Heavy-Heavy Truck 33,001-60,000 lbs	21.6	0.0	0.0	100.0
Other Bus	0.0	0.0	50.0	50.0
Urban Bus	0.0	0.0	0.0	0.0
Motorcycle	0.0	51.4	48.6	0.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	0.0	0.0	88.9	11.1

Travel Conditions

	Residential				Commercial	
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.8	8.3	7.1	11.8	148.7	148.7
Rural Trip Length (miles)	11.8	8.3	7.1	11.8	4.4	4.4
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Industrial park				64.0	18.0	18.0

Area Source Emissions

Area source emissions include natural gas and electricity use. Both of these energy sources generate GHG emissions. Table B-8 shows electricity and natural gas use assumptions as compiled by Itron, Inc. (2006) for the California Energy Commission.

Table B-8. Electricity Use and Natural Gas Use Assumptions

	Unmitigated Electric kWh/ft^2	Unmitigated Natural Gas kBtu/ ft^2	Cool Roof Mit Electric kwh/ ft^2	Cool Roof Mit Natural Gas kBtu/ ft^2	Electric Outdoor lighting kWh/ ft^2	Electric Indoor lighting kWh/ ft^2
Warehouses	4.26	4.40	3.96	4.89	0.57	2.4
Refrigerated Warehouses	10.15	3.90	9.85	4.39	0.13	2.2
All Office	21.35	20.52	21.05	21.01	0.76	3.3
Retail	12.82	3.00	12.52	3.49	0.66	5.8
Miscellaneous	9.81	29.65	9.51	30.14	1.12	3
Average All Commercial	13.64	29.50	13.34	29.99	0.78	3.7
Source: Itron, 2006 PG&E Climate Zone 4						

Natural Gas

Table B-9 shows the methodology used to estimate GHG emissions for Scenario 1's natural gas use. The first step involves estimating total annual energy use for each of the land use categories. To do that, the average energy use per year was estimated by taking the total energy use per square foot per year (Table B-8) and multiplying by the square footage of each land use. The second column in Table B-9 shows the energy use category (from Table B-8) that was used to estimate annual energy use. Emission factors for natural gas use were based on a report published by the California Climate Action Registry (2009). Those emission factors include 53.05 kilograms CO_2 per million Btu of natural gas consumed, 0.0059 kilogram of methane per million Btu of gas, and 0.0001 kilogram of nitrous oxide per million Btu of gas consumed. Methane emissions were converted to CO_2 equivalence by multiplying by 21, and nitrous oxide emissions were converted to CO_2e by multiplying by 320. Table B-10 shows Scenario 2's natural gas use and GHG estimates.

Table B-9 Scenario 1 Natural Gas Energy Use, Unmitigated

NATURAL GAS

Scenario 1

Total Building (sf)	Office/Visitor Space (sf)	Remainder (sf)	CEC Energy Use Category	Land Use Type	Energy Use mmBtu/yr	CO2 Emissions metric tons/year	Ch4 Emissions metric tons/year	N2O Emissions metric tons/year	CO2e metric tons/yr
1,319,868	237,576	1,082,292	Warehouse	Manufacturing (Ag Processing)	9,637.14	510.32	0.06	0.00	511.91
711,834	142,367	569,467	Refrigerated Warehouses	Manufacturing (Coolers)	5,142.29	272.30	0.03	0.00	273.15
889,793	177,959	711,834	Warehouse	Manufacturing (Ag Manufacturing)	6,783.79	359.23	0.04	0.00	360.35
1,067,751	1,067,751	-	Warehouse	R&D Center (Ag Support)	21,910.25	1,160.23	0.13	0.00	1,163.84
249,142	249,142	-	Retail	Specialty Retail	747.43	39.58	0.00	0.00	40
4,238,388	1,874,795	2,363,593			44,220.90	2,341.66	0.26	0.00	2,348.96

Table B-10. Scenario 2 Natural Gas Energy Use, Unmitigated

NATURAL GAS

Scenario 2

Total Building (sf)	Office/Visitor Space (sf)	Remainder (sf)	CEC Energy Use Category	Land Use Type	Annual Energy Use (mmBtu/yr)	CO2 Emissions (metric tons/year)	Ch4 Emissions (metric tons/yr)	N2O Emissions (metric tons/yr)	CO2e (metric tons/yr)
1,319,868	237,576	1,082,292	Warehouse	Manufacturing (Ag Processing)	9,637.14	510.32	0.06	0.00	511.91
711,834	142,367	569,467	Refrigerated Warehouses	Manufacturing (Coolers)	5,142.29	272.30	0.03	0.00	273.15
889,793	177,959	711,834	Warehouse	Manufacturing (Ag Manufacturing)	6,783.79	359.23	0.04	0.00	360.35
1,067,751	213,550	854,201	Warehouse	R&D Center (Ag Support)	8,140.53	431.07	0.05	0.00	432.41
249,142	249,142	-	Retail	Specialty Retail	5,112.39	270.72	0.03	0.00	272
4,238,388	1,020,594	3,217,794			34,816.15	1,843.64	0.21	0.00	1,849.39

Tables B-11 and B-12 show mitigated natural gas emissions for Scenarios 1 and 2, respectively. Mitigated assume that from 1,020, 594 (Scenario 2) to 1,874,795 square feet of office space will comply with ASHRAE Advanced Energy Design for Small Buildings (2004), which will achieve an energy reduction of 30% for that office space. Since this square footage represents from 24 to 44 percent of total square footage, and emissions will be reduced by 30%, the net emission reduction will range from 7% to 13% of total building energy use. Also, electricity emissions associated with cool roofs also include an emission reduction. That reduction assumes savings of 2.6 Btu/square foot per year (Levinson, et. al. 2005).

Table B-11 Scenario 1 - Natural Gas Use, Mitigated

NATURAL GAS	Scenario 1 - Mitigated					Office Vistor	Remainder	Total				
				Office/Visitor	Remainders	Annual Energy Use	Annual Energy Use	Energy Use	CO2 Emissions	Ch4 Emissions	N2O Emissions	CO2e
			Renewables	1	1	mmBtu/yr	mmBtu/yr	mmBtu/yr	metric tons/year	metric tons/year	metric tons/year	metric tons/yr
Total (sf)	Office/Visitor Space (sf)	Remainder (sf)	Energy Efficiency	0.7	1							
1,319,868	237,576	1,082,292	Warehouse	Manufacturing (Ag Processing)		3,494.03	5,292.41	8,786.44	465.27	0.05	0.00	466.72
711,834	142,367	569,467	Refrigerated Warehouses	Manufacturing (Coolers)		2,093.79	2,499.96	4,593.75	243.26	0.03	0.00	244.01
889,793	177,959	711,834	Warehouse	Manufacturing (Ag Manufacturing)		2,617.24	3,480.87	6,098.11	322.92	0.04	0.00	323.92
1,067,751	1,067,751	-	Warehouse	R&D Center (Ag Support)		15,703.41	-	15,703.41	831.55	0.09	0.00	834.15
249,142	249,142	-	Retail	Specialty Retail		608.65	-	608.65	32.23	0.00	0.00	32
4,238,388	1,874,795	2,363,593				24,517.13	11,273.24	35,790.37	1,895.23	0.21	0.00	1,901.14

Table B-12 Scenario 2 - Natural Gas Use, Mitigated

NATURAL GAS				Office/Visitor	Remainders	Office Vistor	Remainder	Total				
			Renewables	1	1	Annual Energy Use	Annual Energy Use	Energy Use	CO2 Emissions	Ch4 Emissions	N2O Emissions	CO2e
square feet			Energy Efficiency	0.7	1	mmBtu/yr	mmBtu/yr	mmBtu/yr	metric tons/year	metric tons/year	metric tons/yr	metric tons/yr
	Office/Visitor Space	Remainder										
1,319,868	237,576	1,082,292	Warehouse	Manufacturing (Ag Processing)		3,494.03	5,292.41	8,786.44	465.27	0.05	0.00	466.72
711,834	142,367	569,467	Refrigerated Warehouses	Manufacturing (Coolers) Manufacturing (Ag Manufacturing)		2,093.79	2,499.96	4,593.75	243.26	0.03	0.00	244.01
889,793	177,959	711,834	Warehouse	Manufacturing (Ag Manufacturing)		2,617.24	3,480.87	6,098.11	322.92	0.04	0.00	323.92
1,067,751	213,550	854,201	Warehouse	R&D Center (Ag Support)		3,140.68	4,177.04	7,317.72	387.50	0.04	0.00	388.71
249,142	249,142	-	Retail	Specialty Retail		3,664.13	-	3,664.13	194.03	0.02	0.00	195
4,238,388	1,020,594	3,217,794				15,009.88	15,450.28	30,460.16	1,612.98	0.18	0.00	1,618.00

Electricity

Tables B-13 and B-14 show the methodology used to estimate GHG emissions from electricity use for Scenarios 1 and 2, respectively. The first step involves estimating total annual electricity use for each of the land use categories. To do that, the average electricity use per year was estimated by multiplying the total electricity use per square foot per year (Table B-8) and multiplying by the square footage of each land use. The second column in Table B-13 shows the electricity use category (from Table B-8) that was used to estimate annual electricity use. Emission factors for electricity use were based on a report published by the California Climate Action Registry (2009). Those emission factors include 805.4 pounds CO_2 per megawatt hour of electricity consumed, 0.0067 pounds of methane per megawatt-hour of electricity consumed, and 0.0037 pounds of nitrous oxide per megawatt-hour of electricity consumed. Methane emissions were converted to CO_2 equivalence by multiplying by 21, and nitrous oxide emissions were converted to CO_2e by multiplying by 320.

Table B-13. Scenario 1 Electricity Use Emissions, Unmitigated

Unmitigated	Scenario 1								
ELECTRICITY									
					Annual Energy Use	CO2 Emissions	Ch4 Emissions	N2O Emissions	CO2e
Total Building	Office/Visitor Space	Remainder			(mwh)	metric tons/year	metric tons/year	metric tons/year	metric tons/yr
1,319,868	237,576	1,082,292	Warehouse	Major Ag Processing	9,682.81	3,541.00	0.03	0.02	3,546.50
711,834	142,367	569,467	Refrigerated Warehouses	Minor Ag Processing (coolers)	8,817.35	3,224.50	0.03	0.01	3,229.51
889,793	177,959	711,834	Warehouse	Manufacturing (Ag Manufacturing)	6,831.84	2,498.40	0.02	0.01	2,502.28
1,067,751	1,067,751	-	Warehouse	R&D Center (Ag Support)	22,796.48	8,336.67	0.07	0.04	8,349.62
249,142	249,142	-	Retail	Retail	3,194.00	1,168.05	0.01	0.01	1,170
4,238,388	1,874,795	2,363,593			51,322.48	18,768.63	0.16	0.09	18,797.78

Table B-14. Scenario 2 Electricity Use Emissions, Unmitigated

Unmitigated	Scenario 2									
ELECTRICITY										
						Annual Energy Use	CO2 Emissions	Ch4 Emissions	N2O Emissions	CO2e
Total Building	Office/Visitor Space	Remainder				(mwh)	metric tons/year	metric tons/year	metric tons/year	metric tons/yr
1,319,868	237,576	1,082,292	Warehouse	Major Ag Processing		9,682.81	3,541.00	0.03	0.02	3,546.50
711,834	142,367	569,467	Refrigerated Warehouses	Minor Ag Processing (coolers)		8,817.35	3,224.50	0.03	0.01	3,229.51
889,793	177,959	711,834	Warehouse	Manufacturing (Ag Manufacturing)		6,831.84	2,498.40	0.02	0.01	2,502.28
1,067,751	213,550	854,201	Warehouse	R&D Center (Ag Support)		8,198.19	2,998.08	0.02	0.01	3,002.73
249,142	249,142	-	Retail	Retail		5,319.18	1,945.22	0.02	0.01	1,948
4,238,388	1,020,594	3,217,794				38,849.37	14,207.21	0.12	0.07	14,229.27

Table B-15 and B-16 show mitigated electricity emissions for Scenarios 1 and 2, respectively. Mitigated emissions assume that from 1,020, 594 (Scenario 2) to 1,874,795 (Scenario 1) square feet of office space will comply with ASHRAE Advanced Energy Design for Small Buildings (2004), which will achieve an energy reduction of 30% for that office space. Since this square footage represents from 24 to 44 percent of total square footage, and emissions will be reduced by 30%, the net emission reduction will range from 7% to 13% of total building energy use. Also, electricity emissions associated with cool roofs also include an emission reduction. That reduction assumes savings of 2.6 Btu/square foot per year (Levinson, et. al. 2005). Finally, the mitigated electricity use and GHG emission reductions associated with lighting were estimated. The lighting portion of the calculations assumes: 90% of office/visitor space within the Center will be illuminated by fluorescents, 10% of office/visitor space within the Center will be illuminated by LED's, 50% of the office/visitor space within the Major Ag Processing/Ag Manufacturing, and Ag Support uses will implement motion-sensing devices, 10% of all outdoor lighting will be LEDs, and 5% of remainder areas of all uses will include LEDs. The use of fluorescent lighting or its energy use equivalent is considered to be the unmitigated condition because the latest revisions to Title 24, California's energy code, are slated to take effect in August 2009. The Title 24 revisions will require the use of fluorescent lights or their energy equivalent (California Energy Commission, 2008b). The analysis assumes that 10% of the office/visitor space and 10% of outdoor lighting will see a 50% reduction in lighting energy use due to the use of LEDs (TheDailyGreen.com, 2007). This analysis also assumes that 5% of the "remainder areas" will see a 50% reduction in lighting energy use due to the use of LEDs (TheDailyGreen.com, 2007). Although the use of motion sensing devices will reduce electrical energy demand, insufficient data were available to estimate the electricity reduction associated with this use.

Table B-15. Scenario 1 Electricity Use Emissions, Mitigated

	Lighting	Office/Visitor	Remainders
	Indoor	0.05	0.025
	Outdoor	0.05	N/A

Office/Visitor assumes 10% of office/visitor use LEDs and that LED's reduce consumption by 50%.
Outdoor assumes 10@ will be LEDs and LEDs reduce consumption by 50%

		Office/Visitor	Remainders
ELECTRICITY	Renewables	1	1
	Energy Efficiency	0.7	1

square feet	Office/Visitor Space	Remainder			Office Visitor Annual Energy Use (mwh)	Remainder Annual Energy Use (mwh)	Total Energy Use (mwh)	CO2 Emissions metric tons/year	CH4 Emissions metric tons/year	N2O Emissions metric tons/year	CO2e metric tons/yr
1,319,868	237,576	1,082,292	Warehouse	Manufacturing (Ag Processing)	3,423.87	4,220.94	7,644.80	2,795.71	0.02	0.01	2,800.05
711,834	142,367	569,467	Refrigerated Warehouses	Manufacturing (Coolers)	2,069.66	5,575.65	7,645.31	2,795.89	0.02	0.01	2,800.23
889,793	177,959	711,834	Warehouse	Manufacturing (Ag Manufacturing)	2,567.50	2,776.15	5,343.66	1,954.18	0.02	0.01	1,957.21
1,067,751	1,067,751	-	Warehouse	R&D Center (Ag Support)	15,526.70	-	15,526.70	5,678.11	0.05	0.03	5,686.93
249,142	249,142	-	Retail	Specialty Retail	2,134.15	-	2,134.15	780.46	0.01	0.00	782
4,238,388	1,874,795	2,363,593			25,721.88	12,572.74	38,294.62	14,004.34	0.12	0.06	14,026.09

Table B-16. Scenario 2 Electricity Use Emissions, Mitigated

	Lighting	Office/Visitor	Remainders
	Indoor	0.05	0.025
	Outdoor	0.05	N/A

	Scenario 2 - Mitigated			Office/Visitor	Remainders	Office Vistor	Remainder	Total			
ELECTRICITY			Renewables	1	1		Remainder	Energy Use			
			Energy Efficiency	0.7	1	Annual Energy Use	Annual Energy Use	(mwh)	CO2 Emissions	Ch4 Emissions	N2O Emission
square feet	Office/Visitor Space	Remainder				(mwh)	(mwh)		metric tons/year	metric tons/year	metric tons/yea
1,319,868	237,576	1,082,292	Warehouse	Manufacturing (Ag Processing)		3,434.56	4,220.94	7,655.50	2,799.61	0.02	0.01
711,834	142,367	569,467	Refrigerated Warehouses	Manufacturing (Coolers)		2,077.49	5,575.65	7,653.14	2,798.75	0.02	0.01
889,793	177,959	711,834	Warehouse	Manufacturing (Ag Manufacturing)		2,575.51	2,776.15	5,351.66	1,957.10	0.02	0.01
1,067,751	213,550	854,201	Warehouse	R&D Center (Ag Support)		3,090.60	3,331.38	6,421.99	2,348.52	0.02	0.01
249,142	249,142	-	Retail	Specialty Retail		3,590.63	-	3,590.63	1,313.10	0.01	0.01
4,238,388	1,020,594	3,217,794				14,768.80	15,904.13	30,672.92	11,217.09	0.09	0.05

Agricultural Emissions Avoided

Assumptions:

257.3 acres

4.7	passes/acre/year	total hours	CO_2e (#/hr)	Metric CO_2e tons/year	
2	pass/acre/year tillers	51.46	239.43	5.59	
2	pass/acre/year sprayers	51.46	155.36	3.63	
6	passes/acre/year ag tractors	154.38	178.04	12.47	
10	acres/hour			21.69	<-Total

25.73 hours/pass

120.931 total hours required to plant and harvest

Season	AvgDays	Equipment	MaxHP	Population	hr/day/pop Activity	tpd CO_2 Exhaust	pounds/hr CO_2	tpd CH_4 Exhaust	pounds/hr CH_4	pounds/hr CO_2e
Annual	Mon-Sun	Agricultural Tractors	250	4.65E+02	6.06E+02	5.39E+01	178.04	4.08E-03	6.73E-06	178.04
Annual	Mon-Sun	Sprayers	250	4.49E+00	1.11E+00	8.62E-02	155.36	5.11E-06	4.60E-06	155.36
Annual	Mon-Sun	Tillers	250	2.55E-02	1.20E-02	1.44E-03	239.43	9.05E-08	7.51E-06	239.43

Notes:

Pounds per hour estimates from OFFROAD2007.

Assumptions based on ARB emission inventory (California Air Resources Board, 2003)

Farming also includes electricity used to pump water. These electricity emissions are included in the water use estimates.

Carbon Sequestration from Tree Planting

URBAN FORESTRY CARBON SEQUESTRATION WORKSHEET

10-Sep-08

Reporting Entity: Ag-Industrial Center

Select Units: (◉) Metric To ( ) Short Tons ( ) Kilograms ( ) Pounds

Data Year: 2010

Sequestration Summary:

Gas	Type	Unit of Measure	2010	2011	2012	2013	2014
Carbon	Total Storage	metric tons	0.30	0.69	1.16	1.71	2.35
Carbon	Annual Increase	metric tons	0.30	0.39	0.47	0.55	0.64
Carbon dioxide	Total Storage	metric tons	1.10	2.54	4.25	6.27	8.62
Carbon dioxide	Annual Increase	metric tons	1.10	1.43	1.71	2.02	2.35

Gas	Type	Unit of Measure	2015	2016	2017	2018	2019
Carbon	Total Storage	metric tons	3.08	3.90	4.81	5.81	6.90
Carbon	Annual Increase	metric tons	0.73	0.82	0.91	1.00	1.09
Carbon dioxide	Total Storage	metric tons	11.29	14.30	17.65	21.30	25.30
Carbon dioxide	Annual Increase	metric tons	2.67	3.02	3.35	3.65	4.00

1

Gas	Type	Unit of Measure	2020	2021	2022	2023	2024
Carbon	Total Storage	metric tons	8.07	9.33	10.68	12.11	13.62
Carbon	Annual Increase	metric tons	1.17	1.26	1.35	1.43	1.51
Carbon dioxide	Total Storage	metric tons	29.59	34.21	39.15	44.39	49.93
Carbon dioxide	Annual Increase	metric tons	4.29	4.62	4.95	5.24	5.54

U.S. DEPARTMENT OF ENERGY

VOLUNTARY REPORTING of GREENHOUSE GASES

ENERGY INFORMATION ADMINISTRATION

Notes and Instructions for the

URBAN FORESTRY

CARBON SEQUESTRATION WORKBOOK

Version 8.0 February 9, 2006

BEGIN DATA ENTRY

1) This workbook is intended to assist in the calculations of carbon sequestration by individual ("open grown") trees planted at a "standard" age, defined as typical, nursery-raised trees, sold in a 15-gallon container or balled and burlapped. If you wish to calculate sequestration for trees planted at a non-standard age, please refer to the detailed instructions that accompany the paper version of this worksheet. The paper version is available on the Program's CD-ROM, on the Internet at **http://www.eia.doe.gov/pub/oiaf/1605/cdrom/pdf/sequester2001.pdf** or by contacting the Program's Communications Center at **1-800-803-5182** or **infoghg@eia.doe.gov**.

If you wish to calculate sequestration from forestry activities such as afforestation or reforestation where trees are planted over large, contiguous areas, please refer to the Guidelines which are available on the Program's home page at **http://www.eia.doe.gov/oiaf/1605/frntvrgg.html** or contact the Program's Communications Center for assistance.

2) This workbook estimates sequestration for the most common U.S. tree species, divided into the following 6 categories: fast, medium or slow growth hardwoods; fast, medium or slow growth conifers.

3) To use this workbook, enter the numbers of each type of tree planted in each year on the "Data Entry" sheet.

4) Sequestration is automatically calculated, and appears on the "Sequestration" sheet.

5) Report the sequestration quantities calculated (in short tons, pounds, or metric tons) for the data year(s) you are reporting, as follows:
a) for Form EIB-1605EZ, enter the "Annual Increase of CO2" figure into Column K, "Quantity"; or
b) for Form EIB-1605 (the Long Form), transfer the data to the appropriate year's column in Part III of Section 8.

6) You can also view the annual sequestration details on the sheets labeled with the given year.

7) If you have any questions or comments, please call **1-800-803-5182** or send an email to **infoghg@eia.doe.gov**.

URBAN FORESTRY CARBON SEQUESTRATION WORKSHEET

10-Sep-08

Enter Entity Name: Ag-Industrial Center

PRINT

Enter Data Year: 2010

Enter Number of Trees Planted:

Year	Number of Trees Planted						
	Hardwoods			Conifers			
	Fast	Medium	Slow	Fast	Medium	Slow	
2010		400					
2011							
2012							
2013							
2014							
2015							
2016							
2017							
2018							

Refrigerant Emissions

CFC Assumptions

Assumes that a typical 25 acre processing/cooling operation
will have
(3) 4,000-pound refrigeration tanks
(2) 1,000-pound refrigeration tanks

Ag-Industrial Center will have 5 such operations

Consequently, the Ag-Industrial Center will have 70,000 pounds of refrigerants for the 5 operations.

CFCs phased out by 2030 based on Montreal Protocol.

CFCs banned for Specific Plan area by Measure 2, Table 4.
Therefore, the unmitigated scenario assumes all 5 operations could potentially use CFCs.
The mitigated scenario assumes no use of CFCs, that 2 of the 5 operations would use HFCs, and 3 would use ammonia or other non-GWP refrigerants.

Refrigerant Calculations	Refrigerant Used with Global Warming Potential (pounds)	Leakage Rate	Leakage pounds/yr	CFCs/ HFC's Average GWP	Metric tons CO2e	Source:
1) Unmitigated: Assume as worst case that all 5 use CFCs	70000	24.50%	17150	7540	58,671	California Air Resources Board. 2009. [Page 26]
2) Mitigated Project: Assumes 3 of 5 (60%) operations use non refrigerants, such as NH3, that will have no or extremely low GWP and that 2 of 5 (40%) use HFCs in lieu of CFCs	28000	24.50%	6860	3710	11,547	(U.S. Green Building Council, 2007) [Page 220]
				Net	47,124	

Notes: Leakage rates assume average of Centralized (large) and cold storage (large) from page 26 of ARB, 2009.
Assumes that for Unmitigated that all five use CFCs.
Assumes that for Mitigated that 2 of five use HFCs and 3 of 5 use NH3 or other low GWP
Average of CFC and HFC GWP's listed on page 220 of US Green Building Council, 2007.

Water Use

(30% water use reduction)

	Existing - Farming	Proposed Use	Discharge - Industrial	Discharge - Sanitary	Mitigated Proposed Use	Mitigated Discharge
Acre-Feet/Year	1,386.00	3,152.00	2,409.00	271.00	3,070.70	2,598.70
gallons/acre-ft	325,851.40	325,851.40	325,851.40	325,851.40	325,851.40	325,851.40
Million gallons/year	451.63	1,027.08	784.98	88.31	1,000.59	846.79

Water use estimates based on (Yarne, J. 2009).

MW/year

Water supply	0.96	2.17			2.12	
Water treatment	0.05	0.11			0.11	
Water Distribution	0.57	1.31			1.27	
Wastewater Treatment	-		1.50	0.17	-	1.62
	1.58	3.59	1.50	0.17	3.50	1.62

CO2	0.58	1.31	0.55	0.06	1.28	0.59
CH4	0.00	0.00	0.00	0.00	0.00	0.00
N20	0.00	0.00	0.00	0.00	0.00	0.00
CO2e	0.58	1.31	0.55	0.06	1.28	0.59

Existing	0.58
Total Proposed	1.92
Total Proposed w/Mit	1.87

Greenhouse Gas Emission Factors	CO2	CH4	N2O
Electricity	804.54	0.0067	0.0037
Units	#/mwh	#/mwh	#/mwh

(Source: California Climate Action Registry, 2009)

Table ES-1 from Navigant, 2006.

Table ES-1. Recommended revised water-energy proxies

	Indoor Uses		Outdoor Uses	
	Northern California kWh/MG	Southern California kWh/MG	Northern California kWh/MG	Southern California kWh/MG
Water Supply and Conveyance	2,117	9,727	2,117	9,727
Water Treatment	111	111	111	111
Water Distribution	1,272	1,272	1,272	1,272
Wastewater Treatment	1,911	1,911	0	0
Regional Total	5,411	13,022	3,500	11,111

Appendix C - SALINAS AG-INDUSTRIAL CENTER
Onsite Solar Power Production Analysis
July 7, 2009

This document is an evaluation of the applicability and feasibility of utilizing onsite solar power to supply 15% of the *Center's* anticipated energy demand.

Anticipated Energy Demand: Based on the energy demand estimates in Appendix B of the "Salinas Ag-Industrial Center Greenhouse Gas Analysis" by Rimpo and Associates (Rimpo Report), dated June 5, 2009, the *Center's* total anticipated energy demands, with the *Center* Green Building Plan (*GBP*) measures in place, range from approximately 40,000,000 kilowatt hours per year (kW hrs per year) to 50,000,000 kW hrs per year.

Summary of Calculation Results: Tables 1 and 2 of the "Onsite Solar Power Production Analysis Calculations", page 2 of this document, show the anticipated energy demands for the project and the resulting possible costs and area required for installation. The scenarios listed are those included in the Rimpo Report. As can be seen in Table 2, supplying fifteen percent (15%) of the project's total estimated energy demand with an on-site facility, with the *Center* GBP in place results in the following anticipated range of requirements:

Production required for 15% of total demand..... 6,000,000 to 7,300,000 kWh /year

Required installation area .....7 to 25 acres

Installation Costs .....$61,000,000 to over $150,000,000

Installation Costs equivalent over lifetime..... $0.41 to $1.04 /kWh

The industries locating within the Specific Plan area will experience grid energy rates of approximately $0.10 per kWh. PV production costs are from 4 times to over 10 times these grid energy rates. With energy costs being one of the single, largest operating expenses for these industries, it is impossible for an industry to absorb an increase of 400% or more in one of its most major operating expenses. Such a magnitude of increase in operating costs will render locating within the *Center* infeasible for most major ag-industrial uses.

Technological Factors: Many facilities within the *Center* will be intensive energy users due to their processes such as rapid cooling of warm, raw produce from the field, the continued refrigeration of that produce, and in some cases the transformation of the produce into packaged goods. The utilization of a solar technology at this level of magnitude is not proven for these types of facilities. The very large energy demands that will be experienced by users within the *Center* are a key operating component in their success, and one of their highest single operating costs. Capacity, reliability and availability are not assured, and the failure of any one of these key elements would be catastrophic for a business dealing with perishable commodities within the *Center.*

Conclusions: The Specific Plan allows the installation of photovoltaic panels, solar water heaters, fuel cells, and other renewable energy sources on roofs and within other areas on the individual user sites within the *Center.* However, the magnitude of the anticipated energy demands combined with the high costs of installing and maintaining renewable energy facilities renders mandatory renewable energy generation infeasible for the success of the uses locating within the *Plan Area.* Power costs are one of the single, highest operating costs for these industries. If/when the purchase and installation costs of onsite solar facilities reduce in the future to the point at which they can become a viable source of power for these industries, the installation of the facilities will be allowed within the *Center.* However, the implementation of mandatory renewable energy generation within the *Center* would greatly limit the type of facility that could or would locate within the *Center,* and would jeopardize success of the *Center* for the City.

Pages 4 & 5 of this document list the technical sources utilized in this analysis, along with the major assumptions involved in the calculations.

SALINAS AG-INDUSTRIAL CENTER
Onsite Solar Power Production Analysis Calculations (JUNE 29, 2009)
TABLE 1. TOTAL ENERGY DEMAND FOR THE CENTER

Item	Natural Gas*			Electricity*		Total Energy Demand		Total Energy Demand	
	Total (Btu/yr)	Total Equiv. (kWh/yr) 1 kWh = 3412 Btu	15% of Total (kWh/yr)	Total (kWh/yr)	15% of Total (kWh/yr)	Total (kWh/yr)	15% of Total (kWh/yr)	Total (GWh/yr)	15% of Total (GWh/yr)
Scenario 1, w/o GBP:									
Natural Gas	44,220,900,000	12,959,180	1,943,877						
Electricity				51,322,480	7,698,372				
Total Power Consumption:						64,281,660	9,642,249	64.282	9.642
Scenario 1, w/GBP:									
Natural Gas	35,790,370,000	10,203,066	1,530,460						
Electricity				38,294,620	5,744,193				
Total Power Consumption:						48,497,686	7,274,653	48.498	7.275
Scenario 2, w/o GBP:									
Natural Gas	34,816,150,000	10,488,567	1,573,285						
Electricity				38,849,370	5,827,406				
Total Power Consumption:						49,337,937	7,400,691	49.338	7.401
Scenario 2, w/GBP:									
Natural Gas	30,460,160,000	8,926,519	1,338,978						
Electricity				30,672,920	4,600,938				
Total Power Consumption:						39,599,439	5,939,916	39.599	5.940

* Energy demand estimates are from Appendix B of the "Salinas Ag-Industrial Center Greenhouse Gas Analysis" by Rimpo and Associates, dated June 5, 2009.

TABLE 2
RESULTING COST AND AREA REQUIREMENTS

Scenario	GWH/Yr	Approx. Area Required (ac.)		Approx. Purchase Costs (mil. $$)	
		Low	High	Low	High
Scenario 1, w/o GBP	9.642	11.3	32.4	99.4	200.1
Scenario 1, w/ GBP	7.275	8.5	24.4	75.0	151.0
Scenario 2, w/o GBP	7.401	8.7	24.8	76.3	153.6
Scenario 2, w/ GBP	5.940	7.0	19.9	61.2	123.3

Conversion Facto

1 mBtu =	1,000,000
1 Btu =	1,055
1 kWh =	3,600,000
1 kWh =	3,412
1 GWh =	1,000,000
1 sq. m =	10.764
1 acre	43,560

Assumptions for Calculation of Ranges of Possible System Costs:

	Item	*Low*	*High*	*Units/Source*	
1.	PV cost Installed	10.66	14.66	$ / Peak W	Est. install costs: $4.56 / PW panels only (solarbuzz.com July 2009). Must add costs for: power inverter + wiring + hardware + labor Published: $8.1/PW - per LBNL Report, California total average installation costs
2.	Contingency 30%	13.86	19.06	Standard contingency percentage for this conceptual stage	
3.	Peak Sun Hours	5.35	4.40	Solar irradiance equivelant to the amount of solar radiation received by a surface exactly perpendicular to the sun, for one hour at sea level. Peak Sun Hours are interchangeable with kWh/m^2/day.	
4.	Ideal Annual Production	1.95	1.61	kWh / Peak W	[CEC Guide p. 9 Table 2]
5.	Production Tolerance Factor	0.98	0.95	Manufacture's specs allow +/- 5%	
6.	Temp. Reduct. Factor	0.89	0.89	[CEC Guide p. 8]	
7.	Dirt & Dust Reduct. Factor	0.93	0.93	[CEC Guide p. 8]	
8.	Mismatch & Wire Loss	0.95	0.95	[CEC Guide p. 8]	
9.	DC to AC Loss Factor	0.94	0.90	[CEC Guide p. 8-9]	
10.	Age Degradation Factor	0.95	0.85	Manufacturer Specs allow -20% in 20-25 year	
11.	Orientation Reduct. Factor	1.00	1.00	Assume panels are tilted and oriented optimally, therefore no reduction for this factor	
12.	Total Reduction Factor	0.69	0.57	Product of preceding reduction factors	
13.	Actual Annual Production	1.34	0.92	kWh / Peak W	
14.	Purchase Cost	10.31	20.75	$ / kWh/yr	
15.	Purchase Cost	10.31	20.75	mil. $ / GWh/yr	
16.	System Lifespan	25	20	years	Panel manufacturer's warranty lifespan (DC-AC converter unit lifespans are much less)
17.	Average PV Pwr Cost	0.41	1.04	$ / kWh	Does not account for the cost of the time value of money

Assumptions for Calculation of Ranges of System Area Requirements:

	Item	*Low*	*High*	*Unit/Source*
18.	Panel Power Density	10	5.0	Peak W / Sq. Ft., [CEC Guide P. 6]
19.	Access/Build Space	20%	50%	[CEC Guide P. 6]
20.	Net Pwr Density	8.3	3.3	Peak W / Sq. Ft.
21.	Pwr Production Density	19.5	8.0	kWh / Sq.Ft. yr
22.	Area Range	1.17	2.86	acres per gWh / yr

Salinas Ag-Industrial Center
On-site Solar Power Production Analysis
Production Cost and Area Calculation Backup

This list of sources and assumptions accompanies the Salinas Ag-Industrial Center Onsite Solar Energy Production Analysis, Tables 1 and 2.

Sources:

- "Guide to Photovoltaic (PV) System Design and Installation" published by the California Energy Commission (CEC Guide), dated June 14, 2001.
- "Tracking the Sun: The Installed Cost of Photovoltaics in the U.S. from 1998 -2007" published by the Environmental Energy Technologies Division of Lawrence Berkeley Nation Laboratory (LBNL Report), dated February 27, 2009.
- http://www.solarexpert.com/grid-tie/system-performance-factors.html
- http://www.homepower.com/article/?file=HP118_pg12_AskTheExperts_1

Technical Assumptions:

Energy Production

Peak Sun Hours ---------- See Page 4 of 4
Ideal Annual Production Results comparable with:---------- Table 2 of the CEC Guide, page 9
"Dirt and dust" reduction factor approximated at 0.93 ---------- CEC Guide, page 8
Temperature reduction factor of 0.89 ---------- CEC Guide, page 8
Wiring losses and panel mismatch combined reduction factor of 0.95---------- CEC Guide, page 8
DC to AC conversion efficiencies: 0.90 to 0.94, ----------CEC Guide, pages 8 & 9
Manufacturer warranties at between 20 and 25 years ---------- www.homepower .com
Production Tolerance of +/- 5%---------- Manufacturer specifications
Panel Degradation after 20-25 years of -20%. ---------- Manufacturer specifications

Installation Density (Area Requirements)

Installation density: 5 to 10 peak watts per square foot ---------- CEC Guide, page 6
Access/build space required: 20% to 50%---------- CEC Guide, page 6

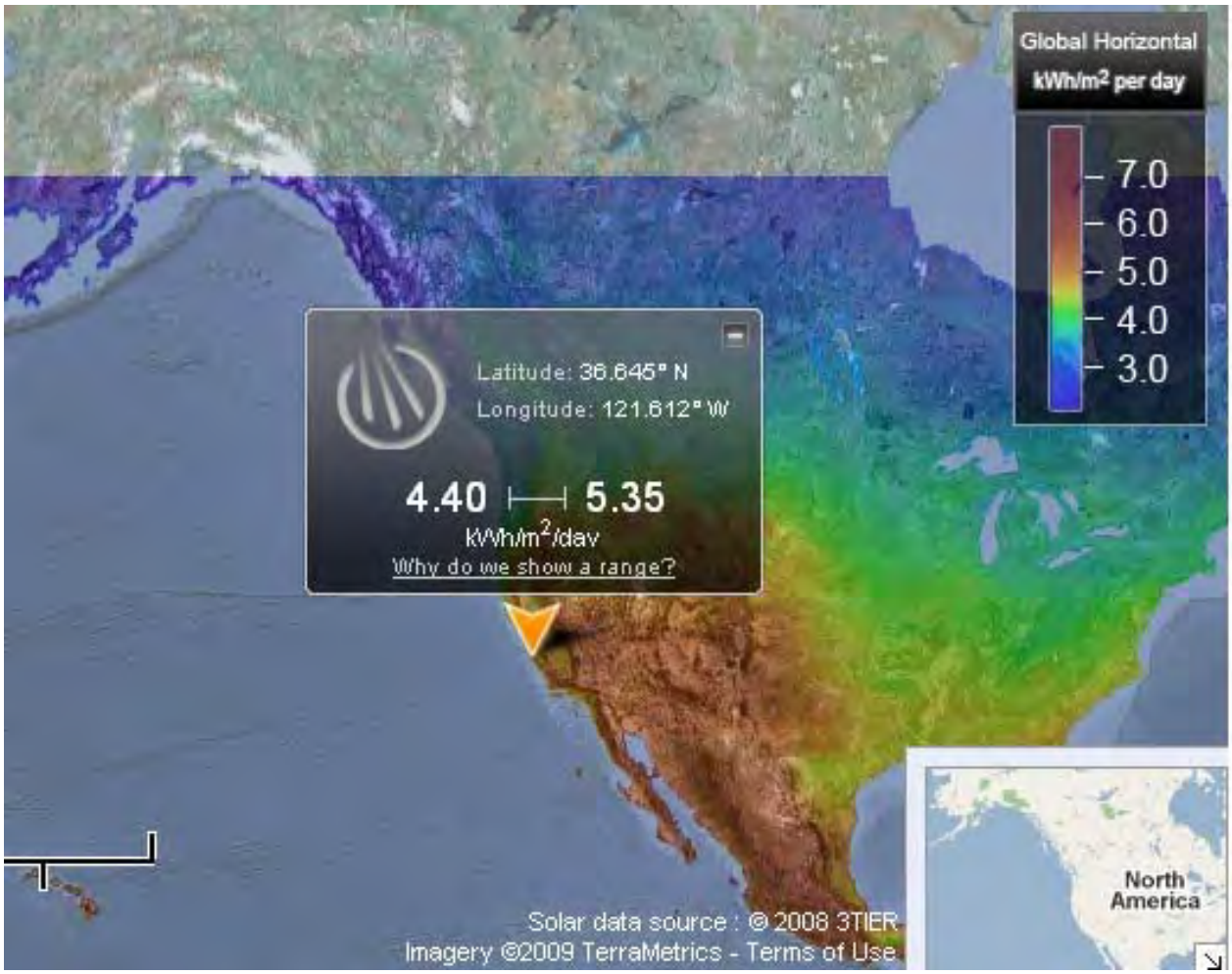
Other

A reduction factor for panel azimuth orientation and vertical tilt is shown in the list of assumptions, however it is set to 1.0 (no reduction), assuming that the panels are oriented and tilted optimally.

The access/build space high end range of 50% is reflective of the fact that installation would be on a property-by-property basis, and thus would not be the optimal spacing of a Solar Farm layout. Additionally, roof top installations will not be able to achieve optimal layout due to other large equipment on the roof and other access needs.

Peak Sun Hours: A commonly used term is "**peak sun hours**" and is defined as the equivalent number of hours per day, with solar irradiance equaling 1,000 W/m^2, which gives the same energy received from sunrise to sundown. This term is interchangeable with kWh / m^2 /day. One sun hour is equivalent to the amount of solar radiation received by a surface exactly perpendicular to the sun, for one hour, at sea level. One peak sun hour equals kWh / m^2 /day.

PEAK SUN HOURS



(Source: www.3tier.com)

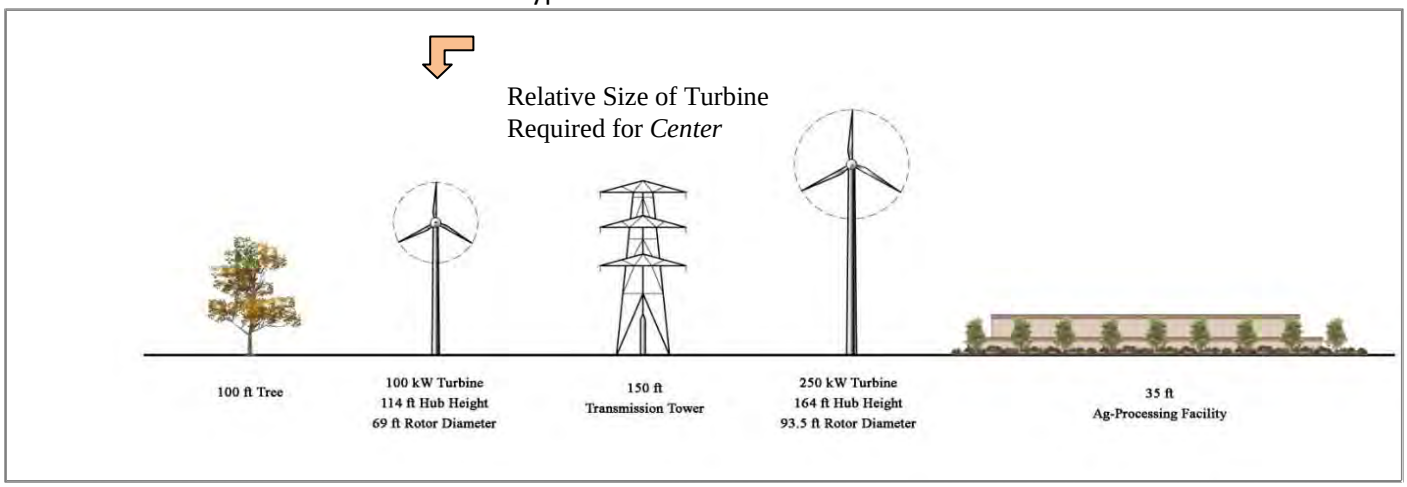
Appendix D. SALINAS AG-INDUSTRIAL CENTER
Onsite Wind Power Production Analysis Calculations

This document is an evaluation of the applicability and feasibility of utilizing on-site wind power generation to supply 15% of the *Center's* anticipated energy demand.

Anticipated Energy Demand: Based on the energy demand estimates in Appendix B of the "Salinas Ag-Industrial Center Greenhouse Gas Analysis" by Rimpo and Associates (Rimpo Report), dated June 2009, the *Center's* total anticipated energy demands, with the *Center* Green Building Plan (*GBP*) measures in place, range from approximately 40,000,000 kilowatt hours per year (kW hrs per year) to 50,000,000 kW hrs per year. Please see Table 1 on page 3.

Technological Factors: While installation and maintenance costs are a concern, the technological and social issues involved in on-site wind generation are the key limiting factors. Wind power generation is not feasible for the *Center,* based on the following:

- The wind conditions in Salinas are not favorable for dependable wind energy generation, especially of the magnitude required for the *Center ("poor" in the valley areas, per www.energyatlas.org). Center* tenants will likely be intensive energy users. The very large energy demands that will be experienced by users within the *Center* are a key operating component in their success, and one of their highest single operating costs. Capacity, reliability and availability are not assured, and the failure of any one of these key elements would be catastrophic for a business dealing with perishable commodities within the *Center.*
- Due to the large energy requirements of the *Center*, supplying just 15% of the energy would require at least 49 and up to over 120 industrial-scale wind turbines when wind conditions are consistent and favorable. These turbines are typically 120' in height or greater, and the diameter of the rotors is approximately 70' or greater. The following exhibit shows the size relative to common structure types:



- Multiple turbines of this size interfere with each other, and reduce the power generation

potential for the site. A wind turbine will always cast a wind shade in the downwind direction. This phenomenon, known as the Wake Effect, creates a long trail of wind which is turbulent and slowed down, when compared to the wind arriving in front of the turbine.

- Many adverse environmental impacts are associated with installing such a facility in an urban area, such as visual, noise, vibration, airport proximity and endangering condors (HT Harvey Nov., 2007) and other birds.
- The number and concentration of wind generation facilities required to serve the *Center* is not suited for urban areas. The (minimum) forty-nine 100 kW turbines described above, when grouped together, would require at least 100 acres to accommodate the recommended turbine spacing. This concentration of turbines is generally found in wind farms on mountain ridges, etc.

TABLE 1. TOTAL ENERGY DEMAND FOR THE CENTER

Item	Natural Gas*			Electricity*		Total Energy Demand		Total Energy Demand	
	Total (Btu/yr)	Total Equiv. (kWh/yr) 1 kWh = 3412 Btu	15% of Total (kWh/yr)	Total (kWh/yr)	15% of Total (kWh/yr)	Total (kWh/yr)	15% of Total (kWh/yr)	Total (GWh/yr)	15% of Total (GWh/yr)
Scenario 1, w/o GBP:									
Natural Gas	44,220,900,000	12,959,180	1,943,877						
Electricity				51,322,480	7,698,372				
Total Power Consumption:						64,281,660	9,642,249	64.282	9.642
Scenario 1, w/GBP:									
Natural Gas	35,790,370,000	10,203,066	1,530,460						
Electricity				38,294,620	5,744,193				
Total Power Consumption:						48,497,686	7,274,653	48.498	7.275
Scenario 2, w/o GBP:									
Natural Gas	34,816,150,000	10,488,567	1,573,285						
Electricity				38,849,370	5,827,406				
Total Power Consumption:						49,337,937	7,400,691	49.338	7.401
Scenario 2, w/GBP:									
Natural Gas	30,460,160,000	8,926,519	1,338,978						
Electricity				30,672,920	4,600,938				
Total Power Consumption:						39,599,439	5,939,916	39.599	5.940

* Energy demand estimates are from Appendix B of the "Salinas Ag-Industrial Center Greenhouse Gas Analysis" by Rimpo and Associates, dated June 5, 2009

TABLE 2

RESULTING COST AND AREA REQUIREMENTS

Scenario	GWH/Yr	Approx. Number of 100 kW Wind Turbines		Approx. Purchase Costs (mil. $$)	
		Low	High	Low	High
Scenario 1, w/o GBP	9.642	80	171	23,902,715	51,168,362
Scenario 1, w/ GBP	7.275	60	129	18,033,547	38,604,279
Scenario 2, w/o GBP	7.401	61	131	18,345,989	39,273,120
Scenario 2, w/ GBP	5.940	49	105	14,724,792	31,521,252

Conversion Factors:

1 mBtu =	1,000,000	Btu
1 Btu =	1,055	joules
1 kWh =	3,600,000	joules
1 kWh =	3,412	Btu
1 GWh =	1,000,000	kWh
1 sq. m =	10.764	sq. ft
1 acre	43,560	sq. ft

Assumptions for Calculation of Ranges of Possible System Costs:

Item	*Low*	*High*	*Units/Source*
1. Turbine Cost	$300,000	$300,000	$/100 kW turbine
2. Average Wind Speed (V)	12.5	9.8	mph, over a 24-hour period
3. Rotor Diameter (D)	69	69	Feet
4. Annual Energy Output (AEO), gross	123,488	59,508	AEO = 0.01328 D^2 V^3 (kWh/year)
5. Wind Park Effect	0.98	0.95	Efficiency resulting from mulitple turbines
6. Annual Energy Output (AEO), net	121,019	56,532	AEO = 0.01328 D^2 V^3 (kWh/year)

Sources:

"Small Wind Electric Systems: A U.S. User's Guide" published by the U.S. Department of Energy http://www.nrel.gov/docs/fy07osti/42005.pdf

http://www.windpoweringamerica.gov/

http://www.energy.ca.gov/maps/wind.html

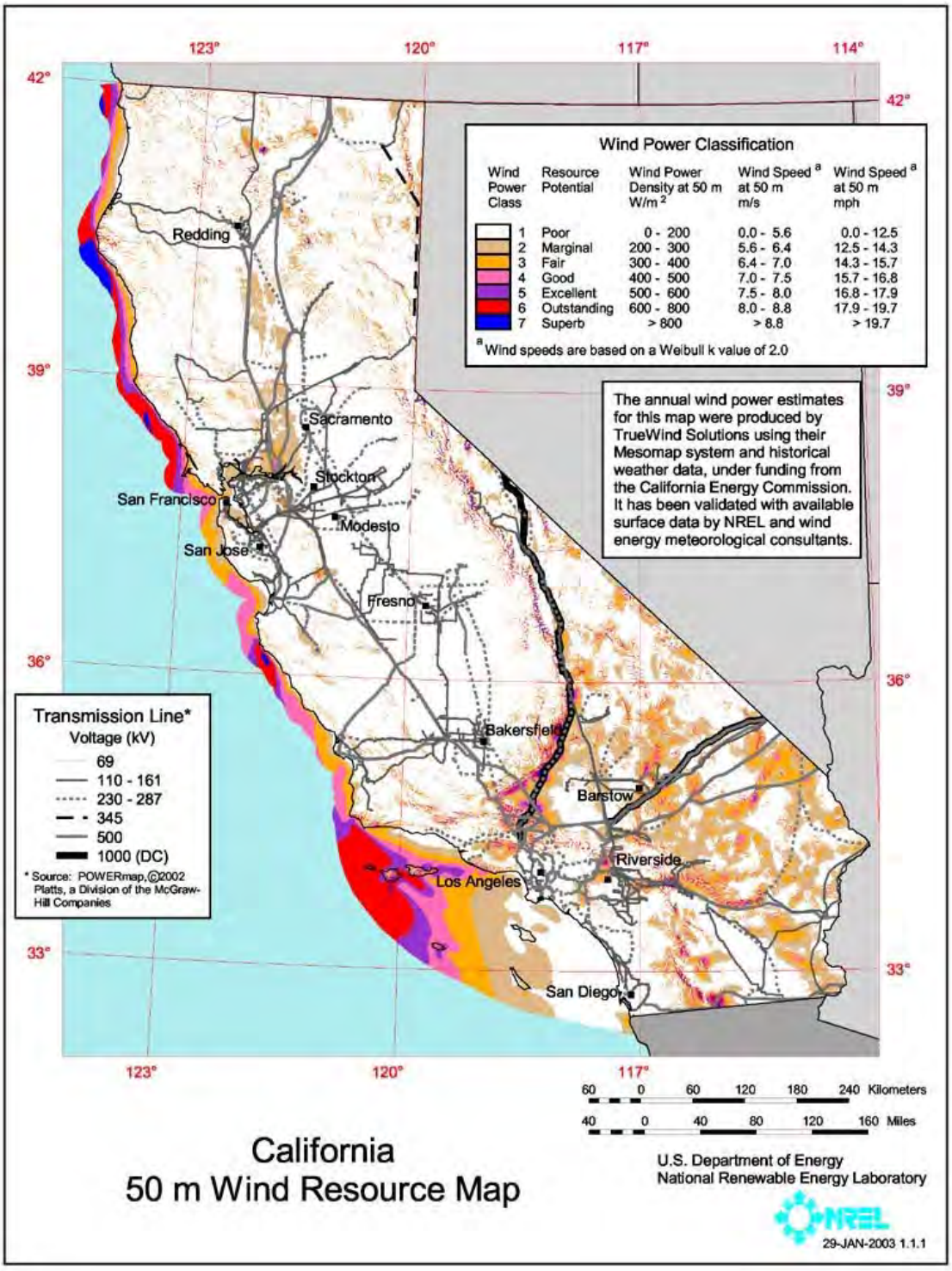
http://www.utilitywarehouse.com/info1/windturb

ineESI-545-100kw.htm

http://www.energyatlas.org

http://www.windpower.org/EN/tour/wres/wake.htm

PRESENCE AND MOVEMENTS OF CALIFORNIA CONDORS NEAR PROPOSED WIND TURBINES - FINAL REPORT PREPAREED FOR HT HARVEY AND ASSOCIATES Prepared by Nellie Thorngate of the Ventana Wildlife Society, November 15, 2007



Source: http://www.windpoweringamerica.gov/images/windmaps/ca_50m_800.jpg

Appendix E. SALINAS AG-INDUSTRIAL CENTER
Onsite Use of High S.R.I. Paving Material Analysis

This document is an evaluation of the applicability and feasibility of utilizing concrete or like paving materials with a high reflectance index (S.R.I) in place of asphalt for the *Center's* onsite pavement surfaces.

Anticipated Pavement Area: The facilities planned for the Center will require large amounts of pavement surface in the form of loading docks, staging areas, and parking lots. The "Preliminary Stormwater Control Plan" by Ruggeri-Jensen-Azar & Associates (RJA), dated June 2009, estimates that over 87% of the plan area could be covered by impervious surfaces. Based on the land use and floor area ratio assumptions in Chapter 3 of the "Draft Salinas Ag-Industrial Center Specific Plan" (Specific Plan) by RJA, dated June 2009, the Center's total anticipated onsite pavement area is between 88 and 108 acres.

Summary of Calculation Results: Tables 1 and 2 of the "Onsite Use of High S.R.I. Paving Material Analysis Calculations", page 2 of this document, show the anticipated pavement areas for the project and the resulting possible material costs. The scenarios listed are based on the probable and maximum land use distribution assumptions in the Specific Plan. As shown in Table 2, using concrete pavement in place of traditional asphalt pavement results in the following material cost increase:

Asphalt Pavement Costs.....$7,000,000 to $9,000,000

Concrete Pavement Costs .....$17,000,000 to over $21,000,000

Increase in Cost .....$10,000,000 to over $12,000,000

Page 3 of this document lists the technical sources utilized in this analysis, along with the major assumptions involved in the calculations.

Conclusions: The Specific Plan allows the installation of concrete and other alternative forms of pavement with high S.R.I. values within the individual user sites of the *Center.* Light-colored paving materials with a published Solar Reflective Index (SRI) of at least 29 at the time of construction shall be used for on-site sidewalks, patios, and courtyards within the Plan Area. However, this requirement does not apply to paving surfaces that are subject to operational and truck traffic; the magnitude of the pavement surface necessary for the anticipated land uses in conjunction with the cost increase over traditional asphalt pavement (more than double), makes mandatory use of concrete pavement, or like materials, infeasible within the *Plan Area.* The implementation of mandatory use of high S.R.I. type pavement materials in the vehicular areas would result in a financial infeasibility for potential future users of the *Center,* and would likely limit the success of the *Center* for the City.

SALINAS AG-INDUSTRIAL CENTER

Onsite Use of High S.R.I Paving Material Analysis Calculations

June 23, 2009

TABLE 1

PAVEMENT SECTION COST CALCULATION

Item	Section Thickness (in.)*	Section Volume (cu. yd./sq. yd.)	Section Cost ($/sq. ft.)
Asphalt Section Cost Calculation:	(T.I. = 10)		
Asphalt Pavement	6	0.17	0.69
Aggregate Base	24	0.67	1.19
Total	30	0.83	1.87
Concrete Section Cost Calculation:			
Concrete Pavement	8	0.22	3.70
Aggregate Base	16	0.44	0.79
Total	24	0.67	4.49

* Asphalt pavement section based on "Preliminary Soil Engineering Investigation and Asphalt Pavement Design" report by Landset Engineers, Inc. dated April 2008

Conversion Factors:

1 yd. =	36	in.
1 sq. yd. =	9	sq. ft.
1 acre =	43,560	sq. ft.

TABLE 2

TOTAL PAVEMENT AREA AND CONSTRUCTION COST FOR THE CENTER

Item	Total Land Use Area (acre)*	Total Building Area (acre)	Total Pervious Area (acre)	Total Pavement (area)	Total Pavement (sq. ft.)	Asphalt Cost ($$)	Concrete Cost ($$)	Cost Difference ($$)
Scenario 1, Probable Land Use:								
Major Ag Processing	90	27.0	11.4	51.6	2,246,389			
Minor Ag Processing	145	72.5	18.4	54.1	2,355,943			
Total Area	235	99.50	29.8	105.7	4,602,332	8,608,065	20,682,084	12,074,019
Scenario 2, Max Major Ag Processing:								
Major Ag Processing	101	30.3	12.8	57.9	2,520,948			
Minor Ag Processing	134	67.0	17.0	50.0	2,177,216			
Total Area	235	97.30	29.8	107.9	4,698,164	8,787,306	21,112,736	12,325,430
Scenario 3, Max Minor Ag Processing:								
Major Ag Processing	-	-	-	-	-			
Minor Ag Processing	235	117.5	29.8	87.7	3,818,252			
Total Area	235	117.50	29.8	87.7	3,818,252	7,141,545	17,158,564	10,017,019

* Land use area assumptions for scenarios based on Table 3-2 of the "Draft Salinas Ag-Industrial Center Specific Plan" by RJA, dated June 2009.

Assumptions for Calculation of Ranges of Possible System Costs:

	Item	*Value*	*Units/Source*	
1.	Total Site Area	257	Acres	[Specfic Plan, Table 3-2]
2.	Street R/W Area	22	Acres	[Specfic Plan, Table 3-2]
3.	F.A.R Major Ag	0.3		[Specfic Plan, Table 3-3]
4.	F.A.R Minor Ag	0.5		[Specfic Plan, Table 3-3]
5.	% Pervious Area	12.7%	% of total area	[SWCP, Figure 5]
6.	Asphalt Pavement Cost	37	$/cu. yd.	[Granite Rock Construction]
7.	Concrete Pavement Cost	150	$/cu. yd.	[Caltrans]
8.	Aggregate Base Cost	16	$/cu. yd.	[Granite Rock Construction]

Salinas Ag-Industrial Center
Onsite Use of High S.R.I. Paving Material Analysis
Pavement Area and Cost Calculation Backup

This list of sources and assumptions accompanies the Salinas Ag-Industrial Center Onsite Use of High S.R.I. Paving Material Analysis Calculations, Tables 1 and 2.

Sources:

- "Draft Salinas Ag-Industrial Center Specific Plan" published by Ruggeri-Jensen-Azar & Associates (Specific Plan), dated June 2009.
- "Preliminary Stormwater Control Plan for the Salinas Ag-Industrial Center" published by Ruggeri-Jensen-Azar & Associates (SWCP), dated June 2009.
- "Preliminary Soil Engineering Investigation and Asphalt Pavement Design for Salinas Ag-Industrial Business Park" published by Landset Engineers, Inc. (Soils Report), dated April 2008.
- Construction Material Unit Costs provided by Granite Rock Construction on May 15, 2009.
- "2008 Contract Cost Data" published by the State of California Department of Transportation (Caltrans).

Technical Assumptions:

Land Use

Land Use Distributions ---------- Table 3-2 of the Specific Plan

Floor Area Ratios ---------- Table 3-3 of the Specific Plan

Percent pervious/landscaped area of 12.7% ----------Figure 5 of the SWCP

Pavement Assumptions

Asphalt pavement section of 6"/24" (T.I. = 10) ---------- Soils Report, page 17

*A Traffic Index (T.I.) of 10 was assumed based on the high truck traffic volume anticipated for the site. Equivalent concrete pavement section of 8"/16" assumed based on engineering experience.

Material Cost

Asphalt Cost of $37 per cubic yard placed ----------Granite Rock Construction

Concrete Cost of $150 per cubic yard placed ----------Caltrans

Aggregate Base Cost of $16 per cubic yard placed----------Granite Rock Construction

GENERAL PLAN CLIMATE CHANGE RELATED GOALS AND POLICIES

LAND USE ELEMENT

Issues, Goals and Policies

Policy LU-1.1: Achieve a balance of land uses to provide for a range of housing, jobs, libraries, and educational and recreational facilities that allow residents to live, work, shop, learn, and play in the community.

Policy LU-1.4: Create and preserve distinct, identifiable neighborhoods that have traditional neighborhood development (TND) characteristics. Specifically, development should:

- Connect in as many locations as possible to adjacent development, arterial streets, and thoroughfares;
- Provide a balanced mix of housing, workplaces, shopping, recreational opportunities, and institutional uses, including mixed-use structures (combined residential and non-residential uses), that help to reduce vehicular trips;
- Provide natural amenities that are fronted by thoroughfares or public spaces, and not privatized behind backyards;
- Commercial buildings should directly front on the sidewalk, with ample landscaping as a buffer between the building and sidewalk, and parking lots are to be located behind the buildings;

- Allow flexible parking requirements and arrangements within neighborhood activity centers to minimize the impact of the automobile and foster a pedestrian oriented streetscape;
- Provide second stories on commercial buildings to provide for other uses and encourage residential use;
- Allow small ancillary dwelling units in the rear yard for residential areas; and
- Decrease the front yard setbacks moving from the neighborhood edge to neighborhood center.

Policy LU-2.1: Minimize disruption of agriculture by maintaining a compact city form and directing urban expansion to the North and East, away from the most productive agricultural land.

Policy LU-2.3: Encourage clustering of development on sites within the Future Growth Area to minimize impacts on agricultural and open space resources.

Policy LU-2.4: Utilize well-designed in-fill development, and selectively increase density within Focused Growth Areas to maintain compact city form.

Policy LU-2.7: Encourage existing commercial and professional office developments to redevelop and reconfigure uses to incorporate new housing opportunities.

Policy LU-3.7: Revitalize the existing commercial and industrial areas within the City including: the Central City and Sunset Avenue Redevelopment Project Areas; the commercial areas along North and Sough Main Streets, West Market and Abbott Street.

Policy LU-6.3: Participate in and support regional programs and projects that target the improvement and conservation of the region's groundwater and surface water supply.

Policy LU-6.4: Actively promote water conservation by City residents, businesses and surrounding agricultural producers.

Land Use Plan

The following Land Use Plan provides for growth in the Future Growth Area outside the city limits, and within the Focused Growth Areas within the urbanized city limits. New growth outside the city will occur on land that is currently under agricultural production. Future Growth

Area is the area outside the city limits that is designated for urban uses on Figure LU-1. To minimize the amount of agricultural land lost to urban development and create a livable community, *New Urbanism* principles were used to design a land use plan that is compact and pedestrian-friendly, with a mixture of higher density uses surrounding activity centers/neighborhood focal points. Higher density residential uses surround retail, recreational, and governmental uses in the Future Growth Area[1], and all of these core activity centers are connected with pedestrian, bicycle, and transit routes to help reduce the number of vehicle trips generated by the new development.

The Focused Growth Areas (shown in Figure LU-2) are existing urbanized areas where additional growth and/or redevelopment and revitalization would be appropriate and provide benefits to the community. By selectively increasing density of development in a manner compatible with the surrounding neighborhoods, the pressure to develop agricultural lands is also reduced.

Balance of Land Uses

The variety of land uses within Salinas affects the important balance between the generation of public revenues and the provision of public services and facilities. Achieving and maintaining a balance of land uses can ensure fiscal stability and also create a desirable community in which people can work, shop, reside, and recreate. As discussed later in this element, implementation of the Land Use Plan will result in positive net revenue for Salinas.

Implementation of the Land Use Plan will also assist in creating a balance between jobs and housing units within the City. A balance between jobs and housing allows people to live and work within the same community, and often within the same neighborhood. This results in a reduction of traffic, thereby reducing the level of air pollution and improving the quality of life for the community.

Land Use Classification System

The Land Use Map also includes a Mixed Use land use category. This category is extremely important for achieving the Salinas of the future. The Mixed Use category is designated in areas where a vibrant combination of residential and non-residential uses is desired, either to create new *New Urbanism* activity centers in the Future Growth Area, or to help revitalize or redevelop

[1] Prior to approving development proposals within the Future Growth Area, developer will need to prepare Specific Plans.

the Focused Growth Areas. These mixed use areas will allow City residents to utilize community connections for walking, bicycling, or taking transit to work, school, shopping, medical, and recreation.

Land Use Designations

Other Land Use Designations

Mixed Use: The Mixed Use designation allows for development including a mixture of retail, office and residential uses in the same building, on the same parcel or in the same area. The intent of this designation is to create activity centers with pedestrian-oriented uses in certain portions of the City. The maximum intensity/density of development is 1.0 + 10 dwelling units per acre (for a total maximum allowable floor area ratio of 1.25) throughout the City and a maximum intensity/density of development of 4.0 + 80 dwelling units per acre (for a total maximum allowable floor area ratio of 6.0) for projects within the Central City. For retail or office development without residential, the maximum intensity of development is a 3.0 FAR. For residential without retail or office, the maximum allowable density is 60 units per acre in the Central City. An FAR of 8.0 may be allowed for receiving properties in the core of the downtown commercial area under a transfer of development rights (TDR) program that maybe adopted by the City.

Management of Future Growth

Over the last decade, Salinas and the Monterey region have grown at a significant rate. Factors affecting growth have changed during that time, with pressure for affordable housing now coming all the way from the Silicon Valley to the north. Understanding that growth will occur in the future, directing how and where growth will occur is important, as it will have a great impact on the quality of life and economic well-being of the community as a while. To prepare for population increases in the next 20 years, Salinas will direct growth within the Future Growth Area and Focused Growth Areas, as described below, to create a community that is compact and pedestrian and transit-oriented, avoids removing from production more valuable agricultural land than necessary, and is able to meet the public service and infrastructure needs of existing and future residents.

Reuse/Revitalization of Existing Areas

In addition to the Future Growth Area, growth in Salinas will occur in the Focused Growth Area. These areas are located within the urbanized City limits, as shown in Figure LU-2. These areas of existing development would benefit from redevelopment or revitalization, change of land uses, and/or the incorporation of mixed use residential uses. By encouraging future growth in these areas, conversion of agricultural lands will be reduced and the quality of life within the community improved.

Land Use Implementation Program

LU-7 **City-Centered Growth:** To encourage City-Centered Growth, give priority to redevelopment and infill projects that reduce development pressure on agricultural lands. Establish an incentive program to promote these projects, such as priority permit processing and density bonuses for such developments.

COMMUNITY DESIGN ELEMENT

Issues, Goals and Policies

Policy CD-3.1: Create and preserve distinct, identifiable neighborhoods that have traditional neighborhood development (TND) characteristics. Specifically, each neighborhood should have the following characteristics:

- An approximately 5-minute walk from perimeter to center;
- Housing densities should increase from perimeter to center (i.e., neighborhoods should be more densely populated at the center);
- The neighborhood center should be the location of retail space, office space, and upper story residential above commercial and office space;
- A civic or public space such as a plaza or park should be at the neighborhood center;
- Small parks should be distributed throughout the neighborhood;
- Schools should lie within the neighborhood and be easily accessible and within walking distance;
- When not adjacent to agricultural operations, which may require a variety of buffering techniques, the neighborhood edge should be bordered by either a natural corridor or the edge of an adjacent neighborhood across a pedestrian-friendly boulevard; and
- Front yard setbacks should decrease from neighborhood edge to neighborhood center.

Policy CD-3.3: Maintain a compact Central City core that minimizes distances between most residential units, offices, stores and restaurants.

Policy CD-3.4: Actively encourage mixed-use development in order to provide a greater spectrum of housing near businesses, alternative modes of transportation and other activity areas.

Policy CD-3.5: Promote high-density residential development and mixed-use (commercial, office, and residential together) in the Central City to the extent consistent with the area's architectural and historical character.

Policy CD-3.6: Provide and maintain a pedestrian-friendly atmosphere by encouraging "pedestrian zones" with increased landscaping, use of traffic-calming techniques on local streets, adequate separation from automobile traffic and the inclusion of amenities such as lighted crosswalks and increased lighting along sidewalks.

Policy CD-3.7: Provide sufficient, conveniently located public parking in the Central City to support a pedestrian business district.

Policy CD-3.8: Promote the use of alternative modes of transportation, including bus, rail, bicycling and walking.

Policy CD-3.9: Group neighborhood shopping centers, schools, civic and recreational uses, parks, and public transit opportunities together in new neighborhoods to create an activity center focal point for the neighborhoods they serve.

Community Design Implementation Program

CD-11: **Smart Growth Principals:** Using the Smart Growth Network's Getting to Smart Growth: 100 Policies for Implementation (ICMA, 2002) or other similar policy manual, to perform an "audit" of the City's Zoning and Subdivision Ordinances to identify potential impediments to the development of smart growth and traditional neighborhood development projects. Revise, adopt, and implement new standards and procedures as necessary to encourage smart growth and traditional neighborhood development in Salinas.

CD-12: **Mixed Uses:** Actively encourage the development and maintenance of mixed uses, particularly in the Mixed Use district, but also in the Arterial Frontage, Retail, Mixed Office/Residential, Commercial Office, and Downtown Commercial districts by maintaining a list of sites zoned for these uses and making the list available for developers. Establish developer incentives to encourage mixed use development in these districts.

CD-13: **Pedestrian-Friendly Improvements:** Consider, plan for, and fund sidewalk, pedestrian path, crosswalk, lighting and landscaping improvements within the Capital Improvement Plan.

CONSERVATION/OPEN SPACE ELEMENT

Issues, Goals and Policies

Policy COS-2: Encourage the conservation of water resources.

Policy COS-3: Identify, preserve and protect the significant agricultural resources within and surrounding Salinas, while minimizing conflicts between agricultural and urban uses.

Policy COS-3.1: Maintain a compact urban form, locating growth areas to minimize the loss of important agricultural resources while allowing for the reasonable expansion of the City to address projected population growth.

Policy COS-6: Improve air quality through proper planning for land use, transportation and energy use.

Policy COS-6.4: Support alternative modes of transportation, such as walking, biking and public transit, and develop bike- and pedestrian-friendly neighborhoods to reduce emissions associated with automobile use.

Policy COS-7.11: Develop and maintain an integrated system of open-space corridors and trails along utility easements, power-transmission-line rights-of-way, the reclamation ditch, stream banks, drainage-ways, slopes, and other natural features.

Goal COS-8: Encourage energy conservation.

Policy COS-8.1: Enforce State Title 24 building construction requirements.

Policy COS-8.2: Apply standards that promote energy conservation in new and existing development.

Policy COS-8.3: Work with energy suppliers and distributors to implement energy conservation programs and help inform the public of these programs.

Policy COS-8.4: Participate in programs that promote energy conservation.

Policy COS-8.5: Encourage land use arrangements and densities that facilitate the use of energy efficient public transit.

Policy COS-8.6: Encourage the creation and retention of neighborhood-level services (e.g., family medical offices, dry cleaners, grocery stores, drug stores) throughout the City in order to reduce energy consumption through automobile use.

CIRCULATION ELEMENT

Issues, Goals and Policies

Policy C-1.1: Create and preserve distinct, identifiable neighborhoods that have traditional neighborhood development (TND) characteristics and corresponding circulation systems. Specifically, the street network should have the following characteristics:

- Individual blocks should average less than 600 feet in length and less the 1,800 feet in perimeter;
- Streets should be organized in a comprehensive hierarchical network that manifests the structure of the neighborhood;
- Cul-de-sacs should be avoided unless natural conditions demand them;
- The street network should be interconnected; and
- Transit access, passenger safety, and transit facilities should be included in the street network design.

Policy C-1.9: Use traffic calming methods within residential areas where necessary to create a pedestrian-friendly circulation system.

Policy C-1.10: Encourage car-pooling, at government offices, business, schools, and other facilities, to reduce the number of vehicles using the roadway system.

Policy C-2.1: Urge a countywide approach to Transportation Demand Management (TDM) and Transportation Systems Management (TSM) as the best way to reduce peak-hour vehicle trips and congestion at major employment centers.

Policy C-2.6: Promote a regional jobs-housing balance to reduce vehicle miles traveled and congestion on the regional circulation system.

Policy C-2.7: Support continued maintenance and expanded use of the City's Intermodal Transportation Center.

Goal C-3: Promote an efficient public transportation network.

Policy C-3.1: Support Monterey-Salinas Transit initiatives to provide adequate and improved (i.e. more frequent availability and use of Intelligent Transportation System measures where appropriate) public transportation service.

Policy C-3.2: Design development and reuse/revitalization projects to be transit-oriented to promote the use of alternative modes of transit and support higher levels of transit service.

Policy C-3.3: Support the extension of commuter rail to Salinas to allow for alternatives to automobile use.

Policy C-3.4: Support public transportation that is "bike" friendly, such as buses with bicycle racks and reduced fares for bicycle riders and provision of bicycle racks at public transportation stations.

Goal C-4: Provide an extensive, safe public bicycle network that provides on-street as well as off-street facilities.

Policy C-4.1: Continue to develop a network of on- and off-street bicycle routes to encourage and facilitate the use of bicycles for commute, recreational, and other trips. Eliminate gaps and provide connections between existing bicycle routes.

Policy C-4.2: Increase availability of facilities, such as bike racks and well-maintained and well-lit bike lanes that promote bicycling.

Policy C-4.3: Encourage existing businesses and require new construction to provide on-premise facilities to aid bicycle commuters, such as on-site safe bicycle parking.

Policy C-4.4: Improve the biking environment by providing safe and attractive cut-throughs, bike lanes, and bike paths for both recreational and commuting purposes.

Policy C-4.5: Where possible, ensure that roadway improvements (i.e., widening and re-striping), as well as new overpasses and underpasses, allow for safe on-street bike lanes or adequate right-lane space for bicycles.

Policy C-4.6: Ensure that all pedestrian and bicycle route improvements meet the Americans with Disabilities Act (ADA) standards for accessibility, and Caltrans standards for design.

Policy C-4.7: Encourage parking lot designs that provide for safe and secure bicycle parking.

Goal C-5: Provide safe routes to school, work, shopping, and recreation for pedestrians.

Policy C-5.1: Increase availability of safe and well-maintained sidewalks in all areas of the City.

Policy C-5.2: Encourage all new bus stops and changes in existing bus stops to take pedestrian access into consideration.

Policy C-5.3: Ensure that all pedestrian route improvements meet with ADA standards for accessibility.

Policy C-5.4: Encourage parking lot designs that promote pedestrian access and safety.

Policy C-5.5: Improve the walking environment by providing safe and attractive sidewalks, cut-throughs, and walkways, for both recreational and commuting purposes.

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LANDSET ENGINEERS, INC.

ENGINEERING - LAND PLANNING
SURVEYING - ENVIRONMENTAL CONSULTING

PRELIMINARY SOIL ENGINEERING INVESTIGATION AND ASPHALT PAVEMENT DESIGN FOR SALINAS AG-INDUSTRIAL BUSINESS PARK MONTEREY COUNTY, CALIFORNIA

PROJECT LSS-0620-01

Prepared for

THE UNI-KOOL PARTNERS
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8055 CAMINO ARROYO
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Prepared by

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APRIL 2008

LANDSET ENGINEERS, INC.
ENGINEERING - LAND PLANNING
SURVEYING - ENVIRONMENTAL CONSULTING

April 30, 2008 File No.: LSS-0620-01

Mr. Steve Kovacich
The Uni-Kool Partners
c/o Ruggeri-Jensen-Azar
8055 Camino Arroyo
Gilroy, California 95020

Attention: Mr. Ross Doyle

Subject: **PRELIMINARY SOIL ENGINEERING INVESTIGATION AND ASPHALT PAVEMENT DESIGN**
Salinas Ag-Industrial Business Park
Abbott Street between Harkins and Harris Roads
Salinas Area of Monterey County, California

Dear Mr. Kovacich:

In accordance with your authorization, Landset Engineers, Inc. has completed a preliminary soil engineering investigation and asphalt pavement design for a proposed 250-acre regional agricultural business park located on the southwest side of Abbott Street in the Salinas area of Monterey County, California. This report presents the results of our field investigation, laboratory testing, along with our preliminary conclusions and recommendations for site development.

It is our opinion that the proposed development is feasible from a soil-engineering standpoint. However, the site has a *high potential for liquefaction susceptibility*. Therefore as required by the State of California Seismic Hazards Mapping Act (1990) and Section 1802.2.7 of the 2007 California Building Code, we recommend that an additional site-specific supplemental liquefaction study be performed. The supplemental study should be performed in accordance with the latest standards for liquefaction analysis and within the guidelines of the California Division of Mines & Geology, Special Publication 117.

The recommendations included in this report are preliminary and contingent upon the findings of the recommended supplemental liquefaction study. We also recommend that additional design level soil engineering investigation update(s) should be performed on a lot-by-lot basis once preliminary building plans have been completed and proposed building & improvement locations and anticipated loads are known.

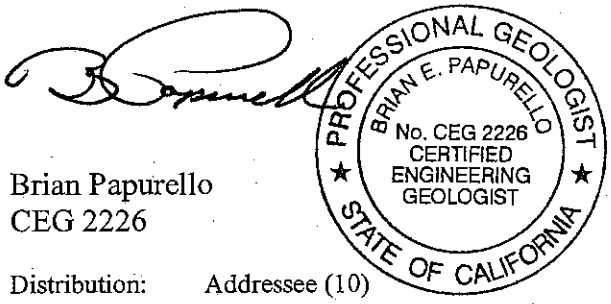
520-B Crazy Horse Canyon Road, Salinas, CA 93907 • (831) 443-6970 • Fax (831) 443-3801

The conclusions and recommendations included herein are preliminary and are based upon applicable standards at the time this report was prepared.

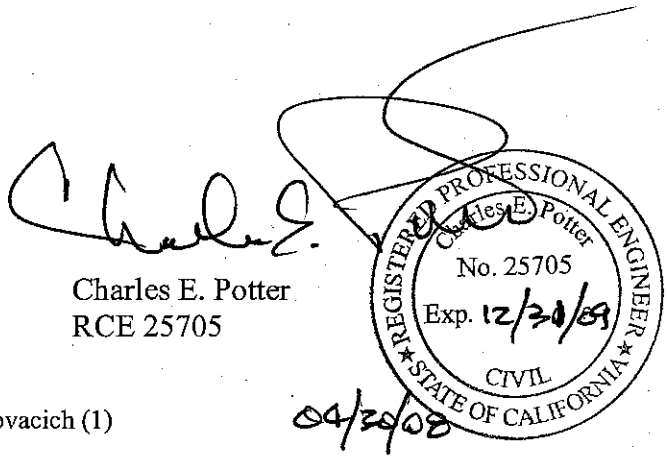
It has been a pleasure to be of service to you on this project. If you have any questions regarding the attached report, please contact the undersigned at (831) 443-6970

Respectfully submitted,

LandSet Engineers, Inc.



Brian Papurello
CEG 2226



Charles E. Potter
RCE 25705

Distribution: Addressee (10)
Uni-Kool Partners, Attn. Mr. Steve Kovacich (1)

Doc. No.: 0804-132.SER

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INTRODUCTION

This report summarizes the findings, conclusions and recommendations for our preliminary soil engineering investigation and asphalt pavement design for an approximate 250-acre regional agricultural business park located on the southwest side of Abbott Street, norththwest of Harris Road in the Salinas area of Monterey County, California (Vicinity Map, Figure 1).

PURPOSE AND SCOPE OF SERVICES

This preliminary soil engineering investigation and asphalt pavement design has been prepared to explore surface and subsurface soil and groundwater conditions at the site, and provide preliminary design level soil-engineering criteria for construction of infrastructure improvements for the project.

Specific design criteria for future building development was beyond the scope of services for this investigation and should be addressed by site specific update investigation(s) on a lot-by-lot basis once anticipated building types, locations and foundation loads are known.

The conclusions and recommendations of this report are intended to comply with Sections 1802.2 trough 1802.6 of the California Building Code (CBC) 2007 edition as modified by standard soil engineering practice in this area. Our scope of services included:

1. A visual site reconnaissance.
2. Review of available soil engineering data in our files pertinent to the site.
3. Exploration, sampling and classification of the surface and subsurface soils by means of drilling 50 exploratory borings to depths ranging from 10.0 to 50.0 feet below the ground surface.
4. Laboratory testing of selected soil samples collected from the exploratory borings and surface locations to determine their pertinent engineering and index properties.
5. Engineering analysis of the information collected based on the results of the field exploration; laboratory testing program and review of published and unpublished studies in the general area of the site.
6. Preparation of this report summarizing our findings and preliminary soil engineering conclusions and recommendations for site preparation, grading and compaction, foundations, utility trenches, slabs-on-grade, asphalt pavement design, soil corrosion potential, general site drainage, and erosion control.

SITE DESCRIPTION AND PROPOSED DEVELOPMENT

The approximate center of the site is located at 36.646° N latitude, -121.620° W longitude in the southwest quarter and southeast quarter of the Natividad and Salinas 7.5' minute quadrangles respectively. The site is located in the Salinas River Valley within an unincorporated area of Monterey County adjacent to the city limits of the City of Salinas, California. The site is unsectionalized, remaining part of the Llano De Buena Vista Rancho, Mexican Land Grant. Access to the site is gained from Harris Road along the southern property boundary. Surrounding land uses are commercial/industrial and agricultural (Figure 1, Vicinity Map).

The site consists of a quasi-rectangular shaped undeveloped property of about 250-acres. The site is fairly flat, sloping very gently in a northerly direction. Overall topographic relief is about 7 feet. The site is currently utilized for row crop agriculture.

Based on our review of a preliminary site plan, we understand the following. Proposed development will consist of the construction a of regional agricultural/industrial business park with proposed parcels ranging in size from 21.4-acres to 50.0-acres. Additional improvements will consist of new roadway & vehicle drives and associated underground utility and drainage improvements.

FIELD EXPLORATION

50 exploratory borings were drilled during the period of March 24, 2008 through March 28, 2008 at the approximate locations shown on the Exploratory Boring Location Map, Sheet 1, located in the map pocket at the back of this report. The borings were drilled using a truck mounted drill rig equipped with an 8-inch outside diameter hollow stem auger. The exploratory borings were drilled to depths ranging from 10.0 to 50.0 feet below the ground surface. Bulk soil samples were collected at depth intervals ranging from 0 to 2.0 feet and 0 to5.0 feet below the ground surface. A Certified Engineering Geologist and/or an engineering technician working under the supervision of a Certified Engineering Geologist from our office logged the borings in the field.

Upon completion of drilling, the borings that encountered groundwater were backfilled with neat cement grout. Exploratory borings that did not encounter were backfilled with native soil cuttings.

Soils encountered in each exploratory boring were visually classified in the field and a continuous log was recorded. Visual classifications were made in general accordance with the Unified Soil Classification System and ASTM D2488. Logs of the borings from this field investigation can be found in Appendix A (Figures A4 to A53). Appendix A also contains a Key to the Unified Soil Classification System, Key to Log of Borings and soil terminology (Figures A1 to A3). The approximate exploratory boring locations are shown on the Exploratory Boring Location Map, Sheet 1, located in the map pocket at the back of this report.

Soil samples were obtained by drilling to the desired depth and then driving a 3-inch OD Modified California Sampler or a 2-inch OD Standard Penetration Test sampler. The samplers were driven into the ground using force generated by a 140-pound hammer dropping freely through a distance of 30-inches. The number of blows required to drive the last 12-inches of an 18-inch sampler were recorded as penetration resistance (blows/foot) on the exploratory boring logs. The penetration resistance values were used to describe the consistency/density of the subsurface materials. In addition to the collection of driven samples, three bulk soil samples were obtained from the site.

LABORATORY TESTING

Laboratory tests were performed to determine some of the physical and engineering characteristics on selected soil samples of the various soil materials encountered in the exploratory borings considered pertinent to the design of the project. The tests performed were selected on the basis of the probable design requirements as correlated to the site subsurface profile. A summary of the laboratory test results is presented in Appendix B. A brief generalized description of the tests performed is presented below.

- Moisture-Density Determinations: This test was conducted on brass liner samples to measure their in-situ moisture contents and dry unit weights. The test results are used to assess the distribution of subsurface pressures and to calculate degrees of in-situ relative compaction.

- Atterberg Limits: This test was performed on bulk and insitu samples, to determine the liquid limit and plastic limit index values. This test provides water content values for the sample's liquid and plastic phases. This test aids in determining the expansive potential and other engineering characteristics of the soil.

- Grain Size Distribution (Gradation) Analysis: Grain size distribution analysis were performed on a selected soil samples. The distribution of particle sizes larger than 0.075 mm is determined by sieving, while the distribution of particle sizes smaller than 0.075 mm is determined by a sedimentation process using a hydrometer. The grain size distribution is used to determine the classification of the site soils. This information is used for liquefaction and foundation design analysis.

- Unconfined Compressive Strength of Lime Treated Soil: This test was performed on a several disturbed bulk soil samples. This purpose is to determine the unconfined compressive strength of laboratory compacted lime treated soils. The unconfined compressive strength data is utilized to determine the percent lime to be added to the subgrade soils for lime treated asphalt pavement design sections.

- Corrosion Testing: Resistivity, Chloride & Sulfate Content, pH and Redox testing was performed on four bulk soil samples from the site. This testing was performed to address the risk of corrosion of construction materials from potential soil-induced chemical reaction.

SUBSURFACE CONDITIONS

Subsurface constituents were similar to the depths explored in each of the 50 exploratory borings. The site is underlain by Holocene age floodplain and basinal sediments deposited by the Salinas River. The soil materials encountered typically consist of several feet of expansive fat clay topsoil underlain by a laterally discontinuous interbedded heterogeneous sequence of fat & lean clay, silt, elastic silt, silty sand, poorly graded sand and well graded sand. These unconsolidated sediments have highly variable consistencies and are typically very moist to saturated to the total depth explored of 50.0 feet below the ground surface (Appendix A, Figures A-4 to A-53)

GROUNDWATER

Free perched groundwater was encountered in 15 of the 50 exploratory borings drilled on site. Depths to ground water are presented in the table below.

Ground Water Depth

Exploratory Boring	Depth to Ground Water (ft)	Exploratory Boring	Depth to Ground Water (ft)
B-1	14.0	B-32	18.0
B-2	13.0	B-36	23.0
B-3	15.0	B-38	18.0
B-4	19.0	B-40	18.0
B-5	40.0	B-42	18.0
B-8	23.0	B-43	21.0
B-9	23.5	B-45	18.0
B-15	18.0		

Local groundwater levels can fluctuate over time depending on but not limited to factors such as irrigation, seasonal rainfall, site elevation, groundwater withdrawal, and construction activities at neighboring sites. The influence of these time dependent factors could not be assessed at the time of our investigation.

SUMMARIZED CONCLUSIONS

The following conclusions are drawn from the data acquired and evaluated during this preliminary investigation for the proposed project. Soil and groundwater conditions can deviate from the conditions encountered at the boring locations if significant variations in the subsurface conditions are encountered during construction, it may be necessary for Landset Engineers, Inc. to review the recommendations presented herein, and recommend adjustments as necessary.

Site Suitability: While the site susceptibility for liquefaction to occur is high, site development appears to be feasible from a soil-engineering standpoint for the proposed commercial/industrial development, provided that the recommendations contained herein are confirmed and/or modified based on the findings of a supplemental liquefaction study. The following preliminary recommendations are presented as guidelines to be used by project planners and designers for the soil engineering aspects of the project design and construction.

Soil Expansion: Atterberg limits test performed on 15 samples of clay topsoil on the site resulted in plasticity index values of 21 to 47 (LL=80 to 43). These values indicate that the near surface soil (upper 4 to 6-feet) has a high to very expansion potential. Expansive soils experience volumetric changes with changes in moisture content, swelling with increases in moisture content and shrinking with decreasing moisture content. These volumetric changes that the soil undergoes in this cyclic pattern can cause distress resulting in damage to concrete slabs and foundations. The potential causal effects of expansive soils can be mitigated if precautionary measures are incorporated into the construction procedures and methods. Placement of non-expansive material or chemical treatment of the native soil under concrete slab and foundation areas is recommended to reduce the effects of soil expansion for concrete slabs-on-grade.

Grading: As the soils that will be supporting the foundations have a high to very high expansion potential and have been disturbed by past intensive agricultural use, ***deep remedial grading and subexcavation is considered necessary to improve the soils for future building foundation support***. Therefore, it is recommended that the top 2 to 4-feet of native soil be removed and replaced. Depending on foundation types, the subexcavated soils may be replaced with imported select structural fill, compacted native soil, DQM chemically treated native soil or some combination thereof. The actual depth of subexcavation should be determined by additional design level soil engineering investigation update(s) performed on a lot-by-lot basis once preliminary building plans have been completed and proposed building & improvement locations and anticipated loads are known.

Liquefaction Potential:. Liquefaction is the transformation of soil from a solid to a liquid state as a consequence of increased pore-water pressures in response to strong ground shaking generated during an earthquake. Liquefaction is most commonly associated with Holocene age deposits where the groundwater is less than 30 feet below the surface and the anticipated peak ground acceleration (PGA) having a 10% probability of being exceeded in 50 years is greater than 0.2g. Liquefaction most often occurs in loose saturated silts, and saturated poorly graded fine-grained sands. However, some cohesive clay soils can be subject to strength loss even under relatively minor strains.

Review of published maps and reports indicates that substantial structural damage and historical liquefaction occurred in the nearby area as a result of San Francisco Earthquake of April 18, 1906. Review of the Relative Liquefaction Susceptibility Map contained in the County of Monterey Draft General Plan shows that the site is predominantly located in an area of moderate to high susceptibility for liquefaction.

Review of published geologic maps and the findings of our investigation indicate the following. The site is underlain by soft unconsolidated Holocene age sediments, the depth to ground water is less than 30 feet, and the site peak ground acceleration having a 10% probability of being exceeded in 50 years is significantly greater than 0.2g. Based on these natural physical

conditions, and past documented historical accounts, it is our opinion that the potential for liquefaction to effect the site is **High**.

We therefore recommend that an additional site-specific supplemental liquefaction study be performed. The supplemental liquefaction study should be performed in accordance with the guidelines contained within the California Division of Mines & Geology Special Publication 117, as adopted by the State Mining and Geology Board in accordance with the State of California Seismic Hazards Mapping Act of 1990. It is recommended that the supplemental liquefaction study should include additional cone penetrometer test (CPT) borings in order to more accurately characterize the site subsurface conditions, determine liquefaction factors of safety, and estimate potential ground settlements as a result of liquefaction. These conclusions and recommendations have been prepared assuming that Landset Engineers, Inc. will be commissioned to perform the recommended supplemental liquefaction study, provide updated recommendations, review the proposed grading, improvements, and foundation plans before construction, and to observe, test and advise during earthwork and foundation construction.

Seismic Design Parameters: For seismic design using the 2007 CBC, we recommend the following design values be used. The parameters were calculated using the U.S. Geological Survey Ground Motion Parameters computer program (Version 5.0.8) and were based on the approximate center of the site located at 36.646° N. latitude and –121.620° W. longitude.

2007 CBC Seismic Design Parameters

Design Parameter	*Site Design Value*	Reference
Site Class	**E – Soft Soil**	Table 1613.5.2
Spectral Acceleration Short Period	**(S_s) = 1.372g**	Fig. 22-3, ASCE 7-05
Spectral Acceleration 1 Second Period	**(S_1) = 0.623g**	Fig. 22-4. ASCE 7-05
Short Period Site Coefficient	**(F_a) = 0.9**	Table 1613.5.3(1)
1 Second Period Site Coefficient	**(F_v) = 2.40**	Table 1613.5.3(2)
MCE Spectral Response Acceleration Short Period	**(S_{MS}) = 1.235g**	Section 1613.5.3
MCE Spectral Response Acceleration 1-Second Period	**(S_{M1}) = 1.496g**	Section 1613.5.3
5% Damped Spectral Response Acceleration Short Period	**(S_{DS}) = 0.823g**	Section 1613.5.4
5% Damped Spectral Response Acceleration 1-Second Period	**(S_{D1}) = 0.997g**	Section 1613.5.4

Corrosion Protection: Corrosion is a naturally occurring process where the surface of buried construction materials are attacked by either oxidation, reduction or other soil induced chemical reactions. The corrosion potential of a soil depends on resistivity, pH, and redox potential. In order to evaluate the potential for corrosion of metallic objects in contact with site soils, corrosion testing was performed as part of this investigation.

Based on criteria developed by the National Association of Corrosion Engineers and the test results presented in Appendix B, the surficial site soils exhibit very corrosive to corrosive corrosion potential for buried metallic objects. It is recommended that that the project civil designer, contractor or material suppliers determine if proposed construction materials are compatible with the potential soil corrosion conditions. If an adequate determination cannot be made, it will be necessary to consult with a corrosion-engineering specialist to provide design parameters.

Sulfate Content: Soils with a soluble sulfate content above 0.2% dry weight is considered to constitute an adverse sulfate condition to concrete structures that are in contact with the soil. The results of our laboratory testing were compared to the requirements for concrete exposed to sulfate containing solutions in accordance with ACI 318, 4.3. Test results from the samples indicates negligible sulfate corrosion potential. Therefore, Type II Cement is considered adequate for use in concrete in contact with the on-site soils.

RECOMMENDATIONS

Site Preparation and Grading

1. The soil engineer should be notified **at least ten (10) working days prior to any site clearing or grading** so that the work in the field can be coordinated with the grading contractor, and arrangements for testing and observation services can be made. The preliminary recommendations contained in this report are based on the assumption that Landset Engineers, Inc. will perform the required testing and observation services during grading and construction. It is the owner's responsibility to make the necessary arrangements for these required services.

2. Prior to grading, construction areas should be cleared of obstructions, buried structures & utilities, and other deleterious materials. Site clearing should be observed by a field representative of Landset Engineers, Inc. Voids created by removal of as described above should be called to the attention of the soil engineer. No fill should be placed unless a representative of this firm has observed the underlying soil.

3. Following site clearing, the upper 2 to 4-feet of soft native expansive clay soil should be overexcavated from the building areas. The actual depth of subexcavation should be determined by additional design level soil engineering investigation update(s) performed on a lot-by-lot basis once preliminary building plans have been completed and proposed building & improvement locations and anticipated loads are known. Building areas are defined as the soils within and extending a minimum of 5 feet beyond the foundation perimeters and structural fill areas.

4. The soils exposed by overexcavation should be scarified 12 inches; moisture conditioned to a level of 3% to 5% above optimum moisture content, and compacted to at least 90% of maximum dry density. Where referenced in this report, percent relative compaction and optimum moisture content shall be based on ASTM test D1557. Areas to receive

structural fill outside the building pad should be scarified and recompacted in a similar manner.

5. Select Structural Fill is defined herein as a non-expansive import fill which, when properly compacted, will support foundations, pavements, and other fills without detrimental settlement or expansion. Select Structural Fill is specified as follows:

Select Structural Fill

- Clean import material with a Plasticity Index of less than 12.
- Have a minimum R-Value of 30.
- Be free of debris, vegetation, and other deleterious material.
- Have a maximum particle size of 3-inches in diameter.
- Contain no more than 15% by weight of rocks larger than 21/2-inches in diameter.
- Have sufficient binder to allow footing and unshored excavation without caving.
- Prior to delivery to the site, a representative sample of proposed import material should be provided to Landset Engineers, Inc. for laboratory evaluation.

6. As an alternative to removal and replacement of the soils underlying the building pads with imported select fill, the soils may be chemically treated with dolomitic quick lime (DQM). The minimum thickness of chemically treated soils should be determined by additional design level soil engineering investigation update(s) performed on a lot-by-lot basis once preliminary building plans have been completed and proposed building & improvement locations and anticipated loads are known. Chemical treatment should consist of the addition of 4% DQM by the dry weight of the soil.

Foundations - General

7. Future buildings may be supported by conventional continuous and spread (pad) footings or by post-tensioned/mat slab foundations. Actual foundation designs should be determined by additional site specific design level soil engineering investigation update(s) performed on a lot-by-lot basis once the proposed building locations and anticipated loads are known.

8. Post construction total settlement of foundations is expected to be about ½ to 1½-inch from static loading. Post construction differential settlement of foundations is expected to be about 1-inch from static loading. Estimated foundation movements due to seismically induced settlement should be determined by performing an additional site-specific supplemental liquefaction study prepared in accordance with the latest standards for liquefaction analysis and within the guidelines of the California Division of Mines & Geology, Special Publication 117.

Conventional Footings

9. The buildings may be supported by conventional continuous and spread (pad) footings supported on recompacted soil. Footings should have minimum depths of 12-inches below lowest adjacent grade for single story structures, and 18-inches below lowest adjacent grade for two story structures, and 24-inches below lowest adjacent grade for three story structures. For the above conditions, the footings for a proposed structure may be designed for an allowable bearing pressure range of 1,000 to 2,000-ft^2 for dead plus live loads. Footings should be reinforced as directed by the architect/structural engineer.

10. Conventional continuous and spread (pad) footings should be underlain by a layer of engineered select structural fill or recompacted native soil. The depth of replacement/recompaction of soils underlying the footing bottoms should be determined by additional site specific design level soil engineering investigation update(s) performed on a lot-by-lot basis once the proposed foundation loads are known.

11. Footing excavations should be observed by a representative of this firm prior to placement of formwork or reinforcement. Concrete should be placed only in foundation excavations that have been kept moist, and contain no loose or soft soil debris.

12. Footings located adjacent to other footings or utility trenches should have their bearing surfaces founded below an imaginary 1:1 (horizontal to vertical) plane projected upward from the bottom edge of the adjacent footings or utility trenches.

Post-Tensioned/Mat Slab Foundations

13. Post-tensioned/mat slabs may be utilized to resist soil expansion and static & seismic differential settlement of the native earth materials. Post-tensioned/mat slabs should be designed in accordance with the latest editions of the California Building Code and the design recommendations by the Post-Tensioning Institute utilizing the following design criteria:

14. For the above conditions, the post-tensioned/mat slabs should have a minimum thickness of 12 full inches and may be designed for an allowable bearing pressure range of 1,000 to 2,000 pounds per square foot for dead plus live loads. A qualified structural engineer should design post-tensioned/mat slabs.

15. A minimum of 4 inches of clean sand should be provided beneath the slabs. The building pad subgrade should be pre-moistened to a level at or slightly above optimum moisture content prior to the placement of the clean sand cushion. Clean sand is defined as a sand (ASTM D 2488) of which less than 3 percent passes the No. 200 sieve.

16. To minimize floor dampness, such as where moisture sensitive floorings will be present, a membrane vapor barrier should be placed at the midsection of the clean sand cushion. The membrane vapor barrier should be a minimum 10 mil in thickness, and care should be taken to properly lap and seal the vapor barrier, particularly around utilities.

17. To limit the potential for subsurface moisture to enter the underlying sand cushion, the perimeters of the post-tensioned slabs should be thickened to penetrate below the bottom of the sand cushion layer.

18. Post-tensioned/mat slabs should be constructed and maintained in accordance with the latest procedures as specified by the Post-Tensioning Institute. Plumbing through the slabs, utility connections, exterior flatwork, and drainage systems should be sleeved and designed to accommodate the specified differential settlement conditions as determined by additional design level investigations.

Slabs-on-Grade and Exterior Flatwork

19. Conventional interior slabs-on-grade should have minimum thickness of 4 to 6 full inches and be underlain by a layer of imported select structural fill, compacted native soil, or DQM chemically treated soil as determined by additional design level soil engineering investigation update(s) once the proposed building locations are known. It should be noted that the project structural engineer might require thicker slab sections to provide the necessary support for the anticipated structural loads. Concrete slabs-on-grade should be reinforced with steel as specified by the structural engineer.

20. To minimize floor dampness, such as where moisture sensitive floorings will be present, a section of capillary break material at least 4-inches thick covered with a membrane vapor barrier should be placed between the floor slab and the compacted soil subgrade. The capillary break should consist of a clean, free draining material such as ½ to ¾-inch drainrock with not more than 10 percent of the material passing a No. 4 sieve. The drainrock should be free of sharp edges that might damage the membrane vapor barrier. The membrane vapor barrier should be a minimum 10 mil in thickness, and care should be taken to properly lap and seal the vapor barrier, particularly around utilities. To protect the vapor barrier from damage during concrete placement, it should be covered with a minimum of 2 inches of clean sand. Clean sand is defined as a sand (ASTM D 2488) of

which less than 3 percent passes the No. 200 sieve. The sand cushion should be lightly moistened immediately prior to concrete placement.

21. Exterior concrete flatwork such as driveways, patios and sidewalks should be designed to act independently of building foundations. Exterior flatwork should be constructed on soil subgrade compacted to 90% and be moisture conditioned to at least 5% over optimum moisture content to a depth of 18-inches below lowest adjacent grade. Exterior concrete slab-on-grade soils should be overlain by at least 12-inches select structural fill.

22. Due to the expansive nature of the site soils, exterior concrete slabs and flatwork can expect to suffer some cracking and movement. To reduce the potential for cracking and movement, exterior concrete slabs and flatwork should be reinforced with steel and contraction joints should be installed. Reinforcement and joint spacing should be at the direction of the architect/structural engineer.

Utility Trenches

23. On-site soils should be properly shored, braced or sloped during construction to prevent sloughing and caving of trench sidewalls. The contractor should comply with the Cal/OSHA and local safety requirements and codes dealing with excavations and trenches.

24. A select imported non-corrosive, granular, material should be used as bedding and shading immediately around all underground utility pipes and conduits. Select imported granular material should also be used as intermediate backfill material for trenches less than five (5) feet in depth.

25. For trenches deeper than five (5) feet, native soil materials may be utilized as intermediate backfill. Native soil materials classified as fat CLAY (CH), SILT (ML) or elastic SILT (MH) are not recommended to be utilized as intermediate backfill material

within three (3) feet of proposed finish subgrade elevations. Subsurface locations and classification of the soil materials encountered on-site, along with Unified Soil Classification System descriptions can be found in the exploratory boring logs (Appendix A, Figures A4 to A53).

26. Trench backfill in landscaped or unimproved areas should be compacted to a minimum of 85 percent of maximum dry density. Trench backfill beneath asphalt and concrete pavements should be compacted to a minimum of 95 percent of maximum dry density. Trench backfill in all other areas should be compacted to a minimum of 90 percent of maximum dry density. Jetting of utility trench backfill should not be allowed.

27. The bottoms of utility trenches that are parallel to foundations should not extend below an imaginary plane sloping downward at a 1:1 (horizontal to vertical) angle from the bottom outside edges of foundations.

Asphalt Pavement Design

28. In general, we find that the natural quality of the site subgrade soil to be very poor. The asphalt concrete (A.C.) sections were designed in accordance with the California Department of Transportation (Caltrans) Highway Design Method. Traffic Indices (T.I.'s) of 7.0 to 11.0 were assumed for design. The structural sections presented below are considered to be consistent with a design period equal to about 20 years, assuming a T.I. of 11 or less. Truck traffic and equivalent axle loads that exceed a T.I. of 11 could be destructive to pavements, resulting in an accelerated rate of deterioration. The project civil designer should determine the appropriate T.I.'s for the areas to be paved. The calculated Class 2 A.B. and A.C. thickness are for material after mechanical compaction.

Pavement Sections – Native Subgrade Conditions

R-Value	Traffic Index	A.C.	Class 2 A.B.
5	7.0	0.35'	1.25'*
5	8.0	0.40'	1.48'*
5	9.0	'0.45	1.72'*
5	10.0	0.50'	1.95'*
5	11.0	0.60'	2.10'*

* - ***Cement Treated Base or Lean Concrete Base Recommended***

29. As an alternative the native soil subgrade may be chemically treated with DQM. A composite bulk soil sample with 4% DQM added yielded unconfined compression results of 269 psi. Chemical treatment of the subgrade soils will reduce the overall pavement section thickness. A reduction in the pavement section can result a reduced quantity of subgrade export (cut), in addition to reducing the quantity of import Class 2 A.B. The chemical treatment should consist of mixing at least 4% of DQM by the dry weight of the soil plus the addition of 2% Portland cement. The addition of Portland cement will provide additional strength for factors of safety in design. The LTS treated material

density, be firm & unyielding when proof-rolled by heavy rubber-tired equipment and be a full 18-inches in thickness prior to placement of Class 2 AB.

Preliminary Pavement Sections – 4% DQM +2% PC

R-Value	Traffic Index	A.C.	A.B. (R= 78)	LTSPC S.B. (R=60 min.)
5	7.0	0.35'	0.35'	1.00'
5	8.0	0.40'	0.40'	1.50'
5	9.0	0.45'	0.45'	1.50'
5	10.0	0.50'	0.55'	1.50'
5	11.0	0.60'	0.75'	1.50'

Note: Preliminary pavement sections will be confirmed and/or modified based on additional testing currently being performed to determine R-value of treated subbase.

30. Class 2 A.B. should be compacted to 95% of maximum dry density and comply with Section 26 of Caltrans Standard Specifications, latest edition. The Class 2 A.B. should be firm and unyielding when proof-rolled by heavy rubber-tired equipment prior to A.C. paving.

31. Asphalt concrete should conform and comply with Section 39 of Caltrans Standard Specifications, latest edition. Finished A.C. surfaces should slope toward drainage facilities at 2% grade where possible. Under no circumstances should water be allowed to pond.

Site Drainage

32. A drainage plan and storm water prevention plan is essential to the project. Fluctuations of moisture contents are a major consideration, both before and after construction. Site runoff will be substantially increased due to the proposed large paved and roofed areas.

34. Roof gutters should be utilized around the building eaves. Roof gutters should be connected to downspouts, which in turn should be connected to pipes leading to the site storm drain system. Site runoff should discharge in a non-erosive manner away in accordance with the requirements of the governing agencies.

QUALITY CONTROL

The conclusions and recommendations contained in this investigation are preliminary in nature. We recommend that Landset Engineers, Inc. be retained to review preliminary site improvement plans once they are available. Additional recommendations will be provided if necessary based on our review, to interpret this report during infrastructure construction, and to provide construction testing and observation services. These services are beyond the scope of this investigation.

Additionally, we should provide the recommended supplemental liquefaction study and perform additional site specific design level investigation update(s) on a lot-by-lot basis once the proposed site usage, construction type, locations and anticipated loads are known. These services are beyond the scope of this preliminary soil engineering investigation.

The following items should be performed, reviewed, tested, or observed by this firm:

- Supplemental liquefaction study
- Infrastructure grading & improvement plans
- Lot specific design level soil engineering investigation update(s)
- Lot specific grading and foundation plans
- Site stripping and clearing
- Overexcavation
- Scarification and recompaction
- Fill placement and compaction
- Non-expansive Select Structural Fill
- Lime Treatment of building pads and pavement subgrade (if utilized)
- Foundation excavations
- Underground utility backfill and compaction.
- Compaction of subgrade and Class 2 A.B. in areas to be paved.

If Landset Engineers, Inc. is not retained to provide the recommended supplemental and design level soil engineering services, or construction observation and compaction testing, we shall not be responsible for the interpretation of the information by others or any consequences arising therefrom.

LIMITATIONS AND UNIFORMITY OF CONDITIONS

The preliminary recommendations contained in this report are based, in part, on certain plans, information, and data that has been provided to us. Any changes in those plans, information, and data will render our recommendations invalid unless we are commissioned to review the changes and to make any necessary modifications and/or additions to our recommendations. The criteria in this report are considered preliminary until such time as they are modified or verified by the soil engineer in the field during construction. No representation, warranty, or guarantee is either expressed or implied. This report is intended for the exclusive use by the client and the client's architect/engineer. Application beyond the stated intent is strictly at the user's risk.

The recommendations of this report are based upon the assumption that the soil conditions do not deviate from those disclosed in the borings. If any variations or undesirable conditions are encountered during construction, Landset Engineers, Inc. should be notified so that supplemental recommendations can be given.

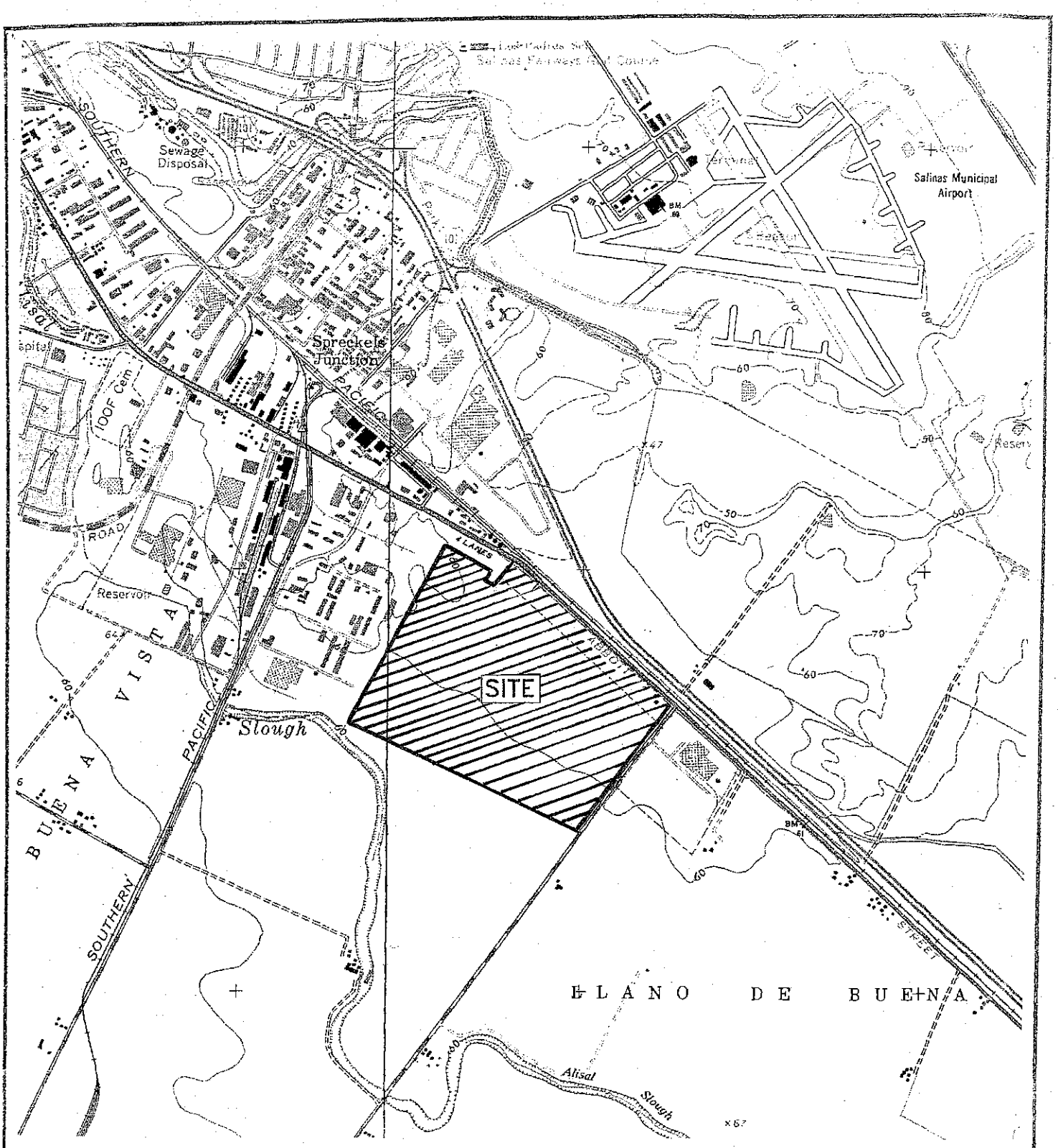
This report is issued with the understanding that it is the responsibility of the owner, or his representative, to ensure that the information and recommendations contained herein are called to the attention of the Architects and Engineers for the project and incorporated into the plans, and that the necessary steps are taken to ensure that the Contractor and Subcontractors carry out such recommendations. The conclusions and recommendations contained herein are professional opinions derived in accordance with current and local standards of professional practice.

The findings of this report are valid as of the present date. However, changes in the conditions of a property can occur with the passage of time, whether due to natural processes or to the works of man, on this or adjacent properties. In addition, changes in applicable or appropriate standards may occur, whether they result from legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated, wholly or in part, by changes outside of our control. Therefore, this report should not be relied upon after a period of three years, without being reviewed by Landset Engineers, Inc. from the date of issuance of this report.

This report does not address issues in the domain of the contractor such as, but not limited to, loss of volume due to stripping of the site, shrinkage of fill soils during compaction, excavatability, and construction methods. The scope of our services did not include any determination or evaluation of site geology, environmental assessment of wetlands, radioisotopes, hydrocarbons, hazardous or toxic materials, or other chemical properties hazardous to human health in the soil, surface water, groundwater or air, on or below or around the site.

FIGURES

Figure 1, Vicinity Map



BASE MAPS: Salinas & Natividad, California
U.S.G.S. 7.5' Topographic
Quadrangle Maps

Scale: 1"=2000'

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Vicinity Map
Salinas Ag-Industrial Business Park
Abbott Street Between Harkins & Harris Roads
Salinas, California

FIGURE
1
PROJECT
LSS-0620-01

APPENDIX A

Unified Soil Classification Systems
Key to Log of Borings
Soil Terminology
Exploratory Boring Logs B-1 through B-50

UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS			GRAPHIC SYMBOL	LETTER SYMBOL	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS More than 50 % of material is larger than No. 200 sieve size.	GRAVEL AND GRAVELLY SOILS More than 50 % of coarse fraction retained on No. 4 sieve.	CLEAN GRAVELS		GW	Well-graded gravels, gravel-sand mixtures, little or no fines.
				GP	Poorly-graded gravels, gravel-sand mixtures, little or no fines.
		GRAVELS WITH FINES		GM	Silty gravel, gravel-sand-silt mistures.
				GC	Clayey gravels, gravel-sand-clay mixtures.
	SAND AND SANDY SOILS More than 50 % of coarse fraction passing No. 4 sieve.	CLEAN SAND (Little or no fines)		SW	Well-graded sands, gravelly sands, little or no fines.
				SP	Poorly-graded sands, gravelly sands, little or no fines.
		SAND WITH FINES (Appreciable amount of fines)		SM	Silty sands, sand-silt mixtures.
				SC	Clayey sands, sand-clay mixtures.
FINE GRAINED SOILS More than 50 % of material is smaller than No. 200 sieve size.	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands, or clayey silts with slight plasticity.
				CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.
				OL	Organic silts and organic silty clay of low plasticity.
		LIQUID LIMIT GREATER THAN 50		MH	Inorganic silty, micaceous or diatomaceous fine sand or silty soils.
				CH	Inorganic clays of high plasticity, fat clays.
				OH	Organic clays of medium to high plasticity, organic silts.
HIGHLY ORGANIC SOILS				PT	Peat, humus, swamp soils with high organic contents.
VARIOUS SOILS AND MAN MADE MATERIALS					Fill materials.
MAN MADE MATERIALS					Asphalt and concrete.

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Figure A1

KEY TO LOG OF BORINGS

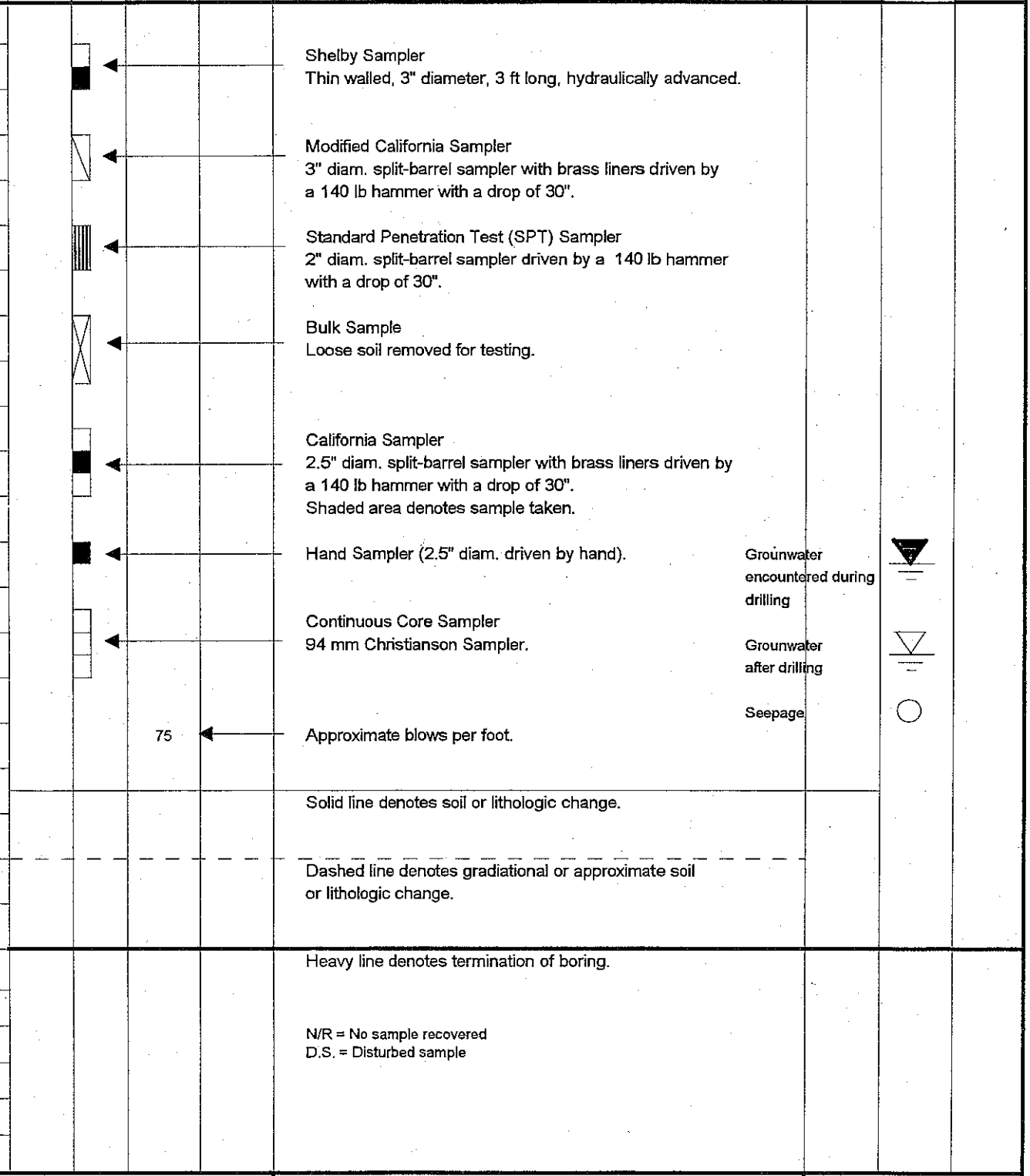

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Figure A2

SOIL TERMINOLOGY

SOIL TYPES (Ref. 1)

Boulders:	Particles of rock that will not pass a 12 inch screen.
Cobbles:	Particles of rock that will pass a 12 inch screen, but not a 3 inch sieve.
Gravel:	Particles of rock that will pass a 3 inch sieve, but not a No.4 sieve.
Sand:	Particles that will pass a No. 4 sieve, but not a No. 200 sieve.
Silt:	Soil that will pass a No. 200 sieve, that is non-plastic or very slightly plastic, and that exhibits little or no strength when dry.
Clay:	Soil that will pass a No. 200 sieve, that can be made to exhibit plasticity (putty-like properties) within a range of water contents, and that exhibits considerable strength when dry.

MOISTURE AND DENSITY

Moisture Condition:	An observational term; dry, slightly moist, moist, very moist, saturated.
Moisture Content:	The weight of water in a sample divided by the weight of dry soil in the soil sample, expressed as a percentage.
Dry Density:	The pounds of dry soil in a cubic foot of soil.

DESCRIPTORS OF CONSISTENCY (Ref. 3)

Liquid Limit:	The water content at which a No. 40 soil is on the boundary between exhibiting liquid and plastic characteristics. The consistency feels like soft butter.
Plastic Limit:	The water content at which a No. 40 soil is on the boundary between exhibiting plastic and semi-solid characteristics. The consistency feels like stiff putty.
Plasticity Index:	The difference between the liquid limit and the plastic limit, i.e. the range in water contents over which the soil is in a plastic state.

MEASURES OF CONSISTENCY OF COHESIVE SOILS (CLAYS) (Ref's. 2 & 3)

Very soft	N=0-1 *	C=0-250 psf	Squeezes between fingers
Soft	N=2-4	C=250-500 psf	Easily molded by finger pressure
Medium Stiff	N=5-8	C=500-1000 psf	Molded by strong finger pressure
Stiff	N=9-15	C=1000-2000 psf	Dented by strong finger pressure
Very Stiff	N=16-30	C=2000-4000 psf	Dented slightly by finger pressure
Hard	N>30	C>4000 psf	Dented slightly by a pencil point

* N = Blows per foot in the Standard Penetration Test. In cohesive soils, with the 3" diameter sampler, 140 pound weight, divide the blow count by 1.2 to get N (Ref. 4).

MEASURES OF RELATIVE DENSITY OF GRANULAR SOILS (GRAVELS, SANDS AND SILTS) (Ref's. 2 & 3)

Very Loose	N=0-4 **	RD=0-30	Easily push a 1/2" reinforcing rod by hand
Loose	N=5-10	RD=30-50	Push a 1/2" reinforcing rod by hand
Medium Dense	N=11-30	RD=50-70	Easily drive a 1/2" reinforcing rod
Dense	N=31-50	RD=70-90	Drive a 1/2" reinforcing rod 1 foot
Very Dense	N>50	RD=90-100	Drive a 1/2" reinforcing rod a few inches

** N = Blows per foot in the Standard Penetration Test. In granular soils, with the 3" diameter sampler, 140 pound weight, divide the blow count by 2 to get N (Ref. 4). RD = Relative Density

Ref. 1: ASTM Designation: D 2487-93, Standard Classification of Soils for Engineering Purposes (Unified Soils Classification System).

Ref. 2: Terzaghi, Karl, and Peck, Ralph B., Soil Mechanics in Engineering Practice, John Wiley & Sons, New York, 2nd Ed., 1967, pp. 30, 341, 347.

Ref. 3: Sowers, George F., Introductory Soil Mechanics and Foundations: Geotechnical Engineering, Macmillan Publishing Company, New York, 4th Ed., 1979, pp. 80,81 and 312.

Ref. 4: Lowe, John III, and Zaccheo, Phillip F., Subsurface Explorations and Sampling Chapter 1 in "Foundation Engineering Handbook," Hsai-Yang Fang, Editor, Van Nostrand Reinhold Company, New York, 2nd Ed., 1991, p. 39.

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Figure A3

EXPLORATORY BORING LOG

No. B-1

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:**	24-Mar-08
DRILLER:	Exploration Geoservices	**DRILLING METHOD:**	B-53
BORING DIAMETER:	8" HS	**BORING DEPTH:**	50.0'

FILE No. LSS-0620-01
LOGGED BY: BP
GROUNDWATER DEPTH: 14.0'

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dark brown fat CLAY, medium stiff, very moist	CH		
2								
3	1-1		28	3.25	Yellowish brown silty SAND, medium dense, moist, very fine grained, 10-15% fines	SM	8.4	96.7
4								
5								
6	1-2		32	1.50			12.4	89.0
7								
8								
9								
10	1-3		35	2.00	Dark brown lean CLAY with dark yellowish brown mottles, hard, very moist	CL	20.7	96.7
11								
12								
13								
14					Dark yellowish brown (10YR4/2) silty SAND, medium dense, saturated, very fine grained, 40-45% fines	SM		
15	1-4		14				29.8	
16								
17								
18					Color change to light olive gray (5Y5/2) dense, saturated, 15-25% fines			
19								
20	1-5		36				28.0	
21								
22								
23					Color change to dark greenish gray (5GY4/1) medium dense to dense, very fine grained, 5' of 2" rod added			
24								
25	1-6		31				30.7	
26								
27								

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Figure A-4

EXPLORATORY BORING LOG

No. B-1 Cont.

PROJECT:	Salinas Ag/Industrial Park	DATE DRILLED:	24-Mar-08
DRILLER:	Exploration Geoservices	DRILLING METHOD:	B-53
BORING DIAMETER:	8" HS	BORING DEPTH:	50.0'

FILE No. LSS-0620-01
LOGGED BY: BP
GROUNDWATER DEPTH: 14.0'

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
28					Dark greenish gray (5GY4/1) silty SAND, dense, very fine grained saturated, 20-25% fines	SM		
29								
30	1-7		33				29.6	
31								
32								
33								
34								
35								
36	1-8		43		20' of 2" Rod added		23.6	
37								
38								
39					Medium dark gray (N4) fat CLAY with silt, hard, very moist, trace very fine sand	CH		
40	1-9		33				44.2	
41								
42								
43								
44								
45	1-10		20		Very stiff common silt and sandy silt interbeds		52.7	
46								
47								
48								
49								
50	1-11		22				34.5	
51					TD @ 50.0' GROUNDWATER ENCOUNTERED @ 14.0'			

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Figure A-4

EXPLORATORY BORING LOG

No. B-2

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:**	24-Mar-08
DRILLER:	Exploration Geoservices	**DRILLING METHOD:**	B-53
BORING DIAMETER:	8" HS	**BORING DEPTH:**	50.0'

FILE No. LSS-0620-01
LOGGED BY: BP
GROUNDWATER DEPTH: 13.0'

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown (10YR2/2) fat CLAY medium stiff, moist	CH		
2								
3	2-1		17	2.50	Color change to dark yellowish brown (10YR4/2) very stiff, very moist		30.4	75.9
4								
5								
6	2-2		27	1.75			24.1	87.6
7								
8					Dark yellowish brown (10YR4/2) poorly graded SAND, medium dense, moist very fine grained	SP		
9								
10	2-3		12	2.00	Dark yellowish brown (10YR4/2) fat CLAY, stiff, moist	CH	35.7	81.9
11								
12								
13					Light olive gray (5Y5/2) SILT, stiff very moist, trace clay, 10-15% very fine sand, trace fine gravel	ML		
14								
15	2-4		10				31.6	
16								
17					Light olive gray (5Y5/2) silty SAND, medium dense, moist, very fine grained 25-30% fines	SM		
18								
19								
20	2-5		22		Common silty interbeds		27.9	
21								
22					Dark yellowish poorly graded silty SAND brown (10YR4/2) medium dense to dense, very moist very fine grained, 10-15% fines, 5' of 2" Rod added	SP		
23								
24								
25	2-6		30				27.9	
26								
27								

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Figure A-5

EXPLORATORY BORING LOG

No. B-2 Cont.

PROJECT:	Salinas Ag/Industrial Park	DATE DRILLED: 24-Mar-08	FILE No. LSS-0620-01
DRILLER:	Exploration Geoservices	DRILLING METHOD: B-53	LOGGED BY: BP
BORING DIAMETER:	8"HS	BORING DEPTH: 50.0'	GROUNDWATER DEPTH: 13.0'

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
28					Color change to olive gray (5Y4/1) loose, saturated, 20' of 2" rod added	SP		
29								
30	2-7		12				28.4	
31								
32								
33								
34								
35	2-8		24		Medium dense		25.1	
36								
37								
38					Dark gray (N3) silty SAND, medium dense, saturated, 30-35% fines, very fine grained	SM		
39								
40	2-9		21				24.7	
41								
42								
43								
44								
45	2-10		24		Very fine grained 40-45% fines		31.6	
46								
47								
48								
49								
50	2-11		38		30' of 2" Rod added		33.5	
51					**TD @50.0'** **GROUNDWATER ENCOUNTERED @ 13.0'**			

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Figure A-5

EXPLORATORY BORING LOG

No. B-3

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:**	24-Mar-08
DRILLER:	Exploration Geoservices	**DRILLING METHOD:**	B-53
BORING DIAMETER:	8" HS	**BORING DEPTH:**	50.0'

FILE No. LSS-0620-01
LOGGED BY: BP
GROUNDWATER DEPTH: 15.0'

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown (10YR2/2) fat CLAY medium stiff, very moist	CH		
2								
3					Color change to dark yellowish brown (10YR4/2)			
4	3-1		13	1.25	Dark yellowish brown silty SAND, loose, very moist, very fine grained, 20-25% fines	SM	17.9	92.6
5								
6					Dark yellowish brown (10YR4/2) poorly graded SAND, medium dense, moist, very fine to fine grained 5-10% fines	SP		
7	3-2		19	3.00			10.2	89.0
8								
9								
10	3-3		19	2.25			15.8	90.6
11								
12								
13					Dark yellowish brown (10YR4/2) lean CLAY, stiff, very moist	CL		
14								
15	3-4		10		Occasional thin silt interbeds		28.7	
16					Light olive gray (5Y5/2) silty SAND, medium dense, saturated, very fine grained, 40-45% fines	SM		
17								
18								
19								
20	3-5		29				30.5	
21								
22								
23								
24								
25	3-6		25		5.0' of 2" rod added		27.6	
26								
27								

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Figure A-6

EXPLORATORY BORING LOG

No. B-3 Cont.

PROJECT:	Salinas Ag/Industrial Park	DATE DRILLED:	24-Mar-08
DRILLER:	Exploration Geoservices	DRILLING METHOD:	B-53
BORING DIAMETER:	8" HS	BORING DEPTH:	50.0'

FILE No. LSS-0620-01

LOGGED BY: BP

GROUNDWATER DEPTH: 15.0'

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
28					Light olive gray (5Y5/2) silty SAND, dense, saturated, very fine grained 45% fines, 20' of 2" rod added	SM		
29								
30	3-7		34				24.0	
31								
32								
33								
34								
35	3-8		17		Color change to dark gray (N3) medium dense, very fine grained, 45-50% fines		29.6	
36								
37								
38								
39					Dark gray (N3) fat CLAY, stiff, very moist	CH		
40	3-9		11				47.5	
41								
42								
43								
44								
45	3-10		17		Very stiff, moist		40.2	
46								
47								
48								
49								
50	3-11		23				39.3	
51					TD @ 50.0'			
25					GROUNDWATER ENCOUNTERED @ 15.0'			
26								
27								

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Figure A-6

EXPLORATORY BORING LOG

No. B-4

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:** 24-Mar-08	**FILE No.** LSS-0620-01
DRILLER:	Exploration Geoservices	**DRILLING METHOD:** B-53	**LOGGED BY:** BP
BORING DIAMETER:	8" HS	**BORING DEPTH:** 50.0'	**GROUNDWATER DEPTH:** 19.0'

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown fat CLAY, medium stiff, very moist	CH		
2								
3	4-1		16	2.50	Color change to dark yellowish brown, stiff		25.6	85.5
4								
5					Dark yellowish brown SILT, stiff to very stiff, moist, 5-10% very fine sand	ML		
6								
7	4-2		18	1.75			25.8	86.3
8								
9								
10	4-3		9	1.00	Medium stiff to stiff, 20-30% very fine sand		25.4	86.5
11								
12					Color change to olive gray sandy SILT medium dense, moist, 40-45% very fine sand fraction			
13								
14								
15	4-4		13				17.5	
16								
17								
18								
19							▼	
20	4-5		19		Saturated		21.0	
21								
22					Light olive gray poorly graded SAND, dense, saturated	SP		
23								
24								
25	4-6		31				31.2	
26								
27								

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Figure A-7

EXPLORATORY BORING LOG

No. B-4 Cont.

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:**	24-Mar-08	**FILE No.**	LSS-0620-01
DRILLER:	Exploration Geoservices	**DRILLING METHOD:**	B-53	**LOGGED BY:**	BP
BORING DIAMETER:	8" HS	**BORING DEPTH:**	50.0'	**GROUNDWATER DEPTH:**	19.0'

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
28					Light olive gray poorly graded SAND, medium dense, saturated very fine to fine grained	SP		
29								
30	4-7		22				27.4	
31								
32								
33								
34								
35	4-8		15		Grayish olive (10Y4/2) fat CLAY stiff to very stiff, very moist	CH	55.7	
36								
37					Common saturated silt and silty sand interbeds			
38								
39								
40	4-9		16				36.0	
41								
42								
43								
44								
45	4-10		9				35.8	
46								
47								
48								
49								
50	4-11		23				24.8	
51					**TD @ 50.0'** **GROUNDWATER ENCOUNTERED @ 19.0'**			

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Figure A-7

EXPLORATORY BORING LOG

No. B-5

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:** 25-Mar-08	**FILE No.** LSS-0620-01
DRILLER:	Exploration Geoservices	**DRILLING METHOD:** B-53	**LOGGED BY:** BP
BORING DIAMETER:	8" HS	**BORING DEPTH:** 50.0'	**GROUNDWATER DEPTH:** 40.0'

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown fat CLAY very moist, medium stiff very fine	CH		
2								
3	5-1		12	1.75	Moderate yellowish brown, (10YR5/4) silty SAND, loose moist, 10-20% fines, very fine to fine grained	SM	14.1	89.1
4								
5					Dark yellowish orange (10YR6/6) poorly graded SAND, very stiff, moist very fine to fine grained, 5-10% fines			
6	5-2		25	0.50			12.9	95.3
7					Dark yellowish orange (10YR6/6) poorly graded SAND, medium dense moist, very fine to fine grain, 5-10% fines	SP		
8								
9								
10	5-3		20				6.1	87.2
11								
12								
13								
14					Dark yellowish orange poorly grade silty SAND with trace clay loose, moist very fine to fine grained, 15-20% fines	SM		
15	5-4		9				9.9	
16								
17								
18					Color change to medium yellowish brown (10YR5/4) medium dense, trace clay, 15-25% fines			
19								
20	5-5		12				12.9	
21								
22								
23					Color change to dark yellowish orange silty SAND, loose very moist, very fine grained, 40-45% fines			
24								
25	5-6		9		Occasional olive gray (5Y4/1) clay interbeds		26.8	
26								
27								

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Figure A-8

EXPLORATORY BORING LOG

No. B-5 Cont.

PROJECT:	Salinas Ag/Industrial Park	DATE DRILLED:	25-Mar-08
DRILLER:	Exploration Geoservices	DRILLING METHOD:	B-53
BORING DIAMETER:	8" HS	BORING DEPTH:	50.0'

FILE No. LSS-0620-01

LOGGED BY: BP

GROUNDWATER DEPTH: 40.0'

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
28					Moderate yellowish brown silty SAND with clay, medium dense, very moist very fine grained, 35-45% fines	SM		
29								
30	5-7		17				24.9	
31								
32								
33					Moderate yellowish brown (10YR5/4) well graded SAND medium dense, moist, 5-10% fines with occasional poorly graded sand interbeds	SW		
34								
35	5-8		23				6.7	
36								
37								
38								
39								
40	5-9		36		Dense, saturated		14.2	
41								
42								
43					Dark yellowish brown (10YR4/2) fat CLAY with stiff very moist	CH		
44								
45	5-10		24				30.6	
46								
47								
48								
49								
50	5-11		23				33.7	
51					TD @ 50.0' GROUNDWATER ENCOUNTERED @ 40.0'			

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Figure A-8

EXPLORATORY BORING LOG

No. B-6

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:** 25-Mar-08	**FILE No.** LSS-0620-01
DRILLER:	Exploration Geoservices	**DRILLING METHOD:** B-53	**LOGGED BY:** BP
BORING DIAMETER:	8" HS	**BORING DEPTH:** 50.0'	**GROUNDWATER DEPTH:** N/A

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown fat CLAY, medium stiff, moist	CH		
2								
3	6-1		22	3.25	Color change to moderate yellowish brown (10YR5/14) very stiff		21.8	104.8
4								
5								
6	6-2		34	4.50			22.6	95.2
7								
8					Moderate yellowish brown silty SAND, loose to medium dense, moist, very fine grained, 30-35% fines	SM		
9								
10	6-3		15	3.00			15.2	89.8
11								
12								
13								
14					Moderate yellowish brown SILT, very stiff, moist, 25-30% very fine sand	ML		
15	6-4		23				29.4	
16								
17					Occasional clay interbeds			
18								
19								
20	6-5		23				27.2	
21								
22								
23								
24					Moderate yellowish brown poorly graded SAND, dense, moist, very fine grained, 5-10% fines	SP		
25	6-6		36				8.9	
26								
27								

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Figure A-9

EXPLORATORY BORING LOG

No. B-6 Cont.

PROJECT: Salinas Ag/Industrial Park | DATE DRILLED: 25-Mar-08 | FILE No. LSS-0620-01

DRILLER: Exploration Geoservices | DRILLING METHOD: B-53 | LOGGED BY: BP

BORING DIAMETER: 8"HS | BORING DEPTH: 50.0' | GROUNDWATER DEPTH: N/A

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
28					Pale yellowish brown (10YR6/2) poorly graded SAND, dense, moist, very fine grained, 10-15% fines	SP		
29								
30	6-7		33				7.8	
31								
32								
33								
34								
35	6-8		21		Medium dense, difficult drilling		7.6	
36								
37								
38					Pale yellowish brown well graded SAND, very dense, slightly moist to moist, trace very fine gravel, <5% fines	SW		
39								
40	6-9		53				4.3	
41								
42								
43					Pale yellowish brown poorly graded sand, dense, moist, very fine to fine grained	SP		
44								
45	6-10		43				5.1	
46								
47								
48					Pale yellowish brown (10YR6/2) clayey SAND, medium dense, very moist, well graded, 5% fine gravel, 15-20% fines	SC		
49								
50	6-11		28				24.3	
51					TD @ 50.0' NO GROUNDWATER ENCOUNTERED			
25								
26								
27								

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Figure A-9

EXPLORATORY BORING LOG

No. B-7

PROJECT:	Salinas Ag/Industrial Park	DATE DRILLED: 25-Mar-08	FILE No. LSS-0620-01
DRILLER:	Exploration Geoservices	DRILLING METHOD: B-53	LOGGED BY: TL
BORING DIAMETER:	8" HS	BORING DEPTH: 50.0'	GROUNDWATER DEPTH: N/A

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown (10YR2/2) fat CLAY, very moist, soft	CH		
2								
3	7-1		13	1.75	Dark yellowish brown sandy SILT, moist, stiff, 30-40% very fine grained sand fraction	ML	20.4	91.5
4								
5								
6	7-2		10	2.00	Medium yellowish brown silty SAND, loose, moist, very fine grained, 20-30% fines	SM	14.6	87.5
7								
8								
9								
10	7-3		15	2.25	Very moist, 35-45% fines		19.1	86.6
11								
12								
13					Grayish olive (10YR4/2) fat CLAY, very moist, very stiff, 10% very fine grained sand fraction	CH		
14								
15	7-4		16				35.9	
16								
17								
18								
19					Color change to medium yellowish brown, stiff			
20	7-5		12				32.3	
21								
22								
23								
24								
25	7-6		20		Very stiff, moist		30.6	
26								
27								

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Figure A-10

EXPLORATORY BORING LOG

No. B-7 Cont.

PROJECT:	Salinas Ag/Industrial Park	DATE DRILLED: 25-Mar-08	FILE No. LSS-0620-01
DRILLER:	Exploration Geoservices	DRILLING METHOD: B-53	LOGGED BY: TL
BORING DIAMETER:	8" HS	BORING DEPTH: 50.0'	GROUNDWATER DEPTH: N/A

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
28					Dark yellowish orange lean CLAY with caliche, very stiff, moist 10% very fine to fine grained	CL		
29								
30	7-7		24				22.5	
31								
32								
33								
34					Medium yellowish brown SILT, very stiff, very moist, 10 % very fine grained sand fraction	ML		
35	7-8		22				28.6	
36								
37								
38								
39					Medium yellowish brown fat CLAY, very stiff, very moist, 10-15% very fine to fine grained	CH		
40	7-9		23				29.4	
41								
42								
43								
44								
45	7-10		24		Occasional silty interbeds		22.2	
46								
47								
48								
49								
50	7-11		25				23.5	
51					**TD @ 50.0'** **NO GROUNDWATER ENCOUNTERED**			

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Figure
A-10

EXPLORATORY BORING LOG

No. B-8

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:**	25-Mar-08
DRILLER:	Exploration Geoservices	**DRILLING METHOD:**	B-53
BORING DIAMETER:	8" HS	**BORING DEPTH:**	50.0'

FILE No. LSS-0620-01
LOGGED BY: TL
GROUNDWATER DEPTH: 23.0'

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown (10YR2/2) fat CLAY, medium stiff moist	CH		
2								
3	8-1		19	4.50	Color change to medium yellowish brown very stiff moist to very moist		24.3	82.6
4								
5					Medium yellowish brown SILT very stiff moist to very moist 20% very fine grained sand fraction	ML		
6								
7	8-2		25	1.25			24.9	91.9
8								
9					Pale yellowish brown (10YR6/2) silty SAND, moist, loose to medium dense, 20-30% fines	SM		
10	8-3		15				12.6	66.2
11								
12								
13								
14					Medium yellowish brown SILT, medium stiff, very moist 10-15% very fine grained sand fraction common clay intebeds and occasional silty sand interbeds	ML		
15	8-4		6				34.5	
16								
17								
18								
19								
20	8-4		10		Stiff		31.2	
21								
22								
23							▼	
24								
25	8-5		8		Saturated, medium stiff, <5% very fine sand		31.1	
26								
27								

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Figure A-11

EXPLORATORY BORING LOG

No. B-8 Cont.

PROJECT:	Salinas Ag/Industrial Park	DATE DRILLED: 25-Mar-08	FILE No. LSS-0620-01
DRILLER:	Exploration Geoservices	DRILLING METHOD: B-53	LOGGED BY: TL
BORING DIAMETER:	8" HS	BORING DEPTH: 50.0'	GROUNDWATER DEPTH: 23.0'

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
28					Medium yellowish brown SILT, stiff, saturated, 10% very fine grained sand fraction	ML		
29								
30	8-7		13				37.8	
31								
32					Color change to dark gray (N3) 5% very fine grained sand			
33								
34								
35	8-8		17				33.7	
36								
37								
38								
39								
40	8-9		17		25-30% very fine sand		37.5	
41								
42								
43								
44					Dark gray fat CLAY (N3) stiff, saturated, 5% very fine grained sand fraction	CH		
45	8-10		13				56.4	
46								
47								
48								
49					Dark gray (N3) SILT with organics very stiff, 5% very fine grained sand fraction	ML		
50	8-11		19				44.8	
51					**TD @ 50.0'** **GROUNDWATER ENCOUNTERED @ 23.0'**			

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Figure A-11

EXPLORATORY BORING LOG

No. B-9

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:**	25-Mar-08
DRILLER:	Exploration Geoservices	**DRILLING METHOD:**	B-53
BORING DIAMETER:	8" HS	**BORING DEPTH:**	50.0'

FILE No. LSS-0620-01
LOGGED BY: TL
GROUNDWATER DEPTH: 23.5'

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dark yellowish brown fat CLAY, stiff moist to very moist 5% fine grained sand fraction	CH		
2								
3								
4	9-1		17	2.50	Very stiff, very moist, very fine to medium grained sand fraction		33.4	80.0
5								
6					Medium yellowish brown (10YR5/4) SILT, very stiff moist 5% very fine grained sand fraction	ML		
7	9-2		22	2.75			15.6	87.1
8								
9					Color change to dark yellowish orange (10YR6/6) stiff very moist			
10	9-3		16	2.25			20.1	84.4
11								
12								
13					Dark yellowish brown (10YR4/2) fat CLAY very moist medium stiff, 5% very fine to medium grained sand fraction	CH		
14								
15	9-4		8				43.4	
16								
17								
18								
19								
20	9-5		10		Stiff, 5% very fine to coarse grain sand fraction		41.7	
21								
22								
23								
24					Dark yellowish brown (10YR4/2) lean CLAY very stiff, saturated <5% very fine grained sand	CL	▼	
25	9-6		20				41.5	
26								
27								

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Figure A-12

EXPLORATORY BORING LOG

No. B-9 Cont.

PROJECT:	Salinas Ag/Industrial Park	DATE DRILLED: 25-Mar-08	FILE No. LSS-0620-01
DRILLER:	Exploration Geoservices	DRILLING METHOD: B-53	LOGGED BY: TL
BORING DIAMETER:	8" HS	BORING DEPTH: 50.0'	GROUNDWATER DEPTH: 23.5'

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil Group	Moisture (% dry weight)	Dry Density (pcf)
28					Dark yellowish (10YR4/2) lean CLAY, very stiff, saturated, <5% very fine grained sand fraction	CL		
29					Light olive gray (5Y5/2) SILT, stiff, saturated, <5% very fine grained sand fraction	ML		
30	9-7		13				38.7	
31								
32								
33								
34					Color change to dark gray (N3) very stiff			
35	9-8		29				29.0	
36								
37								
38								
39					Dark gray (N3) fat CLAY very stiff, saturated 2-5% very fine grained sand fraction	CH		
40	9-9		17				46.1	
41								
42								
43								
44								
45	9-10		16				40.6	
46								
47								
48								
49					Dusky brown (5YR2/2) elastic SILT with grayish black (N2) clay very stiff saturated	MH		
50	9-11		16				70.0	
51					**TD @ 50.0'** **GROUNDWATER ENCOUNTERED @ 23.5'**			

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Figure A-12

EXPLORATORY BORING LOG

No. B-10

PROJECT:	Salinas Ag/Industrial Park	DATE DRILLED: 25-Mar-08	FILE No. LSS-0620-01
DRILLER:	Exploration Geoservices	DRILLING METHOD: B-53	LOGGED BY: TL
BORING DIAMETER:	8" HS	BORING DEPTH: 20.0'	GROUNDWATER DEPTH: N/A

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dark yellowish brown fat CLAY, moist to very moist stiff	CL		
2								
3					Medium yellowish brown SILT, stiff, very moist, 10% very fine grained sand fraction	ML		
4	10-1		18	1.75			24.7	88.5
5					Pale yellowish brown poorly graded SAND, medium dense, moist, 5-20% fines, very fine grained	SM		
6								
7	10-2		33	2.25			11.8	92.0
8								
9								
10	10-3		19	1.75			12.0	91.4
11								
12								
13					Dark yellowish brown fat CLAY, stiff very moist, very fine to fine grained sand fraction	CH		
14								
15	10-4		13				41.8	
16								
17								
18								
19								
20	10-5		18		Very stiff		39.0	
21					**TD @20.0'**			
22					**NO GROUNDWATER ENCOUNTERED**			
23								
24								
25								
26								
27								

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Figure A-13

EXPLORATORY BORING LOG

No. B-11

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:**	26-Mar-08
FILE No.	LSS-0620-01		
DRILLER:	Exploration Geoservices	**DRILLING METHOD:**	B-53
LOGGED BY:	TL		
BORING DIAMETER:	8" HS	**BORING DEPTH:**	20.0'
GROUNDWATER DEPTH:	N/A		

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1	11-1		30	2.50	Dusky yellowish brown fat CLAY, stiff, mist	CH	28.5	85.4
2								
3								
4					Very stiff, very moist			
5								
6	11-2		30	2.50	Dark yellowish brown sand lean CLAY very stiff, very moist 30-35% very fine to fine grained sand	CL	27.1	87.3
7								
8								
9								
10	11-3		18		Medium yellowish brown silty SAND, medium dense, very moist, 25-35% fines	SM	22.7	85.6
11								
12								
13								
14	11-4		17		Dark yellowish brown lean CLAY, very stiff, very moist, 5% very fine grained sand fraction	CL	21.6	
15								
16								
17								
18								
19	11-5		10		Pale yellowish brown SILT, stiff, very moist, 20-30% very fine grained sand fraction	ML	24.3	
20								
21					**TD @ 20.0'** **NO GROUNDWATER ENCOUNTERED**			
22								
23								
24								
25								
26								
27								

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Figure A-14

EXPLORATORY BORING LOG

No. B-12

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:**	26-Mar-08
DRILLER:	Exploration Geoservices	**DRILLING METHOD:**	B-53
BORING DIAMETER:	8" HS	**BORING DEPTH:**	30.0'

FILE No. LSS-0620-01
LOGGED BY: TL
GROUNDWATER DEPTH: N/A

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1–3	12-1		26	4.50	Dark yellowish brown (10YR4/2) fat CLAY, moist very stiff, 5% very fine grained sand	CH	24.9	88.0
4–12	12-2 12-3		16 22	2.50 2.25	Pale yellowish brown (10YR6/2) silty SAND medium dense, very moist, very fine to fine grained sand, 20-25% fines	SM	18.4 15.6	96.5 97.4
13–18	12-4		13		Dark yellowish orange (10YR6/6) sandy lean CLAY stiff, very moist, 35-45% well graded sand fraction	CL	28.8	
19–27	12-5 12-6		13 32		Medium brown (5YR4/4) well graded sand, medium dense, moist 10-15% fines, <5% very fine gravel	SW	8.9 6.9	

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Figure A-15

EXPLORATORY BORING LOG

No. B-12 Cont.

PROJECT:	Salinas Ag/Industrial Park	DATE DRILLED: 26-Mar-08	FILE No. LSS-0620-01
DRILLER:	Exploration Geoservices	DRILLING METHOD: B-53	LOGGED BY: TL
BORING DIAMETER:	8" HS	BORING DEPTH: 30.0'	GROUNDWATER DEPTH: N/A

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
28					Medium brown (5YR4/4) well graded SAND, medium dense, moist, 10% fines, 20% fine gravel	SW		
29								
30	12-7		29				8.1	
31					**TD @30.0'** **NO GROUNDWATER ENCOUNTERED**			

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Figure A-15

EXPLORATORY BORING LOG

No. B-13

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:**	26-Mar-08
DRILLER:	Exploration Geoservices	**DRILLING METHOD:**	B-53
BORING DIAMETER:	8" HS	**BORING DEPTH:**	10.0'

FILE No. LSS-0620-01
LOGGED BY: TL
GROUNDWATER DEPTH: N/A

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1	13-1		19	2.75	Dark yellowish brown fat CLAY, moist, stiff 5% very fine grained sand	CH	30.3	78.6
2								
3								
4					Very stiff, very moist			
5								
6	13-2		17	1.50	Medium yellowish brown (10YR5/4) silty SAND, medium dense, moist, 15-25%	SM	18.7	95.2
7								
8								
9	13-3		23	2.00	Dark yellowish brown (10YR4/2) lean CLAY, very stiff, very moist, 5% very fine grained sand fraction	CL	27.2	90.4
10								
11					**TD @ 10.0'**			
12					**NO GROUNDWATER ENCOUNTERED**			
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								

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Figure
A-16

EXPLORATORY BORING LOG

No. B-14

PROJECT:	Salinas Ag/Industrial Park	DATE DRILLED:	26-Mar-08	FILE No.	LSS-0620-01
DRILLER:	Exploration Geoservices	DRILLING METHOD:	B-53	LOGGED BY:	TL
BORING DIAMETER:	8" HS	BORING DEPTH:	20.0'	GROUNDWATER DEPTH:	N/A

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1	14-1		18	1.50	Dusky yellowish brown (10YR2/2) fat CLAY, stiff, moist	CH	29.7	83.7
2								
3								
4	14-2		20	1.50	Color change to dark yellowish brown (10YR4/2) very stiff, very moist, common interbeds of elastic silt		31.3	79.0
5								
6								
7								
8								
9	14-3		13	2.00	Dark yellowish orange (10YR6/6) silty SAND medium dense, very moist, very fine to fine grained sand, 20-25% fines	SP	14.1	89.9
10								
11								
12								
13								
14	14-4		18		Dark yellowish brown (10YR4/2) fat CLAY, very stiff moist, very fine grained sand fraction	CH	27.4	
15								
16								
17								
18	14-5		14		Color change to medium yellowish brown (10YR5/4) stiff		30.2	
19								
20								
21					**TD @ 20.0"** **NO GROUNDWATER ENCOUNTERED**			
22								
23								
24								
25								
26								
27								

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Figure A-17

EXPLORATORY BORING LOG

No. B-15

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:**	26-Mar-08
DRILLER:	Exploration Geoservices	**DRILLING METHOD:**	B-53
BORING DIAMETER:	8" HS	**BORING DEPTH:**	30.0'

FILE No. LSS-0620-01
LOGGED BY: TL
GROUNDWATER DEPTH: 18.0'

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1–2					Dusky yellowish brown (10YR2/2) fat CLAY, stiff, moist	CH		
3–5	15-1		15	1.00	Color change to medium yellowish brown (10YR5/4), very moist		34.9	78.4
6–8	15-2		21	4.50	Medium yellowish brown (10YR5/4) silty SAND, medium dense, moist, very fine to fine grained, 15-30% fines	SM	10.3	97.9
9–13	15-3		24	0.75			11.0	83.7
14–18	15-4		11		Olive gray (5Y4/1) lean CLAY, stiff, moist, 5% very fine grained sand fraction	CL	16.4	
19–23	15-5		19		Color change to medium yellowish brown (10YR5/4), very moist, very stiff, 5% very fine grained sand		33.9	
24–27	15-6		9		Medium yellowish brown (10YR5/4) SILT, stiff, saturated, 5% very fine to fine grained sand fraction	ML	35.0	

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Figure A-18

EXPLORATORY BORING LOG

No. B-15 Cont.

PROJECT: Salinas Ag/Industrial Park | DATE DRILLED: 26-Mar-08 | FILE No. LSS-0620-01

DRILLER: Exploration Geoservices | DRILLING METHOD: B-53 | LOGGED BY: TL

BORING DIAMETER: 8" HS | BORING DEPTH: 30.0' | GROUNDWATER DEPTH: 18.0'

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
28					Medium yellowish brown (10YR5/4) SILT, hard saturated	ML		
29								
30	15-7		31				30.0	
31					**TD @ 30.0'**			
					GROUNDWATER ENCOUNTERED @ 18.0'			

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Figure
A-18

EXPLORATORY BORING LOG

No. B-16

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:**	26-Mar-08
DRILLER:	Exploration Geoservices	**DRILLING METHOD:**	B-53
BORING DIAMETER:	8" HS	**BORING DEPTH:**	10.0'

FILE No. LSS-0620-01
LOGGED BY: TL
GROUNDWATER DEPTH: N/A

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown (10YR2/2) fat CLAY, stiff, moist to very moist, 5% very fine grained sand	CH		
2								
3	16-1		16	2.00			38.1	77.6
4								
5	16-2		26	2.75	Very stiff		32.4	84.1
6								
7								
8								
9					Color change to medium yellowish brown (10YR5/4)			
10	16-3		20	1.25			35.7	73.7
11					**TD @ 10.0'**			
12					**NO GROUNDWATER ENCOUNTERED**			
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								

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Figure A-19

EXPLORATORY BORING LOG

No. B-17

PROJECT:	Salinas Ag/Industrial Park	DATE DRILLED: 26-Mar-08	FILE No. LSS-0620-01
DRILLER:	Exploration Geoservices	DRILLING METHOD: B-53	LOGGED BY: TL
BORING DIAMETER:	8" HS	BORING DEPTH: 10.0'	GROUNDWATER DEPTH: N/A

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown (10YR2/2) fat CLAY, moist, medium stiff	CH		
2								
3					Stiff, very moist			
4	17-1		17	2.00			32.7	80.1
5								
6					Color change to dark yellowish brown (10YR4/2) very stiff, very moist, 5% very fine to medium sand			
7	17-2		25	2.00			31.4	77.5
8								
9					Color change to medium yellowish brown (10YR5/4)			
10	17-3		30	1.75			32.1	84.9
11					**TD @10.0'**			
12					**NO GROUNDWATER ENCOUNTERED**			
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								

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Figure
A-20

EXPLORATORY BORING LOG

No. B-18

PROJECT: Salinas Ag/Industrial Park	DATE DRILLED: 26-Mar-08	FILE No. LSS-0620-01	
DRILLER: Exploration Geoservices	DRILLING METHOD: B-53	LOGGED BY: TL	
BORING DIAMETER: 8" HS	BORING DEPTH: 20.0'	GROUNDWATER DEPTH:	

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown (10YR2/2) lean CLAY, stiff, moist	CL		
2								
3					Very stiff, very moist			
4	18-1		19	2.00			24.1	90.4
5								
6					Color change to medium yellowish brown (10YR5/4) slightly moist to moist 10% very fine grained sand			
7	18-2		35	3.00			34.2	74.1
8								
9					Medium yellowish brown (10YR5/4) SILT, moist	ML		
10	18-3		26	4.50			22.1	76.7
11								
12								
13								
14								
15	18-4		13		Medium yellowish brown (10YR5/4) fat CLAY, stiff, very moist, 3% very fine grained sand	CH	37.1	
16								
17								
18								
19					Color change to dark yellowish orange (10YR6/6) with pale yellowish brown (10YR6/2) mottles			
20	18-5		14				34.7	
21					**TD @ 20.0'**			
22					**NO GROUNDWATER ENCOUNTERED**			
23								
24								
25								
26								
27								

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Figure A-21

EXPLORATORY BORING LOG

No. B-19

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:**	26-Mar-08
FILE No.	LSS-0620-01		
DRILLER:	Exploration Geoservices	**DRILLING METHOD:**	B-53
LOGGED BY:	TL		
BORING DIAMETER:	8" HS	**BORING DEPTH:**	15.0'
GROUNDWATER DEPTH:	N/A		

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown (10YR2/2) fat CLAY, stiff, moist to very moist	CH		
2								
3	19-1		32	1.00	Very stiff, very moist		34.3	76.9
4					Color change to medium yellowish brown (10YR5/4), very stiff to hard			
5	19-2		36	2.25			34.7	66.7
6								
7								
8					Color change to dark yellowish brown (10YR4/2) 5% very fine to fine grained sand, very stiff			
9								
10	19-3		2	4.50			35.6	77.4
11								
12								
13								
14								
15	19-4		8		Color change to medium yellowish brown, medium stiff, 5% very fine grained sand		37.0	
16					**TD @ 15.0'**			
17					**NO GROUNDWATER ENCOUNTERED**			
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								

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Figure
A-22

EXPLORATORY BORING LOG

No. B-20

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:** 26-Mar-08	**FILE No.** LSS-0620-01
DRILLER:	Exploration Geoservices	**DRILLING METHOD:** B-53	**LOGGED BY:** TL
BORING DIAMETER:	8" HS	**BORING DEPTH:** 15.0'	**GROUNDWATER DEPTH:** N/A

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown (10YR2/2) fat CLAY, medium stiff moist	CH		
2								
3					Color change to dark yellowish brown (10YR4/2) very moist, stiff			
4	20-1		15	1.00			39.5	72.0
5								
6								
7	20-2		32	3.25	Very stiff, 3% very fine grained sand		36.9	71.0
8								
9								
10	20-3		30	4.50			35.0	77.6
11								
12								
13								
14								
15	20-4		15				37.2	
16					**TD @ 15.0'** **NO GROUNDWATER ENCOUNTERED**			
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								

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Figure A-23

EXPLORATORY BORING LOG

No. B-21

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:**	26-Mar-08
FILE No.	LSS-0620-01		
DRILLER:	Exploration Geoservices	**DRILLING METHOD:**	B-53
LOGGED BY:	TL		
BORING DIAMETER:	8" HS	**BORING DEPTH:**	20.0'
GROUNDWATER DEPTH:	N/A		

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown (10YR2/2) fat CLAY, stiff very moist			
2								
3								
4	21-1		21	2.50	Very stiff, moist		26.4	92.9
5								
6					Color change to medium yellowish brown (10YR5/4) very stiff, moist			
7	21-2		27	2.00			26.8	93.5
8								
9								
10	21-3		36	3.75	Common silty clay and silt interbeds		33.0	82.9
11								
12								
13								
14								
15	21-4		22		Very stiff, slightly moist, 20-25% very fine grained sand fraction		34.2	
16								
17								
18								
19								
20	21-5		18		Very stiff 20-25% well graded sand fraction, trace fine gravel		37.1	
21					**TD @ 20.0'**			
22					**NO GROUNDWATER ENCOUNTERED**			
23								
24								
25								
26								
27								

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Figure A-24

EXPLORATORY BORING LOG

No. B-22

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:** 26-Mar-08	**FILE No.** LSS-0620-01
DRILLER:	Exploration Geoservices	**DRILLING METHOD:** B-53	**LOGGED BY:** BP
BORING DIAMETER:	8" HS	**BORING DEPTH:** 30.0'	**GROUNDWATER DEPTH:** N/A

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown silty fat CLAY, slightly moist, stiff	CH		
2								
3	22-1		29	4.50	Color change to medium yellowish brown (10YR5/4), very stiff, moist, 3% very fine grained sand		22.3	90.1
4					Moderate yellowish brown (10YR5/4) elastic SILT, very stiff, moist	MH		
5	22-2		28	4.50			22.2	92.3
6								
7								
8								
9					Color change to yellowish orange (10YR6/6)			
10	22-3		24	2.00	Very stiff		29.0	89.1
11								
12								
13								
14					Dark yellowish orange (10YR6/6) silty fat CLAY, very stiff, very moist	CH		
15	22-4		22				35.1	
16								
17								
18								
19								
20	22-5		22				35.0	
21								
22								
23								
24								
25	22-6		18				38.3	
26								
27								

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Figure A-25

EXPLORATORY BORING LOG

No. B-22 Cont.

PROJECT:	Salinas Ag/Industrial Park	DATE DRILLED: 26-Mar-08	FILE No. LSS-0620-01
DRILLER:	Exploration Geoservices	DRILLING METHOD: B-53	LOGGED BY: TL
BORING DIAMETER:	8" HS	BORING DEPTH: 30.0'	GROUNDWATER DEPTH: N/A

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
28					Dark yellowish orange (10YR6/6) silty fat CLAY stiff, very moist, 3% very fine grained sand fraction	CH		
29								
30	22-7		12				39.4	
31					**TD @30.0'** **NO GROUNDWATER ENCOUNTERED**			

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Figure
A-25

EXPLORATORY BORING LOG

No. B-23

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:**	26-Mar-08	**FILE No.**	LSS-0620-01
DRILLER:	Exploration Geoservices	**DRILLING METHOD:**	B-53	**LOGGED BY:**	TL
BORING DIAMETER:	8" HS	**BORING DEPTH:**	30.0'	**GROUNDWATER DEPTH:**	30.0'

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown (10YR2/2) lean CLAY, stiff moist	CL		
2	23-1		21	2.25	Moderate yellowish brown (10YR5/4) elastic SILT, very stiff moist, 5% well graded sand fraction, common caliche veins	MH	24.7	91.8
3								
4					Moderate yellowish brown (10YR5/4) silty lean CLAY, very stiff, moist	CL		
5	23-2		27	4.50			24.4	90.1
6								
7								
8								
9					Moderate yellowish brown fat CLAY, very stiff, very moist	CH		
10	23-3		33	3.75			31.6	81.6
11								
12								
13					Color change to dark yellowish orange (10YR6/6)			
14								
15	23-4		18				37.0	
16								
17								
18								
19								
20	23-5		18				35.6	
21								
22								
23								
24								
25	23-6		19				36.1	
26								
27								

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Figure
A-26

EXPLORATORY BORING LOG

No. B-23 Cont.

PROJECT:	Salinas Ag/Industrial Park	DATE DRILLED: 26-Mar-08	FILE No. LSS-0620-01
DRILLER:	Exploration Geoservices	DRILLING METHOD: B-53	LOGGED BY: TL
BORING DIAMETER:	8" HS	BORING DEPTH: 30.0'	GROUNDWATER DEPTH: 30.0'

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
28					Dark yellowish orange (10YR4/6) fat CLAY very stiff, very moist	CL		
29								
30	23-7		23		Saturated		39.5	
31					**TD @ 30.0'** **GROUNDWATER ENCOUNTERED @ 30.0'**			
32								

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Figure A-26

EXPLORATORY BORING LOG

No. B-24

PROJECT:	Salinas Ag/Industrial Park	DATE DRILLED: 26-Mar-08	FILE No. LSS-0620-01
DRILLER:	Exploration Geoservices	DRILLING METHOD: B-53	LOGGED BY: TL
BORING DIAMETER:	8" HS	BORING DEPTH: 15.0'	GROUNDWATER DEPTH: N/A

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown (10YR2/2) fat CLAY, stiff moist	CH		
2								
3	24-1		17	3.00	Color change to dark yellowish orange (10YR 6/6) 5% very fine grained to medium grained sand		26.6	81.2
4								
5								
6					Moderate yellowish brown (10YR5/4) elastic SILT, very stiff very moist,	MH		
7	24-2		29	4.25			31.5	85.4
8								
9					Moderate yellowish brown (10YR5/4) fat CLAY, very stiff to hard, moist, very fine grained sand	CH		
10	24-3		36	2.50			37.3	80.0
11								
12								
13								
14								
15	24-4		21		Very stiff		37.7	
16					**TD @ 15.0'**			
17					**NO GROUNDWATER ENCOUNTERED**			
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								

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Figure
A-27

EXPLORATORY BORING LOG

No. B-25

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:** 27-Mar-08	**FILE No.** LSS-0620-01
DRILLER:	Exploration Geoservices	**DRILLING METHOD:** B-53	**LOGGED BY:** TL
BORING DIAMETER:	8" HS	**BORING DEPTH:** 30.0'	**GROUNDWATER DEPTH:** N/A

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown (10YR2/2) lean CLAY, stiff, moist	CL		
2								
3	25-1		24	4.50	Color change to moderate yellowish brown (10YR5/4), very stiff very fine to coarse grained sand fraction		19.5	97.5
4								
5								
6	25-2		30	3.25	Very fine to fine grained sand		26.7	91.2
7								
8								
9								
10	25-3		34	4.50	Very moist		32.0	79.7
11								
12								
13					Color change to light olive gray (5Y5/2), common Caliche			
14	25-4		20				31.5	
15								
16								
17								
18								
19					Dark yellowish orange fat CLAY (10YR6/6), moist	CH		
20	25-5		20				33.8	
21								
22								
23								
24					Moderate yellowish brown (10YR5/4) elastic SILT, stiff, very moist	MH		
25	25-6		13				34.1	
26					Occasional clay interbeds			
27								

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Figure A-28

EXPLORATORY BORING LOG

No. B-25 Cont.

PROJECT:	Salinas Ag/Industrial Park	DATE DRILLED: 27-Mar-08	FILE No. LSS-0620-01
DRILLER:	Exploration Geoservices	DRILLING METHOD: B-53	LOGGED BY: TL
BORING DIAMETER:	8" HS	BORING DEPTH: 30.0'	GROUNDWATER DEPTH: N/A

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
28					Moderate yellowish brown (10YR5/4) elastic SILT, stiff, very moist	MH		
29					Moderate yellowish brown (10YR5/4) fat CLAY, very stiff very moist, 2% very fine grained sand with occasional silt interbeds	CH		
30	25-7		22				33.9	
31					**TD @ 30.0'** **NO GROUNDWATER ENCOUNTERED**			

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Figure
A-28

EXPLORATORY BORING LOG

No. B-26

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:**	27-Mar-08
DRILLER:	Exploration Geoservices	**DRILLING METHOD:**	B-53
BORING DIAMETER:	8" HS	**BORING DEPTH:**	30.0'

FILE No. LSS-0620-01
LOGGED BY: TL
GROUNDWATER DEPTH: N/A

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown (10YR2/2) lean CLAY, stiff, moist	CL		
2	26-1		13	4.50	Color change to dusky yellowish brown (10YR2/2) with medium yellowish brown (10YR5/4) mottles, moist		22.1	82.2
3								
4					Moderate yellowish brown (10YR5/4) SILT, medium stiff. very moist, 5% very fine grained sand fraction	ML		
5	26-2		8				25.2	73.1
6								
7								
8								
9					Moderate yellowish brown (10YR05/4) silty SAND, medium dense, very moist 45% fines, very fine to fine grained	SM		
10	26-3		23	2.00			18.8	96.2
11								
12								
13								
14					Moderate yellowish brown (10YR5/7) fat CLAY very stiff, moist, abundant caliche veins	CH		
15	26-4		27				31.3	
16								
17								
18								
19								
20	26-5		22		Color change to dark yellowish orange (10YR6/6) mottling, very moist		38.3	
21								
22								
23								
24					Moderate yellowish brown (10YR5/4) elastic SILT, very stiff, very moist, 3% very fine grained sand fraction	MH		
25	26-6		26				28.6	
26								
27								

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Figure A-29

EXPLORATORY BORING LOG

No. B-26Cont.

PROJECT:	Salinas Ag/Industrial Park	DATE DRILLED:	27-Mar-08
FILE No.	LSS-0620-01		
DRILLER:	Exploration Geoservices	DRILLING METHOD:	B-53
LOGGED BY:	TL		
BORING DIAMETER:	8" HS	BORING DEPTH:	30.0'
GROUNDWATER DEPTH:	N/A		

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
28					Moderate yellowish brown (10YR5/4) fat CLAY, hard, moist very fine grained sand 2%	CH		
29								
30	26-7		32		Moderate yellowish brown SILT, hard saturated	ML	32.6	
31					**TD @ 30.0'** **NO GROUNDWATER ENCOUNTERED**			

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Figure A-29

EXPLORATORY BORING LOG

No. B-27

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:** 27-Mar-08	**FILE No.** LSS-0620-01
DRILLER:	Exploration Geoservices	**DRILLING METHOD:** B-53	**LOGGED BY:** BP
BORING DIAMETER:	8" HS	**BORING DEPTH:** 15.0'	**GROUNDWATER DEPTH:** N/A

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown (10YR2/2) lean CLAY, stiff, slightly moist	CL		
2								
3					Moist			
4	27-1		8	4.50	Moderate yellowish brown (10YR5/4) SILT, medium stiff, very moist, 10% very fine to fine grained sand fraction	ML	20.4	84.2
5								
6								
7	27-2		13	1.75	Moist stiff, 25-30% very fine grained sand fraction		14.9	89.2
8								
9					Moderate yellowish brown (10YR5/4) silty SAND, medium dense, very moist, very fine to fine grained, 20-25% fines very moist	SM		
10	27-3		23	0.75			17.0	94.7
11								
12								
13								
14								
15	27-4		22		Dusky yellowish brown (10YR4/2) lean CLAY, very stiff moist, 5% very fine to medium grained sand fraction	CL	19.9	
16					**TD @15.0'** **NO GROUNDWATER ENCOUNTERED**			
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								

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Figure A-30

EXPLORATORY BORING LOG

No. B-28

PROJECT:	Salinas Ag/Industrial Park	DATE DRILLED: 27-Mar-08	FILE No. LSS-0620-01
DRILLER:	Exploration Geoservices	DRILLING METHOD: B-53	LOGGED BY: TL
BORING DIAMETER:	8" HS	BORING DEPTH: 30.0'	GROUNDWATER DEPTH: N/A

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1–2					Dusky yellowish brown (10YR2/2) fat CLAY, stiff, moist, 5% very fine to fine grained sand fraction	CL		
3–5	28-1		10	4.50	Moderate yellowish brown (10YR 5/4) silty SAND, loose, moist	SM	17.9	93.3
6–9	28-2		11	2.00	Dark yellowish brown (10YR4/2) SILT, stiff, moist, 5% very fine to fine grained sand	ML	19.6	91.1
10–14	28-3		20	1.25	Very stiff, very moist		34.1	81.3
15–18	28-4		12		Stiff, occasional clay interbeds		25.9	
19–23	28-5		11		Dark yellowish orange (10YR6/6) poorly graded SAND medium sand dense, moist, very fine to fine grained	SP	8.4	
24–27	28-6		17		Dark yellowish brown (10YR4/2) elastic SILT, very stiff, very moist, 3% very fine to fine grained sand fraction Occasional clay interbeds	MH	34.3	

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Figure A-31

EXPLORATORY BORING LOG

No. B-28 Cont.

PROJECT: Salinas Ag/Industrial Park | DATE DRILLED: 27-Mar-08 | FILE No. LSS-0620-01

DRILLER: Exploration Geoservices | DRILLING METHOD: B-53 | LOGGED BY: TL

BORING DIAMETER: 8" HS | BORING DEPTH: 30.0' | GROUNDWATER DEPTH: N/A

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
28					Dark yellowish brown (10YR4/2) elastic SILT very stiff, very moist	MH		
29					Dark yellowish brown (10YR4/2) sandy lean CLAY, very stiff, moist, 20% well graded sand fraction	CL		
30	28-7		24				20.0	
31					**TD @ 30.0'** **NO GROUNDWATER ENCOUNTERED**			

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Figure A-31

EXPLORATORY BORING LOG

No. B-29

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:** 27-Mar-08	**FILE No.** LSS-0620-01
DRILLER:	Exploration Geoservices	**DRILLING METHOD:** B-53	**LOGGED BY:** TL
BORING DIAMETER:	8" HS	**BORING DEPTH:** 15.0'	**GROUNDWATER DEPTH:** N/

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown, (10YR2/2) fat CLAY, stiff slightly moist to moist	CH		
2								
3								
4	29-1		15	4.50	Moderate yellowish brown (10YR5/4) SILT, very moist to stiff, 5%	ML	28.2	83.8
5								
6								
7	29-2		12	4.50	Moist		20.9	99.3
8								
9								
10	29-3		36	1.25	Dusky yellowish brown (10YR2/2) lean CLAY, very stiff to hard, moist	CL	23.3	93.3
11								
12								
13								
14					Dark yellowish orange (10YR6/6) well graded SAND, slightly moist, medium dense, 5% fines	SW		
15	29-4		22				4.5	
16					**TD @ 15.0'**			
17					**NO GROUNDWATER ENCOUNTERED**			
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								

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Figure A-32

EXPLORATORY BORING LOG

No. B-30

PROJECT:	Salinas Ag/Industrial Park	DATE DRILLED: 27-Mar-08	FILE No. LSS-0620-01
DRILLER:	Exploration Geoservices	DRILLING METHOD: B-53	LOGGED BY: TL
BORING DIAMETER:	8" HS	BORING DEPTH: 10.0'	GROUNDWATER DEPTH: N/A

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1	30-1		19	3.75	Dusky yellowish brown (10YR2/2) fat CLAY, stiff, slightly moist	CH	31.1	77.3
2								
3					Moist, very stiff			
4	30-2		13	2.75	Moderate yellowish brown (10YR5/4) elastic SILT, moist, stiff, 5% fine to fine grained	MH	30.1	79.0
5								
6								
7								
8								
9	30-3		29	4.00	Dusky yellowish brown (10YR2/2) lean CLAY with medium yellowish brown (10YR5/4) mottles very stiff, moist, 1% very fine grained	CL	20.0	103.9
10								
11					**TD @ 10.0'**			
12					**NO GROUNDWATER ENCOUNTERED**			
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								

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Figure
A-33

EXPLORATORY BORING LOG

No. B-31

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:** 27-Mar-08	**FILE No.** LSS-0620-01
DRILLER:	Exploration Geoservices	**DRILLING METHOD:** B-53	**LOGGED BY:** TL
BORING DIAMETER:	8" HS	**BORING DEPTH:** 15.0'	**GROUNDWATER DEPTH:** N/A

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown (10YR2/2) fat CLAY moist, stiff	CH		
2								
3	31-1		13	4.00	Very moist		32.3	82.4
4								
5								
6	31-2		25	2.00	Very stiff		27.7	86.0
7								
8					Color change to moderate yellowish brown (10YR5/4)			
9								
10	31-3		30	1.25			35.4	74.2
11								
12								
13								
14								
15	31-4		18		Common caliche veins		31.2	
16					**TD @ 15.0'**			
17					**NO GROUNDWATER ENCOUNTERED**			
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								

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Figure A-34

EXPLORATORY BORING LOG

No. B-32

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:** 27-Mar-08	**FILE No.** LSS-0620-01
DRILLER:	Exploration Geoservices	**DRILLING METHOD:** B-53	**LOGGED BY:** BP
BORING DIAMETER:	8" HS	**BORING DEPTH:** 30.0'	**GROUNDWATER DEPTH:** 18.0'

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown (10YR2/2) fat CLAY, moist, stiff	CH		
2	32-1		22	2.75	Very stiff		32.3	78.9
3								
4					Color change to moderate yellowish brown (10YR5/4) slightly moist to moist			
5	32-2		19	3.00			31.6	76.0
6								
7								
8								
9					Moderate yellowish brown (10YR5/4) SILT, moist very stiff, 40% very fine sand fraction	ML		
10	32-3		22	0.50			18.6	87.3
11								
12								
13								
14					Color change to dark yellowish brown (10YR4/2), stiff moist to very moist, 2% very fine grained sand			
15	32-4		14				30.4	
16								
17								
18								
19					Dark yellowish orange (10YR6/6) silty SAND, saturated, medium dense, very fine to fine grained sand, 30-35% fines	SM		
20	32-5		17				32.3	
21								
22								
23								
24					Color change to moderate yellowish brown (10YR5/4) 10-15% fines			
25	32-6		19				30.7	
26								
27								

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Figure A-35

EXPLORATORY BORING LOG

No. B-32 Cont.

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:**	27-Mar-08
DRILLER:	Exploration Geoservices	**DRILLING METHOD:**	B-53
BORING DIAMETER:	8" HS	**BORING DEPTH:**	30.0'

FILE No. LSS-0620-01
LOGGED BY: TL
GROUNDWATER DEPTH: 18.0'

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
28					Moderate yellowish brown (10YR5/4) silty SAND, medium dense, saturated, 10-15% fines, very fine grained	SM		
29								
30	32-7		26				31.2	
31					**TD @ 30.0'** **GROUNDWATER ENCOUNTERED @ 18.0'**			

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EXPLORATORY BORING LOG

No. B-33

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:** 27-Mar-08	**FILE No.** LSS-0620-01
DRILLER:	Exploration Geoservices	**DRILLING METHOD:** B-53	**LOGGED BY:** TL
BORING DIAMETER:	8" HS	**BORING DEPTH:** 10.0'	**GROUNDWATER DEPTH:** N/A

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown (10YR2/2) lean CLAY, stiff, moist	CL		
2								
3	33-1		18	4.50	Moderate yellowish brown (10YR5/4) silty SAND, medium dense, moist, 30-40% fines, very fine to fine grained sand	SM	12.4	101.5
4								
5								
6					Moderate yellowish brown (10YR5/4) SILT, very stiff, moist, 5% very fine to fine grained sand	ML		
7	33-2		21	2.00			25.9	83.3
8								
9					Moderate yellowish brown (10YR5/4) silty SAND, medium dense, moist, 15-20% fines very fine to fine grained sand	SP		
10	33-3		23	0.50			9.8	90.5
11					**TD @ 10.0'** **NO GROUNDWATER ENCOUNTERED**			
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								

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Figure
A-36

EXPLORATORY BORING LOG

No. B-34

PROJECT:	Salinas Ag/Industrial Park	DATE DRILLED: 27-Mar-08	FILE No. LSS-0620-01
DRILLER:	Exploration Geoservices	DRILLING METHOD: B-53	LOGGED BY: TL
BORING DIAMETER:	8" HS	BORING DEPTH: 15.0'	GROUNDWATER DEPTH: N/A

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1	34-1		22	1.50	Dusky yellowish brown (10YR2/2) fat CLAY, stiff, moist	CH	33.9	81.9
2								
3					Very stiff, very moist			
4	34-2		20	1.50	Moderate yellowish brown (10YR5/4) elastic SILT moist to very moist, very stiff, 3% very fine grained	MH	33.1	76.3
5								
6					Occasional clay interbeds			
7								
8								
9	34-3		22	1.00	Moderate yellowish brown (10YR5/4) well graded SAND, medium dense, very moist, 10% fines	SW	11.9	83.6
10								
11								
12								
13								
14	34-4		9		Olive gray (5Y4/1) fat CLAY, stiff very moist	CH	39.5	
15								
16					**TD @15.0'**			
17					**NO GROUNDWATER ENCOUNTERED**			
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								

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Figure A-37

EXPLORATORY BORING LOG

No. B-35

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:** 27-Mar-08	**FILE No.** LSS-0620-01
DRILLER:	Exploration Geoservices	**DRILLING METHOD:** B-53	**LOGGED BY:** TL
BORING DIAMETER:	8" HS	**BORING DEPTH:** 15.0'	**GROUNDWATER DEPTH:** N/A

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown (10YR2/2) lean CLAY, stiff	CL		
2								
3	35-1		18	1.00	Moderate yellowish brown (10YR5/4) SILT, stiff, very moist, 5% very fine grained sand fraction	ML	28.3	77.7
4								
5								
6	35-2		11	1.25			22.8	109.9
7								
8								
9	35-3		13	2.25	Dark yellowish brown (10YR4/2) lean CLAY, stiff, moist, 2% very fine grained and fraction	CL	29.8	89.4
10								
11								
12								
13								
14	35-4		16		Moderate yellowish brown (10YR5/4) silty SAND, medium dense, very moist, very fine grained, 40% fines	SM	16.4	
15								
16					**TD @ 15.0'** **NO GROUNDWATER ENCOUNTERED**			
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								

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Figure A-38

EXPLORATORY BORING LOG

No. B-36

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:** 27-Mar-08	**FILE No.** LSS-0620-01
DRILLER:	Exploration Geoservices	**DRILLING METHOD:** B-53	**LOGGED BY:** TL
BORING DIAMETER:	8" HS	**BORING DEPTH:** 30.0'	**GROUNDWATER DEPTH:** 23.0'

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown (10YR2/2) lean CLAY, soft, slightly moist	CL		
2	36-1		16	0.50	Moderate yellowish brown (10YR5/4) silty SAND, medium dense, moist, 25% fines, very fine to fine grained sand	SM	8.4	93.5
3								
4								
5	36-2		14	3.25	Loose, very moist		12.6	95.1
6								
7								
8								
9					Dark yellowish brown (10YR4/2) lean CLAY, very moist very stiff, 1% very fine grained sand	CL		
10	36-3		22	2.25			27.1	92.4
11								
12								
13								
14					Moderated yellowish brown (10YR5/4) silty SAND, loose, very moist, 35-40% fines, very fine to fine grained sand	SM		
15	36-4		9				24.4	
16								
17								
18								
19								
20	36-5		21		Medium dense, moist, 15-25% fines		13.2	
21								
22								
23								
24					Light olive gray (5Y5/2) poorly graded SAND, medium dense, saturated, 5-10% fines, very fine grained	SP		
25	36-6		19				31.4	
26								
27								

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Figure A-39

EXPLORATORY BORING LOG

No. B-36 Cont.

PROJECT:	Salinas Ag/Industrial Park	DATE DRILLED: 27-Mar-08	FILE No. LSS-0620-01
DRILLER:	Exploration Geoservices	DRILLING METHOD: B-53	LOGGED BY: TL
BORING DIAMETER:	8" HS	BORING DEPTH: 30.0'	GROUNDWATER DEPTH: 23.0'

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
28					Light olive gray (5YR5/2) poorly graded SAND very moist, dense, 5-10% fines, very fine grained	SP		
29								
30	36-7		31				32.6	
31					**TD @ 30.0'** **GROUNDWATER ENCOUNTERED @ 23.0'**			

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Figure
A-39

EXPLORATORY BORING LOG

No. B-37

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:** 27-Mar-08	**FILE No.** LSS-0620-01
DRILLER:	Exploration Geoservices	**DRILLING METHOD:** B-53	**LOGGED BY:** TL
BORING DIAMETER:	8" HS	**BORING DEPTH:** 10.0'	**GROUNDWATER DEPTH:** N/A

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown (10YR2/2) fat CLAY, stiff, moist	CH		
2								
3	37-1		17	1.50	Very moist		31.7	78.7
4								
5								
6	37-2		19	3.00	Very stiff, moist		27.4	84.8
7								
8								
9					Color change to dark yellowish brown (10YR4/2)			
10	37-3		21	1.75			31.3	88.1
11					**TD @10.0'**			
12					**NO GROUNDWATER ENCOUNTERED**			
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								

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Figure
A-40

EXPLORATORY BORING LOG

No. B-38

PROJECT:	Salinas Ag/Industrial Park	DATE DRILLED: 27-Mar-08	FILE No. LSS-0620-01
DRILLER:	Exploration Geoservices	DRILLING METHOD: B-53	LOGGED BY: BP
BORING DIAMETER:	8" HS	BORING DEPTH: 20.0'	GROUNDWATER DEPTH: 18.0'

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown lean CLAY, medium stiff, very moist	CL		
2								
3					Dark yellowish brown silty SAND, loose, very moist, 30-40% fines very fine grained	SM		
4	38-1		14	4.50			11.7	102.4
5					Color change to yellowish brown, medium dense, moist, 15-25% fines			
6								
7	38-2		24	3.25			18.5	95.3
8								
9								
10	38-3		12	0.50			15.8	78.6
11								
12								
13								
14					Dark yellowish brown fat CLAY, stiff, very moist	CH		
15	38-4		9				30.3	
16								
17								
18					Common silty and saturated silty sand interbeds		▼	
19								
20	38-5		16				32.7	
21					**TD @ 20.0'**			
22					**GROUNDWATER ENCOUNTERED @ 18.0'**			
23								
24								
25								
26								
27								

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Figure
A-41

EXPLORATORY BORING LOG

No. B-39

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:**	27-Mar-08
DRILLER:	Exploration Geoservices	**DRILLING METHOD:**	B-53
BORING DIAMETER:	8" HS	**BORING DEPTH:**	10.0'

FILE No. LSS-0620-01
LOGGED BY: BP
GROUNDWATER DEPTH: N/A

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown lean CLAY, medium stiff, very moist	CL		
2								
3	39-1		13	4.50	Dark yellowish brown sandy SILT, medium stiff, moist, 30-35% very fine sand	ML	19.0	96.8
4								
5	39-2		13	1.00			26.2	88.3
6					Dark yellowish brown silty SAND, loose to medium dense, moist, very fine grained, 30-35% fines	SM		
7								
8								
9								
10	39-3		16	0.50			10.4	88.6
11					**TD @ 10.0'**			
12					**NO GROUNDWATER ENCOUNTERED**			
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								

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Figure
A-42

EXPLORATORY BORING LOG

No. B-40

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:**	27-Mar-08
DRILLER:	Exploration Geoservices	**DRILLING METHOD:**	B-53
BORING DIAMETER:	8" HS	**BORING DEPTH:**	30.0'
FILE No.	LSS-0620-01	**LOGGED BY:**	BP
GROUNDWATER DEPTH:	18.0'		

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown lean CLAY, medium stiff, very moist	CL		
2								
3					Dark yellowish brown silty SAND, loose to medium dense moist to very moist, very fine grained 30-40% fines	SM		
4	40-1		14	1.75			17.1	87.5
5								
6								
7	40-2		18	0.50			10.4	86.8
8								
9								
10	40-3		14	0.50	Dusk yellowish brown lean CLAY, medium still, very moist	CL	24.5	91.6
11								
12					Common interbedded silt and silty sands			
13								
14						SM		
15	40-4		8				23.4	
16								
17								
18							▼	
19								
20	40-5		6		Saturated			
21								
22								
23								
24								
25	40-6		24		Medium dense		29.9	
26								
27								

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Figure A-43

EXPLORATORY BORING LOG

No. B-40 Cont.

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:**	27-Mar-08
FILE No.	LSS-0620-01		
DRILLER:	Exploration Geoservices	**DRILLING METHOD:**	B-53
LOGGED BY:	BP		
BORING DIAMETER:	8" HS	**BORING DEPTH:**	30.0'
GROUNDWATER DEPTH:	18.0'		

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
28					Dark yellowish brown, silty SAND, medium dense, saturated, 25-30 % fines, very fine grained, common silt interbeds	SM		
29								
30	40-7		26				30.1	
31					**TD @ 30.0'** **GROUNDWATER ENCOUNTERED @ 18.0'**			

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Figure
A-43

EXPLORATORY BORING LOG

No. B-41

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:** 27-Mar-08	**FILE No.** LSS-0620-01
DRILLER:	Exploration Geoservices	**DRILLING METHOD:** B-53	**LOGGED BY:** BP
BORING DIAMETER:	8" HS	**BORING DEPTH:** 10.0'	**GROUNDWATER DEPTH:** N/A

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown lean CLAY, medium stiff, moist	CL		
2								
3			15	3.25	Yellowish brown silty SAND, loose, very fine grained, 25-35% fines	SM	11.2	96.4
4								
5			13		Yellowish brown poorly graded SAND, medium dense, moist very fine grained	SP	6.8	86.2
6								
7								
8								
9					Dark yellowish brown lean CLAY, very stiff, very moist	CL		
10	41-3		21	2.25			23.1	93.3
11					**TD @ 10.0'**			
12					**NO GROUNDWATER ENCOUNTERED**			
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								

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Figure
A-44

EXPLORATORY BORING LOG

No. B-42

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:** 28-Mar-08	**FILE No.** LSS-0620-01
DRILLER:	Exploration Geoservices	**DRILLING METHOD:** B-53	**LOGGED BY:** TL
BORING DIAMETER:	8" HS	**BORING DEPTH:** 20.0'	**GROUNDWATER DEPTH:** 18.0'

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown (10YR2/2) lean CLAY, stiff, moist	CL		
2								
3	42-1		26	1.25	Moderate yellowish brown (10YR5/4) silty SAND medium dense, very moist, very fine grained, 35-40% fines	SM	21.0	94.5
4								
5								
6	42-2		19	0.25	Moist, 20-25% fines		13.0	75.4
7								
8								
9					Dark yellowish brown (10YR4/2) lean CLAY, stiff, very moist, stiff, 1% very fine grained sand	CL		
10	42-3		14	0.75			29.8	87.8
11					Occasional silt interbeds			
12								
13								
14					Moderate yellowish brown (10YR5/4) silty SAND medium dense, very moist, 35-40% fines, very fine grained	SM		
15	42-4		13				26.4	
16								
17								
18								
19								
20	42-5		15		Saturated		32.8	
21					**TD @ 20.0'**			
22					**GROUNDWATER ENCOUNTERED @ 18.0'**			
23								
24								
25								
26								
27								

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Figure A-45

EXPLORATORY BORING LOG

No. B-43

PROJECT:	Salinas Ag/Industrial Park	DATE DRILLED: 28-Mar-08	FILE No. LSS-0620-01
DRILLER:	Exploration Geoservices	DRILLING METHOD: B-53	LOGGED BY: TL
BORING DIAMETER:	8" HS	BORING DEPTH: 30.0'	GROUNDWATER DEPTH: 21.0'

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown (10YR2/2) lean CLAY, slightly moist to moist, stiff	CL		
2								
3					Moderate yellowish brown (10YR5/4) silty SAND, poorly graded, medium dense, moist	SM		
4	43-1		19	2.75			11.3	94.8
5								
6								
7	43-2		12	1.50			12.5	98.9
8								
9								
10	43-3		10		Dusky yellowish brown (10YR2/2) lean CLAY, medium stiff, very moist	CL	29.2	86.3
11								
12								
13								
14					Moderate yellowish brown (10YR5/4) sandy SILT medium stiff, very moist, 20-25% very fine grained sand fraction	ML		
15	43-4		8				29.1	
16								
17								
18								
19								
20	43-5		10		Stiff		30.3	
21								
22					Saturated			
23								
24								
25	43-6		14				36.1	
26								
27								

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Figure A-46

EXPLORATORY BORING LOG

No. B-43 Cont.

PROJECT: Salinas Ag/Industrial Park | DATE DRILLED: 28-Mar-08 | FILE No. LSS-0620-01

DRILLER: Exploration Geoservices | DRILLING METHOD: B-53 | LOGGED BY: TL

BORING DIAMETER: 8" HS | BORING DEPTH: 30.0' | GROUNDWATER DEPTH: 21.0'

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
28					Moderate yellowish brown sandy SILT, stiff, saturated	ML		
29					20-25% very fine grained sand fraction			
30	43-7		15				33.6	
31					**TD @ 30.0'**			
					GROUNDWATER ENCOUNTERED @ 21.0'			

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Figure
A-46

EXPLORATORY BORING LOG

No. B-44

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:**	28-Mar-08
FILE No.	LSS-0620-01		
DRILLER:	Exploration Geoservices	**DRILLING METHOD:**	B-53
LOGGED BY:	TL		
BORING DIAMETER:	8" HS	**BORING DEPTH:**	15.0'
GROUNDWATER DEPTH:	N/A		

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown (10YR2/2) lean CLAY, stiff, slightly moist	CL		
2								
3	44-1		10	1.25	Moderate yellowish brown (10YR5/4) poorly graded SAND loose, moist, 5-10% fines, very fine grained	SP	6.0	91.5
4								
5								
6	44-2		16	1.25	Moderate yellowish brown silty SAND, medium dense, very moist, 25-30% fines, very fine grained	SM	20.3	95.7
7								
8								
9								
10	44-3		6	0.50	Fine grained, 40-45% fines		26.0	83.3
11								
12								
13					Common silt interbeds			
14								
15	44-4		9		Moderate yellowish brown (10YR5/4) SILT, stiff, very moist, 5-10% very fine grained sand fraction	ML	29.2	
16					**TD @ 15.0'**			
17					**NO GROUNDWATER ENCOUNTERED**			
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								

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Figure A-47

EXPLORATORY BORING LOG

No. B-45

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:**	28-Mar-08
FILE No.	LSS-0620-01		
DRILLER:	Exploration Geoservices	**DRILLING METHOD:**	B-53
LOGGED BY:	TL		
BORING DIAMETER:	8" HS	**BORING DEPTH:**	20.0'
GROUNDWATER DEPTH:	18.0'		

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown (10YR2/2) lean CLAY, stiff, moist	CL		
2	45-1		20	0.50	Dusky yellowish brown (10YR2/2) sandy SILT very stiff, very moist, 20-25% very fine grained sand fraction	ML	26.9	85.7
3								
4								
5	45-2		16	0.50	Moderate yellowish brown (10YR5/4) silty SAND, medium dense, very moist, very fine grained sand	SM	15.9	85.6
6								
7								
8								
9								
10	45-3		6	0.50	Dusky yellowish brown (10YR2/2) fat CLAY, medium stiff, very moist 3% very fine grained sand	CH	30.1	82.3
11								
12								
13								
14					Moderate yellowish brown (10YR5/4) silty SAND medium dense, very moist, 30-35% fines, very fine grained	SM		
15	45-4		11				20.3	
16								
17								
18								
19					Moderate yellowish brown (10YR5/4) SILT, medium stiff, saturated	ML		
20	45-5		7				32.2	
21					**TD @ 20.0'** **GROUNDWATER ENCOUNTERED @ 18.0'**			
22								
23								
24								
25								
26								
27								

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Figure A-48

EXPLORATORY BORING LOG

No. B-46

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:** 28-Mar-08	**FILE No.** LSS-0620-01
DRILLER:	Exploration Geoservices	**DRILLING METHOD:** B-53	**LOGGED BY:** TL
BORING DIAMETER:	8" HS	**BORING DEPTH:** 10.0'	**GROUNDWATER DEPTH:** N/A

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown (10YR5/4) lean CLAY stiff, moist	CL		
2								
3	46-1		18	0.50	Moderate yellowish brown (10YR5/4) silty SAND, medium dense, moist, 20-35% fines, very fine grained	SM	10.8	91.2
4								
5								
6	46-2		10	0.50	Moderate yellowish brown (10YR5/4) elastic SILT, medium stiff, very moist	MH	37.1	74.0
7								
8								
9								
10	46-3		19	1.25	Dusky yellowish brown (10YR2/2) lean CLAY, very stiff, very moist	CL	28.6	92.5
11					**TD @ 10.0'**			
12					**NO GROUNDWATER ENCOUNTERED**			
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								

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Figure A-49

EXPLORATORY BORING LOG

No. B-47

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:** 28-Mar-08	**FILE No.** LSS-0620-01
DRILLER:	Exploration Geoservices	**DRILLING METHOD:** B-53	**LOGGED BY:** TL
BORING DIAMETER:	8" HS	**BORING DEPTH:** 20.0'	**GROUNDWATER DEPTH:** N/A

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown (10YR2/2) fat CLAY, stiff, slightly moist	CH		
2	47-1		17	2.75	Moist		23.9	88.0
3								
4					Moderate yellowish brown (10YR5/4) silty SAND, loose, moist 30% fines, very fine to fine grained	SM		
5								
6	47-2		8	0.25			11.5	86.5
7								
8								
9								
10	47-3		19	1.50			9.2	95.1
11								
12								
13								
14					Moderate yellowish brown (10YR5/4) SILT medium stiff, very moist	ML		
15	47-4		8				28.4	
16								
17								
18								
19					Moderate yellowish brown (10YR5/4) silty SAND, loose, very moist, 25-30% fines very fine to fine grained	SM		
20	47-5		10				17.6	
21					**TD @20.0'**			
22					**NO GROUNDWATER ENCOUNTERED**			
23								
24								
25								
26								
27								

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Figure A-50

EXPLORATORY BORING LOG

No. B-48

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:**	28-Mar-08	**FILE No.**	LSS-0620-01
DRILLER:	Exploration Geoservices	**DRILLING METHOD:**	B-53	**LOGGED BY:**	TL
BORING DIAMETER:	8" HS	**BORING DEPTH:**	30.0'	**GROUNDWATER DEPTH:**	N/A

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown (10YR5/4) fat CLAY, stiff, moist	CH		
2								
3	48-1		14	2.25	Moderate yellowish brown (10YR5/4) silty SAND, loose, very moist, 30-35% fines, very fine to fine grained	SM	18.1	97.5
4								
5								
6					Moderate yellowish brown (10YR5/4) SILT, stiff, very moist	ML		
7	48-2		12	1.25			29.2	83.3
8								
9								
10	48-3		19	0.25	Very stiff		25.8	88.2
11								
12								
13								
14					Moderate yellowish brown (10YR5/4) silty SAND, medium dense, very moist 25-30% fines, very fine grained	SM		
15	48-4		13				21.3	
16								
17								
18								
19								
20	48-5		11		Occasional silt interbeds, saturated silt interbeds, 35-40% fines		35.2	
21								
22								
23								
24					Dusky yellowish brown (10YR2/2) well graded SAND, medium dense, very moist, 15% fines, trace fine gravel	SW		
25	48-6		14		Color change to medium yellowish brown, (10YR5/4)		13.6	
26								
27								

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Figure A-51

EXPLORATORY BORING LOG

No. B-48 Cont.

PROJECT:	Salinas Ag/Industrial Park	DATE DRILLED: 28-Mar-08	FILE No. LSS-0620-01
DRILLER:	Exploration Geoservices	DRILLING METHOD: B-53	LOGGED BY: TL
BORING DIAMETER:	8" HS	BORING DEPTH: 30.0'	GROUNDWATER DEPTH: N/A

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
28					Moderate yellowish brown (10YR5/4) well graded SAND, moist, medium dense, 15% fines	SW		
29								
30	48-7		15				6.2	
31					**TD @ 30.0'** **NO GROUNDWATER ENCOUNTERED**			

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Figure A-51

EXPLORATORY BORING LOG

No. B-49

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:**	28-Mar-08
FILE No.	LSS-0620-01		
DRILLER:	Exploration Geoservices	**DRILLING METHOD:**	B-53
LOGGED BY:	TL		
BORING DIAMETER:	8" HS	**BORING DEPTH:**	10.0'
GROUNDWATER DEPTH:	N/A		

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown (10YR5/4) lean CLAY stiff, moist	CL		
2								
3	49-1		12	0.25	Moderate yellowish brown (10YR5/4) silty SAND, loose, moist, 40-45% fines	SM	15.2	89.3
4								
5	49-2		16	4.50	Medium dense, 30-35% fines		13.1	97.2
6								
7								
8								
9					Moderate yellowish brown (10YR5/4) sandy SILT stiff, very moist, 15-25% very fine sand fraction	ML		
10	49-3		13	1.00			31.8	75.0
11					**TD @ 10.0'**			
12					**NO GROUNDWATER ENCOUNTERED**			
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								

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Figure
A-52

EXPLORATORY BORING LOG

No. B-50

PROJECT:	Salinas Ag/Industrial Park	**DATE DRILLED:** 28-Mar-08	**FILE No.** LSS-0620-01
DRILLER:	Exploration Geoservices	**DRILLING METHOD:** B-53	**LOGGED BY:** TL
BORING DIAMETER:	8" HS	**BORING DEPTH:** 20.0'	**GROUNDWATER DEPTH:** N/A

Depth (ft)	Sample	Graphic Log	Blows per foot	Pocket Pen (tsf)	Description	U.C.S.C. Soil-Group	Moisture (% dry weight)	Dry Density (pcf)
0								
1					Dusky yellowish brown (10YR2/2) fat CLAY, moist, medium stiff	CL		
2								
3								
4	50-1		11	2.00	Moderate yellowish brown (10YR5/4) SILT, stiff moist , 10% very fine grained sand	ML	20.2	95.8
5								
6								
7	50-2		10	0.25	Medium stiff very moist, 5% fine grained sand		32.9	76.9
8								
9					Dusky yellowish brown (10YR2/2) lean CLAY, stiff, moist 10% very fine grained sand	CL		
10	50-3		17	0.25			22.9	94.1
11					Occasional silt interbeds			
12								
13								
14					Moderate yellowish brown (10YR5/4) silty SAND, medium dense, very moist, 45% fines, very fine grained sand.	SM		
15	50-4		11				28.4	
16								
17					Occasional silt interbeds			
18								
19					Light brown (5YR5/6) well graded SAND, medium dense, moist, 5-10% fines, fine to coarse gravels	SW		
20	50-5		19				10.3	
21					**TD @ 20.0'**			
22					**NO GROUNDWATER ENCOUNTERED**			
23								
24								
25								
26								
27								

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Figure A-53

APPENDIX B

Laboratory Test Results

Table B-1
Summary of Laboratory Test Results

Sample No.	Depth (ft.)	Dry Density (pcf)	Water Content (%)	Pocket Pen (tsf)	Swell Index (A)	Swell (%)	Moisture Increase (%B)	Angle of Internal Friction	Unit Cohesion (psf)
1-1	3.0-3.5	96.7	8.4	3.25					
1-2	6.0-6.5	89.0	12.4	1.50					
1-3	9.5-10.0	96.7	20.7	2.00					
1-4	13.5-15.0	--	29.8	--					
1-5	18.5-20.0	--	28.0	--					
1-6	23.5-25.0	--	30.7	--					
1-7	28.5-30.0	--	29.6	--					
1-8	33.5-35.0	--	23.6	--					
1-9	38.5-40.0	--	44.2	--					
1-10	43.5-45.0	--	52.7	--					
1-11	48.5-50.0	--	34.5	--					
2-1	3.0-3.5	75.9	30.4	2.50					
2-2	6.0-6.5	87.6	24.1	1.75					
2-3	9.5-10.0	81.9	35.7	2.00					
2-4	13.5-15.0	--	31.6	--					
2-5	18.5-20.0	--	27.9	--					
2-6	23.5-25.0	--	27.9	--					
2-7	28.5-30.0	--	28.4	--					
2-8	33.5-35.0	--	25.1	--					
2-9	38.5-40.0	--	24.7	--					
2-10	43.5-45.0	--	31.6	--					
2-11	48.5-50.0	--	33.5	--					
3-1	3.0-3.5	92.6	17.9	1.25					
3-2	6.0-6.5	89.0	10.2	3.00					
3-3	9.5-10.0	90.6	15.8	2.25					
3-4	13.5-15.0	--	28.7	--					
3-5	18.5-20.0	--	30.5	--					
3-6	23.5-25.0	--	27.6	--					
3-7	28.5-30.0	--	24.0	--					
3-8	33.5-35.0	--	29.6	--					
3-9	38.5-40.0	--	47.5	--					
3-10	43.5-45.0	--	40.2	--					
3-11	48.5-50.0	--	39.3	--					
4-1	3.0-3.5	85.5	25.6	2.50					
4-2	6.0-6.5	86.3	25.8	1.75					
4-3	9.5-10.0	86.5	25.4	1.00					

Table B-1 (Cont'd)
Summary of Laboratory Test Results

Sample No.	Depth (ft.)	Dry Density (pcf)	Water Content (%)	Pocket Pen (tsf)	Swell Index (A)	Swell (%)	Moisture Increase (%B)	Angle of Internal Friction	Unit Cohesion (psf)
4-4	13.5-15.0	- -	17.5	- -					
4-5	18.5-20.0	- -	21.0	- -					
4-6	23.5-25.0	- -	31.2	- -					
4-7	28.5-30.0	- -	27.4	- -					
4-8	33.5-35.0	- -	55.7	- -					
4-9	38.5-40.0	- -	36.0	- -					
4-10	43.5-45.0	- -	35.8	- -					
4-11	48.5-50.0	- -	24.8	- -					
5-1	3.0-3.5	89.1	14.1	1.75					
5-2	6.0-6.5	95.3	12.9	0.50					
5-3	9.5-10.0	87.2	12.9	- -					
5-4	13.5-15.0	- -	9.9	- -					
5-5	18.5-20.0	- -	12.9	- -					
5-6	23.5-25.0	- -	26.8	- -					
5-7	28.5-30.0	- -	24.9	- -					
5-8	33.5-35.0	- -	6.7	- -					
5-9	38.5-40.0	- -	14.2	- -					
5-10	43.5-45.0	- -	30.6	- -					
5-11	48.5-50.0	- -	33.7	- -					
6-1	3.0-3.5	104.8	21.8	3.25					
6-2	6.0-6.5	95.2	22.6	4.50					
6-3	9.5-10.0	89.8	15.2	3.00					
6-4	13.5-15.0	- -	29.4	- -					
6-5	18.5-20.0	- -	27.2	- -					
6-6	23.5-25.0	- -	8.9	- -					
6-7	28.5-30.0	- -	7.8	- -					
6-8	33.5-35.0	- -	7.6	- -					
6-9	38.5-40.0	- -	4.3	- -					
6-10	43.5-45.0	- -	5.1	- -					
6-11	48.5-50.0	- -	24.3	- -					
7-1	3.0-3.5	91.5	20.4	1.75					
7-2	6.0-6.5	87.5	14.6	2.00					
7-3	9.5-10.0	86.6	19.1	2.25					
7-4	13.5-15.0	- -	35.9	- -					
7-5	18.5-20.0	- -	32.3	- -					
7-6	23.5-25.0	- -	30.6	- -					
7-7	28.5-30.0	- -	22.5	- -					

Table B-1
Summary of Laboratory Test Results

Sample No.	Depth (ft.)	Dry Density (pcf)	Water Content (%)	Pocket Pen (tsf)	Swell Index (A)	Swell (%)	Moisture Increase (%B)	Angle of Internal Friction	Unit Cohesion (psf)
7-8	33.5-35.0	--	28.6	--					
7-9	38.5-40.0	--	29.4	--					
7-10	43.5-45.0	--	22.2	--					
7-11	48.5-50.0	--	23.5	--					
8-1	3.0-3.5	82.6	24.3	4.50					
8-2	6.0-6.5	91.9	24.9	1.25					
8-3	9.5-10.0	66.2	12.6	--					
8-4	13.5-15.0	--	34.5	--					
8-5	18.5-20.0	--	31.2	--					
8-6	23.5-25.0	--	31.1	--					
8-7	28.5-30.0	--	37.8	--					
8-8	33.5-35.0	--	33.7	--					
8-9	38.5-40.0	--	37.5	--					
8-10	43.5-45.0	--	56.4	--					
8-11	48.5-50.0	--	44.8	--					
9-1	3.0-3.5	80.0	33.4	2.50					
9-2	6.0-6.5	87.1	15.6	2.75					
9-3	9.5-10.0	84.4	20.1	2.25					
9-4	13.5-15.0	--	43.4	--					
9-5	18.5-20.0	--	41.7	--					
9-6	23.5-25.0	--	41.5	--					
9-7	28.5-30.0	--	38.7	--					
9-8	33.5-35.0	--	29.0	--					
9-9	38.5-40.0	--	46.1	--					
9-10	43.5-45.0	--	40.6	--					
9-11	48.5-50.0	--	70.0						
10-1	3.0-3.5	88.5	24.7	1.75					
10-2	6.0-6.5	92.0	11.8	2.25					
10-3	9.5-10.0	91.4	12.0	1.75					
10-4	13.5-15.0	--	41.8	--					
10-5	18.5-20.0	--	39.0	--					
11-1	3.0-3.5	85.4	28.5	2.50					
11-2	6.0-6.5	87.3	27.1	2.50					
11-3	9.5-10.0	85.6	22.7	--					

Table B-1
Summary of Laboratory Test Results

Sample No.	Depth (ft.)	Dry Density (pcf)	Water Content (%)	Pocket Pen (tsf)	Swell Index (A)	Swell (%)	Moisture Increase (%B)	Angle of Internal Friction	Unit Cohesion (psf)
11-4	13.5-15.0	- -	21.6	- -					
11-5	18.5-20.0	- -	24.3	- -					
12-1	2.0-2.5	88.0	24.9	4.50					
12-2	4.5-5.0	96.5	18.4	2.50					
12-3	9.5-10.0	97.4	15.6	2.25					
12-4	13.5-15.0	- -	28.8	- -					
12-5	18.5-20.0	- -	8.9	- -					
12-6	23.5-25.0	- -	6.9	- -					
12-7	28.5-30.0	- -	8.1	- -					
13-1	3.0-3.5	78.6	30.3	2.75					
13-2	6.0-6.5	95.2	18.7	1.50					
13-3	9.5-10.0	90.4	27.2	2.00					
14-1	2.0-2.5	83.7	29.7	1.50					
14-2	5.0-5.5	79.0	31.3	1.50					
14-3	9.5-10.0	89.9	14.1	2.00					
14-4	13.5-15.0	- -	27.4	- -					
14-5	18.5-20.0	- -	30.2	- -					
15-1	3.0-3.5	78.4	34.9	1.00					
15-2	6.0-6.5	97.9	10.3	4.50					
15-3	9.5-10.0	83.7	11.0	0.75					
15-4	13.5-15.0	- -	16.4	- -					
15-5	18.5-20.0	- -	33.9	- -					
15-6	23.5-25.0	- -	35.0	- -					
15-7	28.5-30.0	- -	30.0	- -					
16-1	2.0-2.5	77.6	38.1	2.00					
16-2	5.0-5.5	84.1	32.4	2.75					
16-3	9.5-10.0	73.7	35.7	1.25					
17-1	3.0-3.5	80.1	32.7	2.00					
17-2	6.0-6.5	77.5	31.4	2.00					
17-3	9.5-10.0	84.9	32.1	1.75					

Table B-1
Summary of Laboratory Test Results

Sample No.	Depth (ft.)	Dry Density (pcf)	Water Content (%)	Pocket Pen (tsf)	Swell Index (A)	Swell (%)	Moisture Increase (%B)	Angle of Internal Friction	Unit Cohesion (psf)
18-1	3.0-3.5	90.4	24.1	2.00					
18-2	6.0-6.5	74.1	34.2	3.00					
18-3	9.5-10.0	76.7	22.1	4.50					
18-4	13.5-15.0	--	37.1	--					
18-5	18.5-20.0	--	34.7	--					
19-1	2.0-2.5	76.9	34.3	1.00					
19-2	4.0-4.5	66.7	34.7	2.25					
19-3	9.5-10.0	77.4	35.6	4.50					
19-4	13.5-15.0	--	37.0	--					
20-1	3.0-3.5	72.0	39.5	1.00					
20-2	6.0-6.5	71.0	36.9	3.25					
20-3	9.5-10.0	77.6	35.0	4.50					
20-4	13.5-15.0	--	37.2	--					
21-1	3.0-3.5	92.9	26.4	2.50					
21-2	6.0-6.5	93.5	26.8	2.00					
21-3	9.5-10.0	82.9	33.0	3.75					
21-4	13.5-15.0	--	34.2	--					
21-5	18.5-20.0	--	34.2	--					
22-1	2.0-2.5	90.1	22.3	4.50					
22-2	4.5-5.0	92.3	22.2	4.50					
22-3	9.5-10.0	89.1	29.0	2.00					
22-4	13.5-15.0	--	35.1	--					
22-5	18.5-20.0	--	35.0	--					
22-6	23.5-25.0	--	38.3	--					
22-7	28.5-30.0	--	39.4	--					
23-1	2.0-2.5	91.8	24.7	2.25					
23-2	4.0-4.5	90.1	24.4	4.50					
23-3	9.5-10.0	81.6	31.6	3.75					
23-4	13.5-15.0	--	37.0	--					
23-5	18.5-20.0	--	35.6	--					
23-6	23.5-25.0	--	36.1	--					

Table B-1
Summary of Laboratory Test Results

Sample No.	Depth (ft.)	Dry Density (pcf)	Water Content (%)	Pocket Pen (tsf)	Swell Index (A)	Swell (%)	Moisture Increase (%B)	Angle of Internal Friction	Unit Cohesion (psf)
23-7	28.5-30.0	--	34.5	--					
24-1	3.0-3.5	81.2	26.6	3.00					
24-2	6.0-6.5	85.4	31.5	4.25					
24-3	9.5-10.0	80.0	37.3	2.50					
24-4	13.5-15.0	--	37.7	--					
25-1	3.0-3.5	97.5	19.5	4.50					
25-2	6.0-6.5	91.2	26.7	3.25					
25-3	9.5-10.0	79.7	32.0	4.50					
25-4	13.5-15.0	--	31.5	--					
25-5	18.5-20.0	--	33.8	--					
25-6	23.5-25.0	--	34.1	--					
25-7	28.5-30.0	--	33.9	--					
26-1	2.0-2.5	82.2	22.1	4.50					
26-2	4.5-5.0	73.1	25.2	--					
26-3	9.5-10.0	96.2	18.8	2.00					
26-4	13.5-15.0	--	31.3	--					
26-5	18.5-20.0	--	38.3	--					
26-6	23.5-25.0	--	28.6	--					
26-7	28.5-30.0	--	32.6	--					
27-1	3.0-3.5	84.2	20.4	4.50					
27-2	6.0-6.5	89.2	14.9	1.75					
27-3	9.5-10.0	94.7	17.0	0.75					
27-4	13.5-15.0	--	19.9	--					
28-1	3.0-3.5	93.3	17.9	4.50					
28-2	6.0-6.5	91.1	19.6	2.00					
28-3	9.0-9.5	81.3	34.1	1.25					
28-4	13.5-15.0	--	25.9	--					
28-5	18.5-20.0	--	8.4	--					
28-6	23.5-25.0	--	34.3	--					
28-7	28.5-30.0	--	20.0	--					

Table B-1
Summary of Laboratory Test Results

Sample No.	Depth (ft.)	Dry Density (pcf)	Water Content (%)	Pocket Pen (tsf)	Swell Index (A)	Swell (%)	Moisture Increase (%B)	Angle of Internal Friction	Unit Cohesion (psf)
29-1	3.0-3.5	83.8	28.2	4.50					
29-2	6.0-6.5	99.3	20.9	4.50					
29-3	9.5-10.0	93.3	23.3	1.25					
29-4	13.5-15.0	- -	4.5	- -					
30-1	2.0-2.5	77.3	31.1	3.75					
30-2	4.5-5.0	79.0	30.1	2.75					
30-3	9.5-10.0	103.9	20.0	4.00					
31-1	3.0-3.5	82.4	32.3	4.00					
31-2	6.0-6.5	86.0	27.7	2.00					
31-3	9.5-10.0	74.2	35.4	1.25					
31-4	13.5-15.0	- -	31.2	- -					
32-1	2.0-2.5	78.9	32.3	2.75					
32-3	4.0-4.5	76.0	31.6	3.00					
32-3	9.5-10.0	87.3	18.6	0.50					
32-4	13.5-15.0	- -	30.4	- -					
32-5	18.5-20.0	- -	32.3	- -					
32-5	18.5-20.0	- -	32.3	- -					
32-6	23.5-25.0	- -	30.7	- -					
32-7	28.5-30.0	- -	31.2	- -					
33-1	3.0-3.5	101.5	12.4	4.50					
33-2	6.0-6.5	83.3	25.9	2.00					
33-3	9.5-10.0	90.5	9.8	0.50					
34-1	2.0-2.5	81.9	33.9	1.50					
34-2	4.5-5.0	76.3	33.1	1.50					
34-3	9.5-10.0	83.6	11.9	1.00					
34-4	13.5-15.0	- -	39.5	- -					
35-1	3.0-3.5	77.7	28.3	1.00					
35-2	6.0-6.5	109.9	22.8	1.25					
35-3	9.5-10.0	89.4	29.8	2.25					
35-4	13.5-15.0	- -	16.4	- -					

Table B-1
Summary of Laboratory Test Results

Sample No.	Depth (ft.)	Dry Density (pcf)	Water Content (%)	Pocket Pen (tsf)	Swell Index (A)	Swell (%)	Moisture Increase (%B)	Angle of Internal Friction	Unit Cohesion (psf)
36-1	2.0-2.5	93.5	8.4	0.50					
36-2	4.5-5.0	95.1	12.6	3.25					
36-3	9.5-10.0	92.4	27.1	2.25					
36-4	13.5-15.0	- -	24.4	- -					
36-5	18.5-20.0	- -	13.2	- -					
36-6	23.5-25.0	- -	31.4	- -					
36-7	28.5-30.0	- -	32.6	- -					
37-1	2.0-2.5	78.7	31.7	1.50					
37-2	4.0-4.5	84.8	27.4	3.00					
37-3	9.5-10.0	88.1	31.3	1.75					
38-1	3.0-3.5	102.4	11.7	4.50					
38-2	6.0-6.5	95.3	18.5	3.25					
38-3	9.5-10.0	78.6	15.8	0.50					
38-4	13.5-15.0	- -	30.3	- -					
38-5	18.5-20.0	- -	32.7	- -					
39-1	2.0-2.5	96.8	19.0	4.50					
39-2	4.0-4.5	83.3	26.2	1.00					
39-3	9.5-10.0	88.6	10.4	0.50					
40-1	3.0-3.5	87.5	17.1	1.75					
40-2	6.0-6.5	86.8	10.4	0.50					
40-3	9.5-10.0	91.6	24.5	0.50					
40-4	13.5-15.0	- -	23.4	- -					
40-5	18.5-20.0	- -	- -	- -					
40-6	23.5-25.0	- -	29.9	- -					
40-7	28.5-30.0	- -	30.1	- -					
41-1	2.0-2.5	96.4	11.2	3.25					
41-2	4.0-4.5	86.2	6.8	- -					
41-3	9.5-10.0	93.3	23.1	2.25					
42-1	2.0-2.5	94.5	21.0	1.25					
42-2	4.0-4.5	75.4	13.0	0.25					

Table B-1
Summary of Laboratory Test Results

Sample No.	Depth (ft.)	Dry Density (pcf)	Water Content (%)	Pocket Pen (tsf)	Swell Index (A)	Swell (%)	Moisture Increase (%B)	Angle of Internal Friction	Unit Cohesion (psf)
42-3	9.5-10.0	87.8	29.8	0.75					
42-4	13.5-15.0	--	26.4	--					
42-4	18.5-20.0	--	32.8	--					
43-1	3.0-3.5	94.8	11.3	2.75					
43-2	6.0-6.5	98.9	12.5	1.50					
43-3	9.5-10.0	86.3	29.2	--					
43-4	13.5-15.0	--	29.1	--					
43-5	18.5-20.0	--	30.3	--					
43-6	23.5-25.0	--	36.1	--					
43-7	28.5-30.0	--	33.6	--					
44-1	3.0-3.5	91.5	6.0	1.25					
44-2	6.0-6.5	95.7	20.3	1.25					
44-3	9.5-10.0	83.3	26.0	0.50					
44-4	13.5-15.0	--	29.2	--					
45-1	2.0-2.5	85.7	26.9	0.50					
45-2	4.0-4.5	85.6	15.9	0.50					
45-3	9.5-10.0	82.3	30.1	0.50					
45-4	13.5-15.0	--	20.3	--					
45-5	18.5-20.0	--	32.2	--					
46-1	3.0-3.5	91.2	10.8	0.50					
46-2	6.0-6.5	74.0	37.1	0.50					
46-3	9.5-10.0	92.5	28.6	1.25					
47-1	2.0-2.5	88.0	23.9	2.75					
47-2	4.0-4.5	86.5	11.5	0.25					
47-3	9.5-10.0	95.1	9.2	1.50					
47-4	13.5-15.0	--	28.4	--					
47-5	18.5-20.0	--	17.6	--					
48-1	3.0-3.5	97.5	18.1	2.25					
48-2	6.0-6.5	83.3	29.2	1.25					
48-3	9.5-10.0	88.2	25.8	0.25					

Table B-1
Summary of Laboratory Test Results

Sample No.	Depth (ft.)	Dry Density (pcf)	Water Content (%)	Pocket Pen (tsf)	Swell Index (A)	Swell (%)	Moisture Increase (%B)	Angle of Internal Friction	Unit Cohesion (psf)
48-4	13.5-15.0	--	21.3	--					
48-5	18.5-20.0	--	35.2	--					
48-6	23.5-25.0	--	13.6	--					
48-7	28.5-30.0	--	6.2	--					
49-1	2.0-2.5	89.3	15.2	0.25					
49-2	4.0-4.5	97.2	13.1	4.50					
49-3	9.5-10.0	75.0	31.8	1.00					
50-1	3.0-3.5	95.8	20.2	2.00					
50-2	6.0-6.5	76.9	32.9	0.25					
50-3	9.5-10.0	94.1	22.9	0.25					
50-4	13.5-15.0	--	28.4	--					
50-5	18.5-20.0	--	10.3	--					

Summary of Atterberg Limits Test Results

Sample No.	Depth (ft.)	Liquid Limit	Plastic Limit	Plasticity Index
1-9	38.5-40.0	75	29	46
3-10	43.5-45.0	53	26	27
4-10	43.5-45.0	63	27	36
5-10	43.5-45.0	76	29	47
7-4	13.5-15.0	81	34	47
7-9	38.5-40.0	59	27	32
8-10	43-5-45.0	80	33	47
9-4	13.5-15.0	60	27	33
9-6	23.5-25.0	44	22	22
12-1	2.0-2.5	75	29	46
14-1	3.0-3.5	75	29	46
14-2	5.0-5.5	63	35	28
14-4	13.5-15.0	81	29	52
16-1	2.0-2.5	80	35	45
18-1	3.0-3.5	43	22	21
18-4	13.5-15.0	75	29	46
19-4	13.5-15.0	64	28	36
20-4	13.5-15.0	59	28	31
21-2	6.0-6.5	75	28	47

Summary of Atterberg Limits Test Results (Cont'd)

Sample No.	Depth (ft.)	Liquid Limit	Plastic Limit	Plasticity Index
22-1	2.0-2.5	53	28	25
22-4	13.5-15.0	74	30	44
23-6	23.5-25.0	75	29	46
24-2	6.0-6.5	64	28	36
26-1	2.0-2.5	44	22	22
30-1	2.0-2.5	69	37	32
37-1	2.0-2.5	54	20	34
47-1	2.0-2.5	53	19	34
B39/49 Composite	0.0-2.0	41	20	21
B16/30 Composite	0.0-2.0	74	27	47
B17/37 Composite	0.0-2.0	64	23	41
B39/49 Composite (+ 4% DQM added)	*0.0-2.0*	*39*	*30*	*9*

Corrosivity Test Summary

Boring Location	Depth (ft)	Resistivity (Ohm-cm)	Chloride (mg/kg)	Sulfate (mg/kg)	Sulfate (%)	pH	ORP (Redox mv)
B-13	0.0-5.0	370	194	598	0.0598	7.1	75
B-33	0.0-5.0	547	116	503	0.0503	7.5	214
B-43	0.0-5.0	886	33	<5	<0.0005	7.5	167
B-46	0.0-5.0	636	70	363	0.0363	7.3	221

Summary of Sieve Analysis Test Results, Sample 1-4 (13.5'-15.0')

Sieve No.	% Retained	% Passing
3/8"	0	100
#4	0	100
#10	0	100
#30	0	100
#40	0	100
#50	0	100
#100	13	87
#200	57	43

Summary of Sieve Analysis Test Results, Sample 1-7 (28.5'-30.0')

Sieve No.	% Retained	% Passing
3/8"	0	100
#4	0	100
#10	0	100
#30	0	100
#40	0	100
#50	2	98
#100	41	59
#200	77	23

Summary of Sieve Analysis Test Results, Sample 2-4 (13.5'-15.0')

Sieve No.	% Retained	% Passing
3/8"	0	100
#4	0	100
#10	0	100
#30	0	100
#40	0	100
#50	0	100
#100	0	100
#200	11	89

Summary of Sieve Analysis Test Results, Sample 2-6 (23.5'-25.0')

Sieve No.	% Retained	% Passing
3/8"	0	100
#4	0	100
#10	0	100
#30	0	100
#40	0	100
#50	0	100
#100	41	59
#200	86	14

Summary of Sieve Analysis Test Results, Sample 2-10 (43.5'-45.0')

Sieve No.	% Retained	% Passing
3/8"	0	100
#4	0	100
#10	0	100
#30	0	100
#40	0	100
#50	0	100
#100	7	93
#200	58	42

Summary of Sieve Analysis Test Results, Sample 3-5 (18.5'-20.0')

Sieve No.	% Retained	% Passing
3/8"	0	100
#4	0	100
#10	0	100
#30	0	100
#40	0	100
#50	0	100
#100	14	86
#200	56	44

Summary of Sieve Analysis Test Results, Sample 3-8 (33.5'-35.0')

Sieve No.	% Retained	% Passing
3/8"	0	100
#4	0	100
#10	0	100
#30	0	100
#40	0	100
#50	0	100
#100	4	96
#200	51	49

Summary of Sieve Analysis Test Results, Sample 4-4 (13.5'-15.0')

Sieve No.	% Retained	% Passing
3/8"	0	100
#4	0	100
#10	0	100
#30	0	100
#40	0	100
#50	1	99
#100	9	91
#200	45	55

Summary of Sieve Analysis Test Results, Sample 4-8 (33.5'-35.0')

Sieve No.	% Retained	% Passing
3/8"	0	100
#4	0	100
#10	0	100
#30	0	100
#40	0	100
#50	0	100
#100	0	100
#200	13	87

Summary of Sieve Analysis Test Results, Sample 5-4 (13.5'-15.0')

Sieve No.	% Retained	% Passing
3/8"	0	100
#4	0	100
#10	0	100
#30	0	100
#40	1	99
#50	14	86
#100	56	44
#200	82	18

Summary of Sieve Analysis Test Results, Sample 5-6 (23.5'-25.0')

Sieve No.	% Retained	% Passing
3/8"	0	100
#4	0	100
#10	0	100
#30	0	100
#40	0	100
#50	1	99
#100	27	73
#200	58	42

Summary of Sieve Analysis Test Results, Sample 5-8 (33.5'-35.0')

Sieve No.	% Retained	% Passing
3/8"	0	100
#4	0	100
#10	2	98
#30	15	85
#40	22	78
#50	36	64
#100	80	20
#200	82	8

Summary of Sieve Analysis Test Results, Sample 6-5 (18.5'-20.0')

Sieve No.	% Retained	% Passing
3/8"	0	100
#4	0	100
#10	0	100
#30	0	100
#40	0	100
#50	0	100
#100	0	100
#200	27	73

Summary of Sieve Analysis Test Results, Sample 6-9 (38.5'-40.0')

Sieve No.	% Retained	% Passing
3/8"	0	100
#4	0	100
#10	1	99
#30	18	82
#40	37	63
#50	68	32
#100	92	8
#200	96	4

Summary of Sieve Analysis Test Results, Sample 8-4 (13.5'-15.0')

Sieve No.	% Retained	% Passing
3/8"	0	100
#4	0	100
#10	0	100
#30	0	100
#40	0	100
#50	0	100
#100	0	100
#200	15	85

Summary of Sieve Analysis Test Results, Sample 8-6 (23.5'-25.0')

Sieve No.	% Retained	% Passing
3/8"	0	100
#4	0	100
#10	0	100
#30	0	100
#40	0	100
#50	0	100
#100	0	100
#200	3	97

Summary of Sieve Analysis Test Results, Sample 8-9 (38.5'-40.0')

Sieve No.	% Retained	% Passing
3/8"	0	100
#4	0	100
#10	0	100
#30	0	100
#40	0	100
#50	0	100
#100	0	100
#200	27	73

Summary of Sieve Analysis Test Results, Sample 12-5 (18.5'-20.0')

Sieve No.	% Retained	% Passing
3/8"	4	96
#4	11	89
#10	33	67
#30	59	41
#40	66	34
#50	73	27
#100	84	16
#200	88	12

Summary of Sieve Analysis Test Results, Sample 12-7 (28.5'-30.0')

Sieve No.	% Retained	% Passing
3/8"	8	92
#4	20	80
#10	44	56
#30	72	28
#40	78	22
#50	83	17
#100	88	12
#200	90	10

Summary of Sieve Analysis Test Results, Sample 15-6 (23.5'-25.0')

Sieve No.	% Retained	% Passing
3/8"	0	100
#4	0	100
#10	0	100
#30	0	100
#40	0	100
#50	0	100
#100	0	100
#200	30	70

Summary of Sieve Analysis Test Results, Sample 21-4 (13.5'-15.0')

Sieve No.	% Retained	% Passing
3/8"	0	100
#4	0	100
#10	0	100
#30	0	100
#40	0	100
#50	0	100
#100	0	100
#200	20	80

Summary of Sieve Analysis Test Results, Sample 21-5 (18.5'-20.0')

Sieve No.	% Retained	% Passing
3/8"	0	100
#4	0	100
#10	0	100
#30	0	100
#40	0	100
#50	0	100
#100	0	100
#200	21	79

Summary of Sieve Analysis Test Results, Sample 26-3 (9.5'-10.0')

Sieve No.	% Retained	% Passing
3/8"	0	100
#4	0	100
#10	0	100
#30	0	100
#40	0	100
#50	1	99
#100	22	78
#200	53	47

Summary of Sieve Analysis Test Results, Sample 32-3 (9.5'-10.0')

Sieve No.	% Retained	% Passing
3/8"	0	100
#4	1	99
#10	2	98
#30	3	97
#40	5	95
#50	7	93
#100	24	76
#200	40	60

Summary of Sieve Analysis Test Results, Sample 32-6 (23.5'-25.0')

Sieve No.	% Retained	% Passing
3/8"	0	100
#4	0	100
#10	0	100
#30	0	100
#40	0	100
#50	2	98
#100	49	51
#200	87	13

Summary of Sieve Analysis Test Results, Sample 34-3 (9.5'-10.0')

Sieve No.	% Retained	% Passing
3/8"	0	100
#4	0	100
#10	1	99
#30	16	84
#40	35	65
#50	61	39
#100	84	16
#200	90	10

Summary of Sieve Analysis Test Results, Sample 36-6 (23.5'-25.0')

Sieve No.	% Retained	% Passing
3/8"	0	100
#4	0	100
#10	0	100
#30	0	100
#40	0	100
#50	3	97
#100	66	34
#200	92	8

Summary of Sieve Analysis Test Results, Sample 40-5 (18.5'-20.0')

Sieve No.	% Retained	% Passing
3/8"	0	100
#4	0	100
#10	0	100
#30	0	100
#40	0	100
#50	0	100
#100	8	92
#200	61	31

Summary of Sieve Analysis Test Results, Sample 42-2 (4.0'-4.5')

Sieve No.	% Retained	% Passing
3/8"	0	100
#4	0	100
#10	0	100
#30	0	100
#40	0	100
#50	0	100
#100	6	94
#200	64	36

Summary of Sieve Analysis Test Results, Sample 43-4 (13.5'-15.0')

Sieve No.	% Retained	% Passing
3/8"	0	100
#4	0	100
#10	0	100
#30	0	100
#40	0	100
#50	0	100
#100	0	100
#200	24	76

Summary of Sieve Analysis Test Results, Sample 43-6 (23.5'-25.0')

Sieve No.	% Retained	% Passing
3/8"	0	100
#4	0	100
#10	0	100
#30	0	100
#40	0	100
#50	0	100
#100	0	100
#200	20	80

Summary of Sieve Analysis Test Results, Sample 44-1 (3.0'-3.5')

Sieve No.	% Retained	% Passing
3/8"	0	100
#4	0	100
#10	0	100
#30	0	100
#40	0	100
#50	0	100
#100	27	73
#200	92	8

Summary of Sieve Analysis Test Results, Sample 45-1 (2.0'-2.5')

Sieve No.	% Retained	% Passing
3/8"	0	100
#4	0	100
#10	0	100
#30	0	100
#40	0	100
#50	0	100
#100	0	100
#200	23	77

Summary of Sieve Analysis Test Results, Sample 49-1 (2.0'-2.5')

Sieve No.	% Retained	% Passing
3/8"	0	100
#4	0	100
#10	0	100
#30	0	100
#40	0	100
#50	0	100
#100	0	100
#200	34	66

Corrosivity Test Summary

Sample	Resistivity (Ohm-cm)	Chloride (mg/kg)	Sulfate (mg/kg)	Sulfate (%)	pH	ORP (Redox mv)
R-1	613	53	241	0.0241	7.2	176
R-2	450	156	515	0.0515	6.8	233
R-3	922	47	362	0.0362	7.3	221

FINAL REPORT

Phase I
Environmental Site Assessment
Uni-Kool
1776 and 1780 Abbott Street
Salinas, California

EMC Planning, Inc
Monterey, California

June 2008

Job No. 13284/42784

FINAL REPORT

Phase I
Environmental Site Assessment
Uni-Kool
1776 and 1780 Abbott Street
Salinas, California

EMC Planning Group, Inc.
Monterey, California

Kendall W. Price, CEG, REA

June 2008

O'BRIEN & GERE

June 2, 2008

Ms. Janet Ilse
EMC Planning Group, Inc.
301 Lighthouse Avenue, Suite C
Monterey, CA 93940

Re: Phase I ESA
for Uni-Kool Partners Development
Harkins Rd., & Harris Roads
at Abbott St.,Salinas, CA

File: 13284/42784

Dear Ms. Ilse:

O'Brien & Gere is pleased to present the enclosed Phase I Environmental Site Assessment (ESA) for the property located between Harkins Rd, & Harris Roads along Abbott St., Salinas, CA. The scope of services of this proposal is consistent with the American Society for Testing Materials (ASTM) 2005 guidance (Procedure Number E1527-05), which represents the present standard of practice. The objective of this assessment is to evaluate whether past or current activities have resulted in "recognized environmental conditions" as defined in ASTM E1527-05.

This assessment does not constitute legal advice or opinion. Given changing regulatory requirements and the potential legal implications of such an assessment, you may wish to consult legal counsel as part of the overall review of this assessment.

If you have questions regarding this report, please contact us at (408) 496-0801.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

Kendall W. Price, CEG, REA
Sr. Managing Scientist

Janelle Amendola, REA
Sr. Project Engineer

KWP/kp

cc: Mr. James Heckathorne, P.E., O'Brien & Gere

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Environmental Professional Statement

We have the specific qualifications based on education, training, and experience to assess a property of the nature, history and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

_____
Kendall W. Price, REA, CEG
Senior Managing Scientist
O'Brien & Gere Engineers, Inc.

_____
Janelle Amendola, REA
Sr. Project Engineer
O'Brien & Gere Engineers, Inc.

Executive Summary

In accordance with the August 27, 2007 proposal, O'Brien & Gere Engineers, Inc. was retained to conduct a Phase I Environmental Site Assessment (ESA) for the approximately 257 acre property located at the southwest corner of Abbott Street and Harris Road in Salinas, Monterey County, California (subject property). The majority of the property is farmed land. Two residential structures with addresses of 1776 and 1780 Abbott Street and several support structures (garages, sheds, etc) are also on the site. Ms. Janelle Amendola of O'Brien & Gere conducted a site inspection of the subject property and the surrounding area on May 8, 2008.

The Phase I ESA was performed to evaluate the potential existence of recognized environmental conditions associated with the subject property as a result of past and/or present site activities and current site conditions. As such, O'Brien & Gere's work in performing this ESA has been conducted in accordance with the American Society for Testing and Materials (ASTM) "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, designation E-1527-05" (ASTM E-1527-05).

Based on the data obtained during the preparation of our ESA, O'Brien & Gere draws the following findings and conclusions:

- The subject site has been farmed for more than 65 years. During that time, fertilizers and pesticides have been used at the site. Although there is no evidence of improper use of these materials, there is a potential for residue to remain in the soils at the site. Based on the planned industrial use of the site, sampling is not required. Additional sampling could be done if a higher degree of certainty is desired. Any soil that will be removed from the site should be tested for proper handling and disposal.
- The subject site contains a diesel tank and several drums used for tractor/equipment maintenance and fueling at the subject property. In addition, tractor and equipment maintenance was observed on unpaved exterior areas of the site (near the intersection of Harris Road and Abbott Street) Minor staining was observed within and outside of the tank containment area. It is our understanding the tanks, drums, containment area, and equipment will be removed prior to the planned site development. We recommend limited soil and potentially groundwater testing in this area for petroleum-related compounds.
- The buildings at the site appear to be more than 60 years old and likely contain lead-based paint and asbestos-containing building materials. A proper demolition survey should be completed prior to the planned building demolition.
- Four wells providing water for agricultural irrigation are present at the site. It is our understanding these wells will be sealed prior to the planned site development. The well destruction must comply with all applicable regulations and requirements.
- The adjacent property at 1511 Abbott Street has had numerous underground storage tanks and at least one release of Stoddard solvents. Groundwater at 1511 Abbott Street has been impacted with various petroleum-related components including MTBE. Although no wells are present on the subject property, high concentrations of petroleum compounds have been detected in the monitoring well adjacent to Abbott Street across from the site. Based on the concentrations and the calculated groundwater flow direction, it appears likely that this release has impacted the groundwater beneath the northern tip of the subject property. Based on the planned industrial use of the property and the fact an investigation is underway and a release source and responsible party has already been identified, any impacts to the subject property should not impact the

planned site redevelopment. Additional sampling could be done if a higher degree of certainty is desired.

- Our research also revealed a petroleum release at the adjacent and upgradient Former Radionics Facility at 1800 Abbott Street (across Harris Street). According to the reviewed information, a release of diesel fuel and additives was discovered on January 23, 2001. The case description narrative reports "Groundwater Hydropunch indicated contamination of the 9 ft aquifer at 0.7 ppb if toluene. Other onsite soil borings indicated only oil and grease at 520 ppm at 10 ft below ground surface. No other groundwater samples indicated contamination". Based on the relatively low concentrations reported in the groundwater, any impacts to the subject property as a result of this release would likely be minimal. Additional sampling could be done if a higher degree of certainty is desired.

1. Introduction

1.1. Purpose

In accordance with the August 27, 2007 proposal, O'Brien & Gere Engineers, Inc. was retained by EMC Planning, Inc to conduct a Phase I Environmental Site Assessment (ESA) for parcels 177-133-007, 177-133-005, and 177-133-004 in Salinas, Monterey County, California (subject property). The majority of the subject property is active agricultural fields and contains two residences with addresses of 1776 and 1780 Abbott Street. It is our understanding EMC Planning, Inc. is working with the property owner, Uni-Kool, to develop the site as a light industrial/agricultural industry park. A site location map is provided in Appendix 1.

The Phase I ESA was performed to evaluate the existence of potential environmental concerns associated with the subject property as a result of past or present site activities. As such, the Phase I ESA has been conducted at the subject property in conformance with the American Society for Testing and Materials (ASTM) "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, designation E-1527-05" (ASTM E-1527-05).

In defining a standard of good commercial and customary practice for conducting an environmental site assessment of a property, the goal of ASTM E-1527-05 is to identify recognized environmental conditions. The term "recognized environmental conditions" means the presence or likely presence of hazardous substances or petroleum products on a property under conditions that indicate an existing release, past release, or a material threat of a release of hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions of compliance with applicable laws. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to the public health or the environment and generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

1.2. Scope of Services

O'Brien & Gere's activities for the Phase I ESA for the subject property included: a visual review of the property and surrounding areas; a review of historic documents; and interviews with the following facility personnel to identify current and historical environmental status.

In addition, O'Brien & Gere reviewed regulatory agency documents and contacted regulatory personnel for an indication of recognized environmental conditions as defined in ASTM Standard Practice E-1527-05; and evaluated other information obtained from governmental agencies and sources during the assessment process.

1.3. Report Format

This Phase I ESA has been subdivided into the following sections:

- Section 1 identifies the purpose of the Phase I ESA and outlines the scope of services provided.

- Section 2 provides the site description and reconnaissance information for the subject property for the Phase I ESA. The following types of information are included in this section: the location and description of the property; the current and past uses of the subject property; the current and past uses of the surrounding properties; site topography and surficial drainage; site improvements; a geologic and hydrogeologic characterization; the results of the site reconnaissance; and a records review for the subject property. The records review included: state and federal environmental record sources; additional environmental sources on the state and local levels; physical setting sources; and historical use information.

- Section 3 provides the findings and conclusions for the Phase I ESA.

2. Site Description and Reconnaissance Information

2.1 Location and Description

Information concerning the site description for the Phase I ESA was obtained from file reviews, interviews with knowledgeable parties, and a site reconnaissance visit performed on May 8, 2008 by Ms. Janelle Amendola of O'Brien & Gere. Ms. Amendola prepared the Phase I ESA portion of this report and meets the definition of an Environmental Professional, as defined in ASTM E 1527-05. Resumes for Ms. Amendola and Mr. Kendall Price are included in Appendix 13.

The site is approximately 257 acres and is located at the southwest corner of Abbott Street and Harkins Road in Salinas, California. A portion of the site is within the city limits and the majority of site is just outside the city limits in unincorporated Monterey County. The subject property consists of three parcels. The first parcel is identified as assessor's parcel number 177-133-004, is 16.0 acres, is located within the Salinas City Limits, and is partially farmed but also contains all of the building structures on the site. The second parcel is identified as assessor's parcel number 177-133-005, is 183.2 acres, is entirely farmed, and is located in unincorporated Monterey County. The third parcel is identified as assessor's parcel number 177-133-007, is 60.1 acres, is entirely farmed, and is located in unincorporated Monterey County. A map showing the site parcels is included as the Site Map in Appendix 2. Photos taken during the site visit are included in Appendix 3.

According to the USGS 7.5-Minute Series (Topographic) Natividad Quadrangle, dated 1984, the subject site lies at an approximate elevation of 62 feet above mean sea level and is generally flat.

The site is located in an area with mixed light industrial, commercial, and agricultural properties.

2.2. Present and Past Uses of the Facility and the Surrounding Properties

Information concerning the present and past uses of the facility and the surrounding properties was obtained from discussions with facility personnel and a review of historical topographic maps, historical city directories, historical aerial photographs. Fire insurance maps were not available for the subject area.

The subject site has been agricultural fields since at least 1940. Based on reviewed records, it appears the residences were constructed between 1940 and 1947.

The surrounding properties are a mixture of agricultural, commercial, and light industrial uses. Signage observed during the site visit reveals adjacent properties include Quinn-Cat Engine Dyno Service (1300 Abbott Street), County of Monterey Agricultural Center (1428-1432 Abbott), Alsop Motor Company and Roy Alsop Pumps and Drilling (1508 Abbott Street), John Pryor Company (1505 Abbott Street, across Abbott Street), Valero Filling Station (1511 Abbott Street, across Abbott Street), Cal Door 1800 Abbott Street, across Harris Road), Coastal Tractors (10 Harris Place, across Harris Road), a multiple tenant office building (1 Harris Place, across Harris Road), additional agricultural industry and light industrial to the west (across Harkins Road), farmed fields to the south

2.2.1. Interviews with the Site Owner and Facility Personnel
O'Brien & Gere interviewed Mr. Steven Kovacich with Uni-Kool. Uni-Kool Partners has owned the subject property since 2005. According to Mr. Kovacich, the site has been agricultural fields for many years. Mr. Kovacich reported there are four active irrigation wells at the site. According to Mr. Kovacich, all four wells and the existing structures will be demolished as part of the planned site development.

2.2.2. Review of Historical Aerial Photographs
Historical aerial photographs were reviewed to help evaluate past land uses on the site and surrounding properties. In addition, the photographs were reviewed for evidence of hazardous materials and features that may have impacted the site and general vicinity. These features included, but were not limited to, landfills, ponds, pits, staining or distressed vegetation, above ground storage tanks (ASTs), lagoons, exterior storage of hazardous materials, and general land use practices.

Aerial photographs taken in 1956, 1971, 1981, 1987, 1998, and 2005 were reviewed. Copies of the aerial photographs are included in Appendix 4. A summary of the aerial photographs is as follows:

In all of the photographs, the site appeared similar to its current configuration. Structures were apparent in the northeastern corner of the site similar to the current location, although the scale of the photos prevented an accurate accounting of the individual buildings, any tanks, and any outdoor storage in each individual photograph.

2.2.3. Historical U.S.G.S. Topographic Maps
O'Brien & Gere reviewed historical USGS topographic maps for the site vicinity from 1912, 1940, 1947, 1950, 1968, and 1984. Copies of the maps are included in Appendix 5. The 1912 and 1940 maps show no features at the site. Structures were depicted at the northeastern corner of the property (similar to the current residential and support building locations) beginning on the 1947 map. No wells, tanks, ponds, or other potential environmental concerns were depicted on the site parcel or adjoining properties on any of the reviewed historical topographic maps.

2.2.4. City Directory Abstract
A City Directory Abstract was obtained from EDR, and is included in Appendix 6. City directories have been published for major cities and towns across the United States since the 19th century. City Directories published in the 20th century also included a street index for each street address during a given year. City Directories are a valuable source of historical information with regard to site tenancy and use. O'Brien & Gere reviewed the City Directory Abstract as provided by Environmental Data Resources, Inc. (EDR) for the site. Directories were reviewed from 1962, 1968, 1973, 1977, 1983, 1989, 1997, and 2003.

City Directory information provided by EDR shows 1776 and 1780 Abbott Street were not listed in the 1962, 1968, 1973, 1977, 1983, 1989, or 1997 directories. The 2003 directory listed 1776 Abbott Street as a residence with no listing for 1780 Abbott.

Based on the information provided by EDR, the surrounding properties appeared to have been a mixture of primarily undeveloped, commercial and light industrial uses from 1962 through 2003.

2.2.5. Sanborn Fire Insurance Maps
Maps produced by the Sanborn Fire Insurance Company for major cities and towns depict structures, building materials, uses, USTs, gas lines, etc. These maps were typically produced at the turn of the

century and were often updated into the 1970s. These maps are valuable sources of information in establishing prior usage, provided the site's location is within city limits as they were defined in the early to mid-1900s. Sanborn maps for the immediate site vicinity are not available for review. The EDR search report is included in Appendix 7.

2.2.6. Environmental Liens

O'Brien & Gere requested an environmental lien search from EDR. The environmental lien search results, including copies of the current grant deeds and legal descriptions, are included in Appendix 8. No environmental liens or activity and use limitations were identified during the Environmental Lien search.

2.2.7. Previous Environmental Reports

O'Brien & Gere was provided with no previous environmental reports for the subject site. Reports reviewed for nearby properties are discussed elsewhere within this report.

2.3. Site Topography and Surface Drainage Features

The subject property is located in a mixed-use area and the majority of the site is irrigated agricultural fields. The agricultural areas have been graded and tilled to retain the majority of irrigation and storm water at the site. Storm water drainage is also in the adjoining streets.

According to the USGS 7.5-Minute Series (Topographic) Natividad Quadrangle, dated 1984, the subject site lies at an approximate elevation of 62 feet above mean sea level and is generally flat.

2.4. Site Improvements

The following sections describe the site improvements (structures, access, and utilities) observed for the subject property.

2.4.1. Structures and Roads

The subject property is bound to the east by Harris Road, to the west by Harkins Road (except the northernmost portion), and to the north by Abbott Street (except the westernmost portion). Two residential structures, a garage, an aboveground tank containment, and other support structures are present at the northeastern corner of the site near the intersection of Abbott Street and Harris Road. Four irrigation wells with pumps are spread throughout the tilled portion of the site.

2.4.2. Water Supply Systems

Water used for agricultural irrigation is supplied via four onsite wells. Please refer to Section 2.4.5 for additional information on the wells.

The residential and support structures are reported to have potable water supplied by the City of Salinas municipal water system.

Recognized environmental conditions were not noted with respect to the subject site's water requirements during the site walkthrough.

2.4.3. Sanitary Sewage Systems

Wastewater generation at the subject property at this time is limited to sanitary wastes from the residential structures. The Salinas municipal sewer system collects and treats the wastewater generated at the subject site.

Recognized environmental conditions were not noted with respect to the subject site's sanitary sewage system requirements during the site walkthrough.

2.4.4. Storm Water System

The subject site is irrigated fields and has been graded and tilled to retain storm and irrigation water within the fields at the site. Swales on the site adjacent to the adjoining roads appear to have been designed and constructed to minimize road run-off into the farmed areas of the site.

Recognized environmental conditions were not noted with respect to the subject site's storm water system requirements during the site walkthrough.

2.4.5. Wells

Agricultural irrigation water for the site is provided by four wells on the site property. Please refer to Appendix 9 for recent test results for the well. These well test results show that the pumping capacity ranges from 740 to 1,100 gallons per minute, the static water level ranges from 74.7 to 94.5 feet below ground surface (bgs), and no E. Coli and low to no total coliforms was detected in the well samples. It is our understanding these wells will be destroyed as part of the planned site development. The well destruction must comply with all applicable regulations and requirements.

No drinking water wells were observed during the site visit, and none of the information reviewed for the preparation of this report revealed evidence of any former drinking water wells at the site.

No monitoring wells were observed on the site property.

2.4.6. Utilities

As previously noted, four wells on the site provide water for agricultural irrigation. Potable water and sanitary sewage disposal at the residential structures is via the City of Salinas. Pacific Gas and Electric (PG&E) supplies electrical service and natural gas.

2.5. Geologic and Hydrogeologic Characterization

According to the Soil Survey of Monterey County, published by the United States Department of Agriculture (USDA) Soil Conservation Service (SCS), sediments in the area of the site are classified as Cropley silty clay. These are well-drained, partially hydric soils. A representative profile encountered this material to a depth of at least 68 inches bgs.

Groundwater in monitoring wells at a nearby release investigation site has typically encountered initial groundwater at a depth of 16 to 38 ft bgs with a groundwater flow generally to the northwest to west. Testing of the irrigation wells on the sites (from a deeper aquifer) reported static water levels ranging from 74.7 to 94.5 ft bgs.

2.6. Hazardous Material Storage Areas

A containment area containing an aboveground diesel tank, two 55-gallon drums containing oil, and various other containers of maintenance and agricultural chemicals was observed on the site (see photos 7, 8, and 10 in Appendix 3). The containment area has a concrete floor and approximately 3-feet high masonry walls. Additional maintenance and agricultural chemicals were observed in the attached shed and on the ground adjacent to the containment area (photos 8 and 10). Two portable tanks labeled as fertilizer were observed on an unbermed concrete pad (photo 6) near the aboveground tank containment storage area. All of the hazardous material storage was in the northeastern portion of the site between the garage and residence site buildings and Harris Road.

At the time of the site visit, minor maintenance was being done on tractors at the site. It appears that the diesel fuel, the oil, and the maintenance chemicals are used to maintain the tractors, trucks, and related equipment used for farming the subject property.

Small amounts of staining was observed on the concrete floor of the aboveground tank containment storage area (photo 10), on the dirt outside the containment area (photo 7), and on the concrete and dirt in the vicinity of the portable fertilizer tanks (photo 6). No other staining was observed during the site visit. Stressed vegetation was not observed on the site, although very little vegetation was present in the vicinity of the storage and maintenance areas.

2.7. Underground Storage Tanks

At the time of the site inspection, no visual or physical evidence of existing or former USTs was observed. Physical evidence searched included areas of abnormal or nearby staining, manholes, access covers, concrete pads not homogeneous with surrounding surfaces, concrete built-up areas indicating pump islands, abandoned pumping equipment, or gasoline pumps.

Based on the interviews with site representatives and other materials researched for the preparation of this Environmental Site Assessment, no USTs were reported to have been operated at the subject site.

2.8. Above Ground Storage Tanks

Please refer to Section 2.6 for information on aboveground tanks currently present at the subject property. Our research revealed no evidence of other aboveground tanks formerly located at the subject property.

2.9. Pits, Dip Tanks, Sumps, Ponds, Lagoons or Drainage Courses

No pits, dip tanks, sumps, ponds, or lagoons associated with industrial operations were observed during the site visit. Storm water drainage on the property is described in Section 2.3.

2.10. Indications of Potential Polychlorinated Biphenyls

No obvious potential polychlorinated biphenyls were observed at the site.

2.11. Potential Asbestos-Containing Materials

U.S. Environmental Protection Agency (USEPA) regulations for asbestos-containing materials (ACM) date from 1973. A presumption is established under the federal regulations that asbestos had ceased to be used in construction by 1980 (see 29 CFR Part1910.1001 (j)(1).

Based on the prior to 1956 construction date of the structures at the site, ACBMs likely were utilized during construction. A full demolition survey including ACBMs should be performed prior to the planned building demolition.

2.12. Indications of On-Site Waste Disposal or Landfilling

Mounds, depressions, staining, or stressed vegetation were not observed during the site walkthrough. Based on the site reconnaissance and discussions with facility personnel, evidence of on-site waste disposal and/or landfilling was not observed at the subject property. The historical aerial photographs showed no indication of on-site waste disposal or landfilling in the past. No evidence of illegal dumping was observed during the site visit.

2.13. Solid and Hazardous Waste Disposal

2.13.1. Solid Waste

Solid waste generated at the site is primarily typical household solid waste from the residential structures.

2.13.2. Hazardous Waste

No hazardous waste generation was observed at the subject site. It is likely used oil and oil filters have been generated at the site during tractor and other similar equipment maintenance.

2.14. On-Going Remediation Programs

Based on the information reviewed by O'Brien & Gere, no remediation is on going at the subject site.

2.15. Spill History and Past Remediation Actions

Our investigation revealed no past spills or past remediation actions at the subject site.

2.16. Air Emissions and Heating and Cooling Systems

During the site walkthrough, no industrial operations potentially requiring air emissions permits were observed at the site.

2.17. Usage of Herbicides, Pesticides, Fungicides, and Rodenticides

The site consists primarily of agricultural fields. Pesticides and herbicides have been used at the site. O'Brien & Gere obtained a list of pesticides applied at the site in the past three years from the

Monterey County Agricultural Commissioners Office. The information provided is included in Appendix 10.

2.18. Wetlands

No wetlands were depicted at the site on the USGS topographic map. No obvious indications of wetlands were observed during the site inspection.

2.19. Radon

Radon is a radioactive gas that is found in certain geologic environments and is formed by the natural breakdown of radium, an element that is common in the earth's crust. A radon survey was not included within the scope of this investigation. However, the U.S. Environmental Protection Agency (USEPA) conducts radon surveys in designated geographic areas. According to the USEPA radon survey that covers Monterey County, the radon zone level for the county is 2 and radon concentrations within this geographical region are predicted to have an average indoor radon screening potential between 2 pico curies per liter (pCi/L) and 4 pCi/L. The USEPA has set the safety standard for radon gas in homes to be 4 pCi/L. This level is below the USEPA action level of 4.0 pCi/l. Therefore, based upon the reported subsurface characteristics of the area, the site exhibits a low potential for elevated radon levels.

2.20. Federal, State and Local Records Review

2.20.1 General

A review of federal and state environmental files was conducted as part of this ESA. The purpose of this review was to obtain and review records that assist in identifying recognized environmental conditions in connection with the subject property.

An environmental database search, prepared by EDR, was performed to identify the presence of properties within the ASTM search radii of the site with potential environmental issues. A review of the database search report is presented below and a copy of the report is presented as Appendix 11.

The following federal environmental databases were searched as part of the database report:

NPL database (1.0-mi radius). The NPL is a listing of uncontrolled hazardous waste sites eligible for remedial action under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); most recent government version January 31, 2008;

Proposed NPL database (1.0-mi radius). Proposed National Priority List Sites database, most recent government version January 31, 2008;

Delisted NPL database (1.0-mi radius). Sites delisted from the National Priority List database, where no further response is appropriate, most recent government version January 31, 2008;

NPL Liens (target property only). This database identifies properties with liens placed by USEPA under the Superfund program; most recent government version October 15, 1991;

CERCLIS database (0.5-mi radius). The CERCLIS list is a compilation of known and/or suspected uncontrolled or abandoned hazardous waste sites. These sites have been investigated or are currently under investigation by the USEPA for the release or threatened release of hazardous substances. Once a site is placed on the CERCLIS report, it may be subjected to several levels of review and evaluation and may ultimately be placed on the NPL; most recent government version is January 9, 2008;

CERCLIS-NFRAP database (0.25-mi radius). The NFRAP database identifies sites, which have been removed from the USEPA CERCLIS database. Following an initial investigation, it may be identified that these sites were not impacted, that the impact could be remediated quickly, or that the impact was not serious enough to require federal action; most recent government version December 3, 2007;

CORRACTS database (1.0-mi radius). The Corrective Action Report (CORRACTS) database, identifies hazardous waste handlers with RCRA corrective action activity; most recent government version December 12, 2007.

RCRA TSD database (0.5-mi radius). Under the Resource Conservation and Recovery Act (RCRA), the USEPA identifies and tracks hazardous waste from the point of generation to the point of disposal. Sites listed in the RCRA TSD database are those sites which treat, store, or dispose of hazardous waste; most recent government version March 6, 2008;

RCRA LQG and SQG databases (0.25-mi radius). Under the Resource Conservation and Recovery Act (RCRA), the USEPA identifies and tracks hazardous waste from the point of generation to the point of disposal. Sites listed in the RCRA database are those sites which generate large quantities of hazardous waste (LQG facilities); and/or generate small quantities of hazardous waste (SQG facilities); most recent government version March 6, 2008;

ERNS database (target property only). The Emergency Response Notification System (ERNS) database is a listing of sites that have reported releases of oil and hazardous substances to the USEPA and the National Response Center of the US Coast Guard; most recent government version December 31, 2007;

HMIRS database (target property only). This database contains information reported to DOT on hazardous material spill incidents; most recent government version October 31, 2007;

DOD database (1.0-mi radius). This database lists federally owned or administered lands administered by the Department of Defense, most recent version December 31, 2005.

FUDS database (1.0-mi radius). This database includes locations of formerly used defense sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions; most recent version December 31, 2006.

CONSENT database (1.0-mi radius). This database identifies major legal settlements establishing responsibility and standards for cleanup at Superfund sites; most recent government September 1, 2007;

ROD database (1.0-mi radius). This database contains information on documented mandated remedies for Superfund sites; most recent government version January 14, 2008;

UMTRA database (0.5-mi radius). This database contains information on uranium mill tailings sites; most recent government version July 13, 2007;

ODI database (0.5-mi radius). This database contains information on known open dumps, defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria; most recent government version June 30, 1985;

TRIS database (target property only). This database identifies facilities reporting under Superfund Amendments and Reauthorization Act (SARA) Section 313 for releases of toxic chemicals to the air, water, and land; most recent government version December 31, 2006;

TSCA database (target property only). This database identifies manufacturers and importers of TSCA listed substances; most recent government version December 31, 2002;

FTTS database (target property only). This database tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA, and Emergency Planning and Community Right-to-Know Act (EPCRA); most recent version January 15, 2008;

SSTS database (target property only). This database identifies pesticide producing facilities reporting under FIFRA on the types and amounts of pesticides being produced and sold or distributed; most recent government version December 31, 2006;

ICIS database (target property only). This database identifies facilities listed in the integrated compliance information system; most recent government version July 27, 2007;

PADS database (target property only). This database contains information on PCB generators, transporters, commercial storers, and/or brokers and disposers that are required to notify USEPA of their activities; most recent government version December 4, 2007;

MLTS database (target property only). This database identifies facilities licensed by the Nuclear Regulatory Commission for use of radioactive materials; most recent government January 15, 2008;

FINDS database (target property only). The FINDS database contains facility information and ties to other databases, including RCRIS and CERCLIS; most recent government version January 4, 2008.

RAATS database (target property only). This database contains records of enforcement actions (target property); most recent government version April 17, 1995; and,

The following state environmental databases were searched as part of the database report:

Hist Cal-Sites database (1.0-mi radius). Calsites database contains potential or confirmed hazardous substance release properties. This list is no longer updated and has been replaced by the Envirostor database; most recent government version August 8, 2005;

CA Bond Expenditure Plan database (1.0-mi radius). A site-specific expenditure plan used for an appropriation of Hazardous Substance Cleanup Bond Act funds; most recent government version January 1, 1989;

SCH database (0.25-mi radius). This database identifies proposed and existing school sites that area being evaluated by the California Department of Toxic Substances Control (DTSC) for possible hazardous materials contamination; most recent government version February 26, 2008;

Toxic pits database (1.0-mi radius). This database identifies sites suspected of contamination with hazardous substances where cleanup has not yet been completed; most recent government version July 1, 1995;

SWF/LF database (0.5-mi radius). This database active, closed, and inactive landfills; most recent government version March 10, 2008;

WMUDS/SWAT database (0.5-mi radius). This database waste management units; most recent government version April 1, 2000;

CA WDS database (target property only). This database identifies which have been issued waste discharge requirements; most recent government version June 19, 2007;

Cortese database (0.5-mi radius). This database is a listing of potential and confirmed hazardous waste sites throughout the State of California under Government Code Section 65962.5; most recent government version April 1, 2001;

SWRCY database (0.5-mi radius). This database is a listing of recycling facilities in California; most recent government version January 7, 2008;

LUST database (0.5-mi radius). This database is a listing of reported leaking underground storage tank incidents; most recent government version January 1, 2008;

CA FID UST database (0.25-mi radius). This database is a historical listing of active and inactive underground storage tank locations; most recent government version October 31, 1994;

SLIC database (0.5-mi radius). This database is a listing of spills, leaks, investigations, and cleanups and includes unauthorized discharges from spills and leaks, other than from underground storage tanks or other regulated sites; most recent government version January 7, 2008;

UST database (0.25-mi radius). This database is a listing of registered active underground storage tank facilities; most recent government version April 8, 2008;

HIST UST database (0.25-mi radius). This database is a historical listing underground storage tank sites; most recent government version October 15, 1990;

AST database (0.25-mi radius). This database is a listing of registered aboveground petroleum storage tank facilities; most recent government version November 1, 2007;

Sweeps UST database (0.25-mi radius). This database is a historical listing of underground storage tank facilities; most recent government version June 1, 1994;

CHMIRS database (target property only). This California Hazardous Material Incident Report System database contains information on reported hazardous material accidental releases and spills; most recent government version December 31, 2005;

Notify 65 database (1.0-mi radius). This database contains facility notifications about any release which could impact drinking water; most recent government version October 21, 1993;

Deed database (0.5-mi radius). This database is a listing of DTSC Site Mitigation and Brownfields Reuse Program Sites with deed restrictions and Hazardous Waste Management Program Facility Sites with deed/land use restrictions; most recent government version April 1, 2008;

VCP database (0.5-mi radius). This database is a listing of voluntary cleanup program properties; most recent government version December 26, 2008;

Drycleaners database (0.25-mi radius). This database is a listing of drycleaner related facilities that have EPA ID numbers; most recent government version July 31, 2007;

CDL database (target property only). This database is a listing of clandestine drug lab locations; most recent government version September 30, 2007;

Response database (1.0-mi radius). This database is a listing of confirmed release sites where DTSC is involved in remediation; most recent government version February 26, 2008;

Haznet database (target property only). This database is extracted from the copies of hazardous waste manifests received by the DTSC; most recent government version December 31, 2006;

EMI database (target property only). This database is a listing of toxic and criteria pollutant air emissions data; most recent government version December 31, 2005;

Envirostor database (1.0-mi radius). This database is a listing of sites that have known contamination or sites for which there may be reasons to investigate further; most recent February 26, 2008;

The information generated by the database search does not document whether the sites listed have adversely impacted the subject property. The list is provided for informational purposes and to identify the presence of those sites where operations may potentially impact the subject property.

As part of a database search, "orphan" sites are listed which are within the same municipality as a given property but, because of insufficient or conflicting geographic information, cannot be located relative to the subject property.

2.20.2. Federal Environmental Database File Review

The subject site addresses were not reported on any of the reviewed federal databases.

John Pryor Company at 1505 Abbott Street (an adjacent property across Abbott Street) was listed as a small quantity hazardous waste generator. Soil Serv Inc at 1427 Abbott Street within 1/8 mile northwest of the site), was listed on the CERC-NFRAP database. Please refer to the state database section for additional information on these listings.

2.20.3. State Environmental Database File Review

The subject property addresses were not reported on any of the reviewed federal databases.

The Sturdy Oil Company and John Street Service at 1511 Abbott Street (currently the Valero station, an adjacent property across Abbott Street) is listed on the Cortese, LUST, CA FID UST, HIST UST, and SWEEPS UST databases. According to the EDR report, the following tanks were reported to have been operated at the listed address:

Underground Tanks Historically Operated at 1511 Abbott Street

Underground Tank Size	Tank Contents	Date Installed
12,000 gallon	Unleaded*	Not Reported
12,000 gallon	Regular	Not Reported
12,000 gallon	Premium**	Not Reported
20,000 gallon	Diesel	1968
20,000 gallon	Regular Unleaded	1968
20,000 gallon	Leaded	1968
12,000 gallon	Regular Unleaded*	1968
6,000 gallon	Leaded	1963
7,500 gallon	Leaded	1963
7,500 gallon	Regular Unleaded	1963
5,000 gallon	Unknown Product	1978
550 gallon	Unknown Product	1963
1,000 gallon	Unknown Product	1963
1,000 gallon	Waste Oil	1963
12,000 gallon	Premium**	July 1985

* and ** These listings came from different databases and may refer to the same tank

EDR reported a release was discovered at 1511 Abbott Street in April 1993. The released material is listed as Stoddard Solvent. Groundwater has been impacted with various petroleum-related components including Methyl Tert Butyl Ether (MTBE). O'Brien & Gere obtained additional information on these releases on the State of California Geotracker Database. Thirteen monitoring wells have been installed to monitor this release. Although no wells are present on the subject property, high concentrations of petroleum compounds have been detected in the monitoring well adjacent to Abbott Street across from the site. Based on the concentrations and the calculated groundwater flow direction, it appears likely that this release has impacted the northern tip of the subject property. A copy of the most recent quarterly groundwater monitoring report for 1511 Abbott Street is included in Appendix 12.

The John Pryor Company at 1505 Abbott Street is listed on the Cortese, and LUST databases. This release has been closed, indicating it is no longer considered a threat to human health and the environment. Based on the closed status and northwest to west regional groundwater flow direction, this release appears unlikely to have significantly impacted the subject site.

O'Brien & Gere obtained additional information on these releases from the State of California Geotracker Database.

The Geotracker Database also revealed a petroleum release at the adjacent and upgradient Former Radionics Facility at 1800 Abbott Street (currently Cal Door located adjacent to the site across Harris Street) is a LUST. According to the Geotracker information, a release of diesel fuel and additives was discovered on January 23, 2001. The case description narrative reports "Groundwater Hydropunch indicated contamination of the 9 ft aquifer at 0.7 ppb if toluene. Other onsite soil borings indicated only oil and grease at 520 ppm at 10 ft below ground. No other groundwater sampled indicated contamination". No maps showing the boring locations or other reports were available for this release. Based on the relatively low concentrations reported in the groundwater, any impacts to the subject property as a result of this release would likely be minimal.

Based on the distance and direction to the site, none of the other state database listings in the EDR report appear likely to adversely impact the subject site.

2.20.4. Monterey County Environmental Health Department

O'Brien and Gere reviewed available files for the subject site from the Monterey County Environmental Health Department. The Monterey County Environmental Health Department reported they have no files for the site address.

3. Phase I ESA Findings and Conclusions

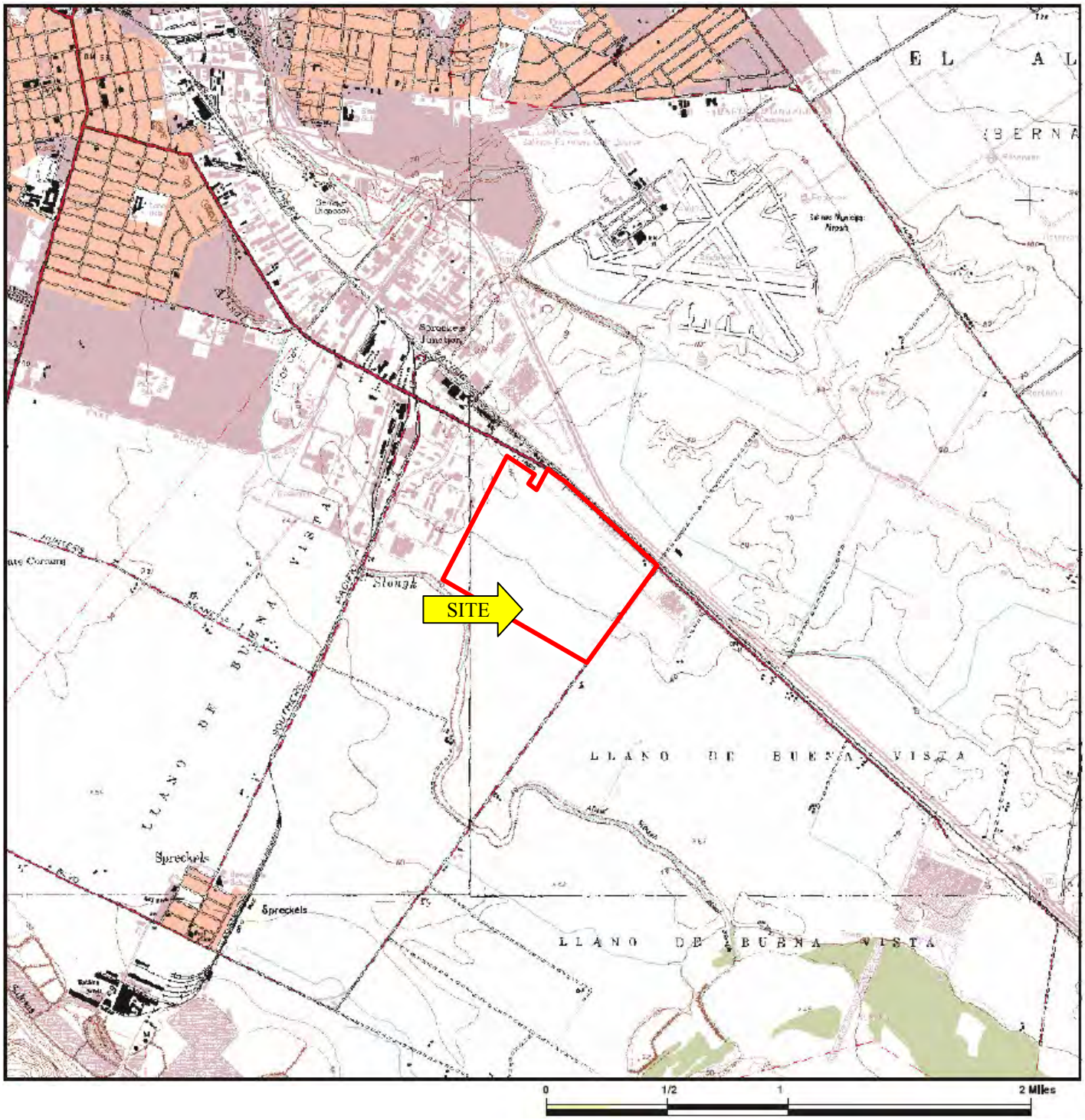
O'Brien & Gere has conducted a Phase I ESA of the approximately 257 acre parcel property identified as 177-133-007, 177-133-005, and 177-133-004 on Abbott Street Salinas, California, in accordance with the document entitled, "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessments Process" (ASTM E 1527-05). Any exceptions to or deletions from this practice are described in the report.

Based on the data obtained during the preparation of our ESA, O'Brien & Gere draws the following findings and conclusions:

- The subject site has been farmed for more than 65 years. During that time, fertilizers and pesticides have been used at the site. Although there is no evidence of improper use of these materials, there is a potential for residue to remain in the soils at the site. Based on the planned industrial use of the site, sampling is not required. Additional sampling could be done if a higher degree of certainty is desired. Any soil that will be removed from the site should be tested for proper handling and disposal.
- The subject site contains a diesel tank and several drums used for tractor/equipment maintenance and fueling at the subject property. In addition, tractor and equipment maintenance was observed on unpaved exterior areas of the site (near the intersection of Harris Road and Abbott Street) Minor staining was observed within and outside of the tank containment area. It is our understanding the tanks, drums, containment area, and equipment will be removed prior to the planned site development. We recommend limited soil and potentially groundwater testing in this area for petroleum-related compounds.
- The buildings at the site appear to be more than 60 years old and likely contain lead-based paint and asbestos-containing building materials. A proper demolition survey should be completed prior to the planned building demolition.
- Four wells providing water for agricultural irrigation are present at the site. It is our understanding these wells will be sealed prior to the planned site development. The well destruction must comply with all applicable regulations and requirements.
- The adjacent property at 1511 Abbott Street has had numerous underground storage tanks and at least one release of Stoddard solvents. Groundwater at 1511 Abbott Street has been impacted with various petroleum-related components including MTBE. Although no wells are present on the subject property, high concentrations of petroleum compounds have been detected in the monitoring well adjacent to Abbott Street across from the site. Based on the concentrations and the calculated groundwater flow direction, it appears likely that this release has impacted the northern tip of the subject property. Based on the planned industrial use of the property and the fact an investigation is underway and a release source and responsible party has already been identified, any impacts to the subject property should not impact the planned site redevelopment. Additional sampling could be done if a higher degree of certainty is desired.
- Our research also revealed a petroleum release at the adjacent and upgradient Former Radionics Facility at 1800 Abbott Street (across Harris Street). According to the reviewed information, a release of diesel fuel and additives was discovered on January 23, 2001. The case description narrative reports "Groundwater Hydropunch indicated contamination of the 9 ft aquifer at 0.7 ppb if toluene. Other onsite soil borings indicated only oil and grease at 520 ppm at 10 ft below ground. No other groundwater sampled indicated contamination". Based on the relatively low concentrations reported in the groundwater, any impacts to the subject property as a result of this release would likely be minimal. Additional sampling could be done if a higher degree of certainty is desired.

Appendix 1

Site location map



Site Vicinity Map

Project Name: Uni-Kool
Abbott Street, Salinas, California
Client Name: EMC Planning, Inc,
Date: May 2008
File: 13284/42784

O'BRIEN & GERE

Appendix 2

Site map

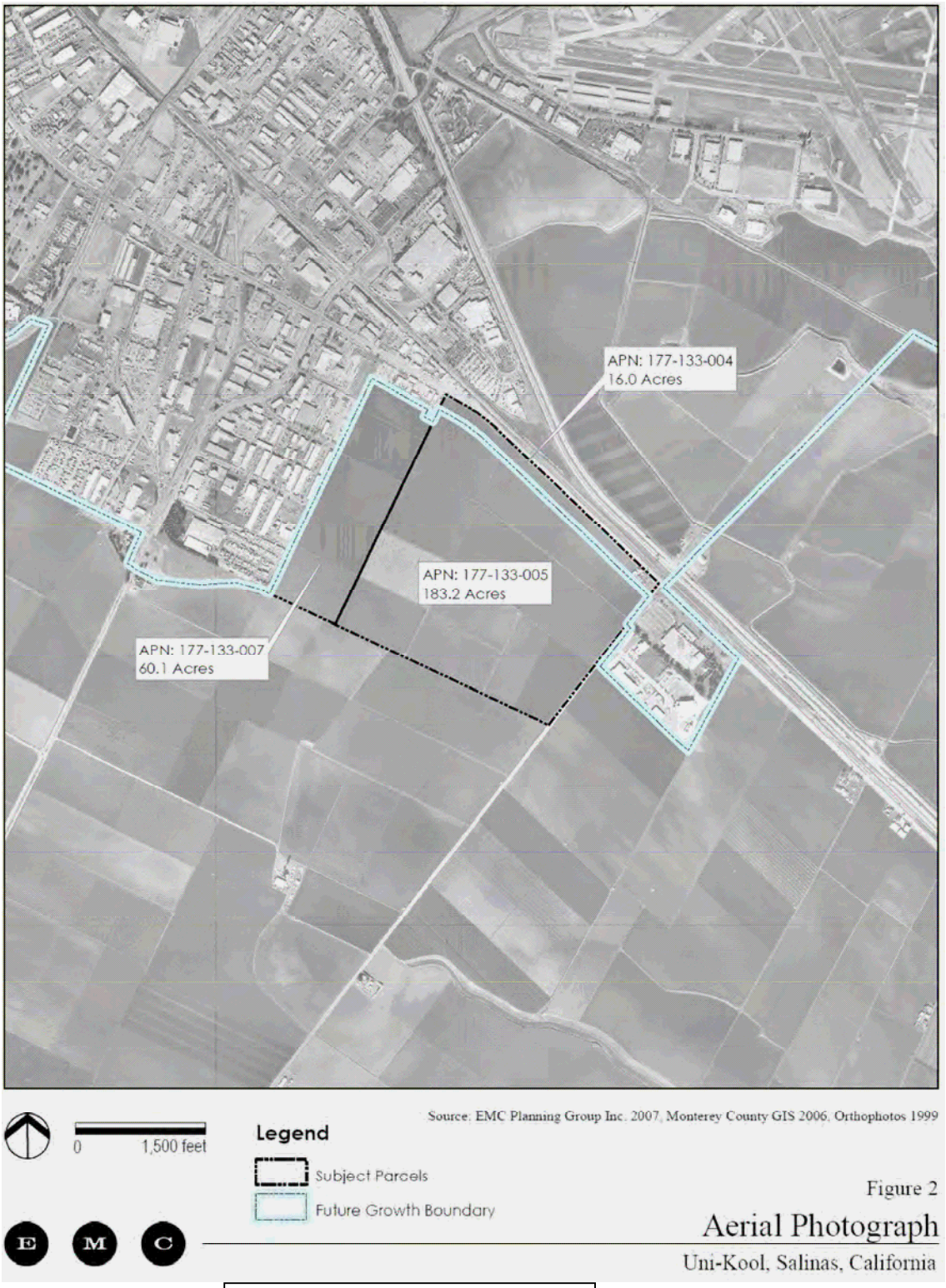


Figure 2

Aerial Photograph

Uni-Kool, Salinas, California

Map provided by EMC Planning, Inc.

Site Map

Project Name: **Uni-Kool**
Abbott Street, Salinas, California
Client Name: **EMC Planning, Inc,**
Date: **May 2008**
File: **13284/42784**

O'BRIEN & GERE

Appendix 3

Site photographs

PHOTO 1: View of site

PHOTO 2: View of site (looking southeast along Abbott Street)

Site Photographs

Project Name: **Uni-Kool**
Abbott Street, Salinas, California
Client Name: **EMC Planning, Inc,**
Date: **May 2008**
File: **13284/42784**

O'BRIEN & GERE

PHOTO 3: View of residence at site

PHOTO 4: View of garage at site

Site Photographs

Project Name: **Uni-Kool**
Abbott Street, Salinas, California
Client Name: **EMC Planning, Inc,**
Date: **May 2008**
File: **13284/42784**

O'BRIEN & GERE

PHOTO 5: View of residence at site

PHOTO 6: View of fertilizer tanks at site

Site Photographs

Project Name: **Uni-Kool**
Abbott Street, Salinas, California
Client Name: **EMC Planning, Inc,**
Date: **May 2008**
File: **13284/42784**

O'BRIEN & GERE

PHOTO 7: View of diesel tank at site

PHOTO 8: View of diesel tank, oil drums, and other materials at site

Site Photographs

Project Name: **Uni-Kool**
Abbott Street, Salinas, California
Client Name: **EMC Planning, Inc,**
Date: **May 2008**
File: **13284/42784**

O'BRIEN & GERE

PHOTO 9: View of tractors, trucks, and equipment at site

PHOTO 10: View of aboveground tank containment area floor at site

Site Photographs

Project Name: **Uni-Kool**
Abbott Street, Salinas, California
Client Name: **EMC Planning, Inc,**
Date: **May 2008**
File: **13284/42784**

O'BRIEN & GERE

PHOTO 11: View of commercial gas station at 1511 Abbott (across from site)

PHOTO 12: View of bulk plant portion of 1511 Abbott (across from site)

Site Photographs

Project Name: **Uni-Kool**
Abbott Street, Salinas, California
Client Name: **EMC Planning, Inc,**
Date: **May 2008**
File: **13284/42784**

O'BRIEN & GERE

Appendix 4

Historical aerial photographs

The EDR Aerial Photo Decade Package

Uni-Kool
Abbott Street
Salinas, CA 93901

Inquiry Number: 2211225.5

May 05, 2008

EDR® Environmental Data Resources Inc

The Standard in Environmental Risk Information

440 Wheelers Farms Road
Milford, Connecticut 06461

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

EDR Aerial Photo Decade Package

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDRs professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Date EDR Searched Historical Sources:

Aerial Photography May 05, 2008

Target Property:

Abbott Street

Salinas, CA 93901

Year	***Scale***	***Details***	***Source***
1956	Aerial Photograph. Scale: 1"=555'	Flight Year: 1956	Aero
1971	Aerial Photograph. Scale: 1"=555'	Flight Year: 1971	Western
1981	Aerial Photograph. Scale: 1"=690'	Flight Year: 1981	WSA
1987	Aerial Photograph. Scale: 1"=666'	Flight Year: 1987	USGS
1998	Aerial Photograph. Scale: 1"=666'	Flight Year: 1998	USGS
2005	Aerial Photograph. Scale: 1"=484'	Flight Year: 2005	EDR


INQUIRY #: 2211225.5
YEAR: 1956
= 555'
N


INQUIRY #: 2211225.5
YEAR: 1971
= 555'
N


INQUIRY #: 2211225.5
YEAR: 1981
= 690'
N


INQUIRY #: 2211225.5
YEAR: 1987
= 666'
N


INQUIRY #: 2211225.5
YEAR: 1998
= 666'
N


INQUIRY #: 2211225.5
YEAR: 2005
= 484'
N

Appendix 5

Historical topographic maps

EDR Historical Topographic Map Report

Uni-Kool
Abbott Street
Salinas, CA 93901

Inquiry Number: 2211225.4

May 05, 2008

EDR® Environmental Data Resources Inc

The Standard in Environmental Risk Information

440 Wheelers Farms Rd
Milford, Connecticut 06461

Nationwide Customer Service

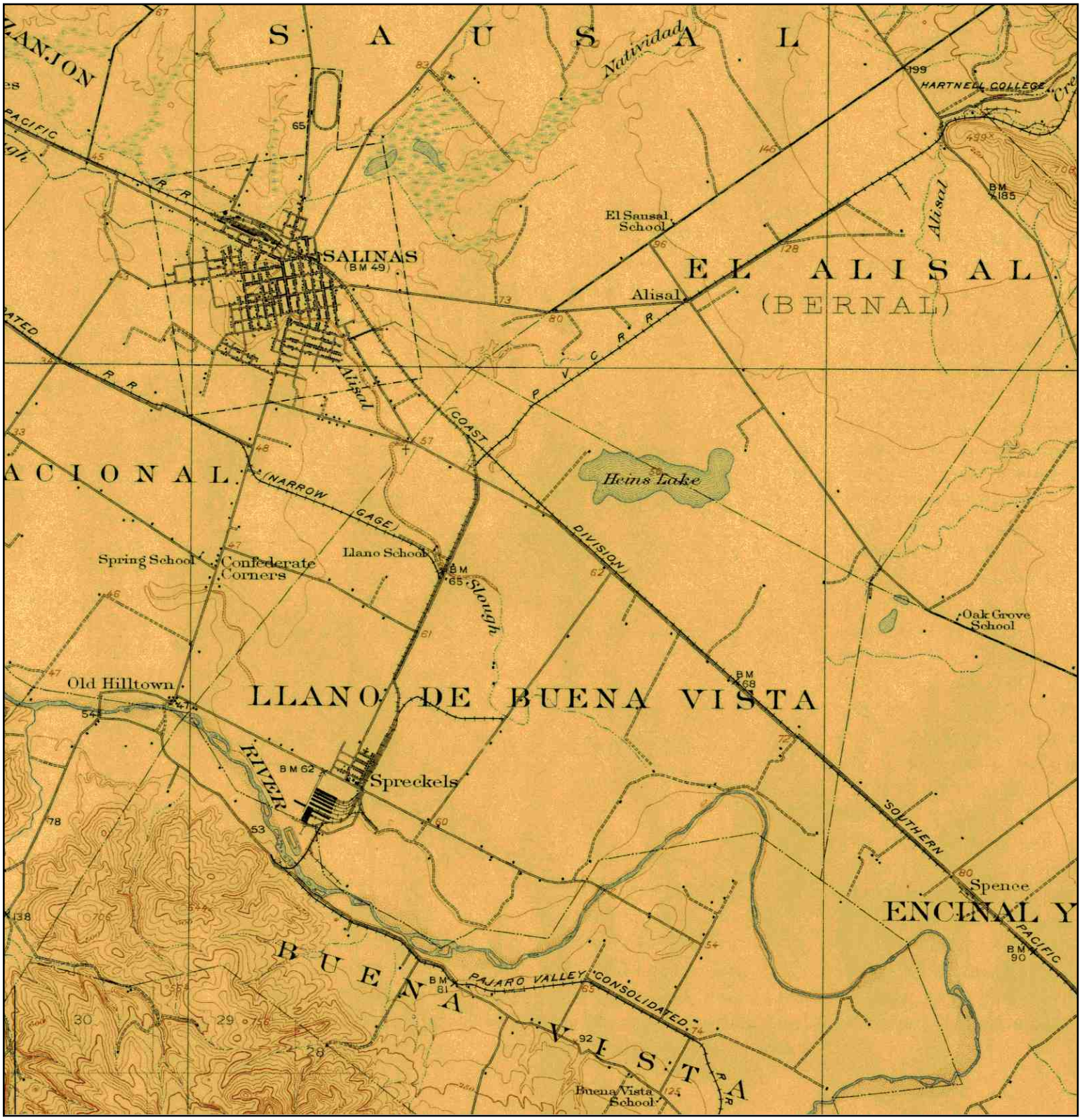
Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

EDR Historical Topographic Map Report

Environmental Data Resources, Inc.s (EDR) Historical Topographic Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topographic Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the early 1900s.

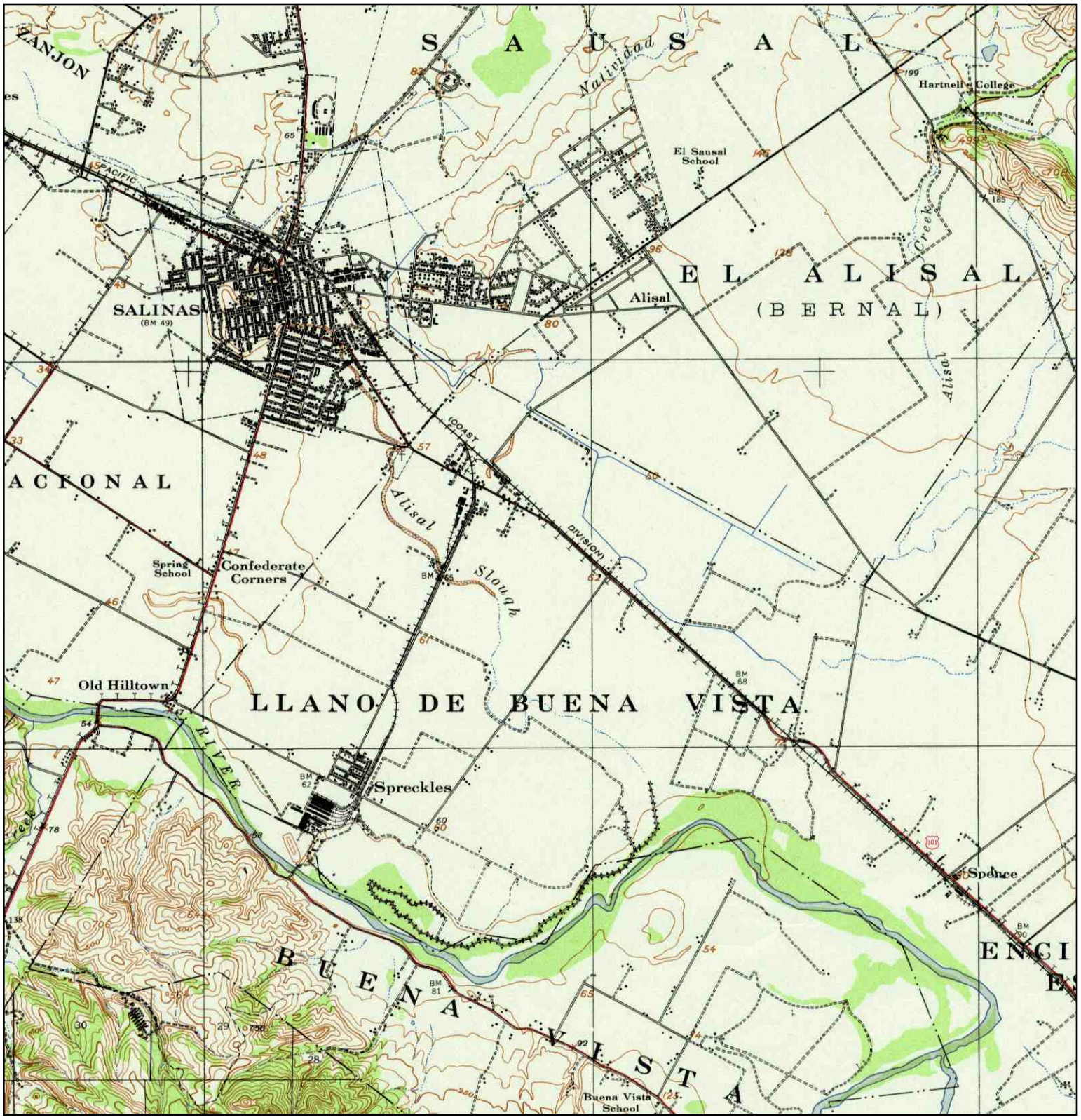
Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Historical Topographic Map



N	TARGET QUAD NAME: SALINAS MAP YEAR: 1912 SERIES: 15 SCALE: 1:62500	SITE NAME: Uni-Kool ADDRESS: Abbott Street Salinas, CA 93901 LAT/LONG: 36.6461 / 121.621	CLIENT: O'Brien & Gere Companies CONTACT: Janelle Amendola INQUIRY#: 2211225.4 RESEARCH DATE: 05/05/2008

Historical Topographic Map

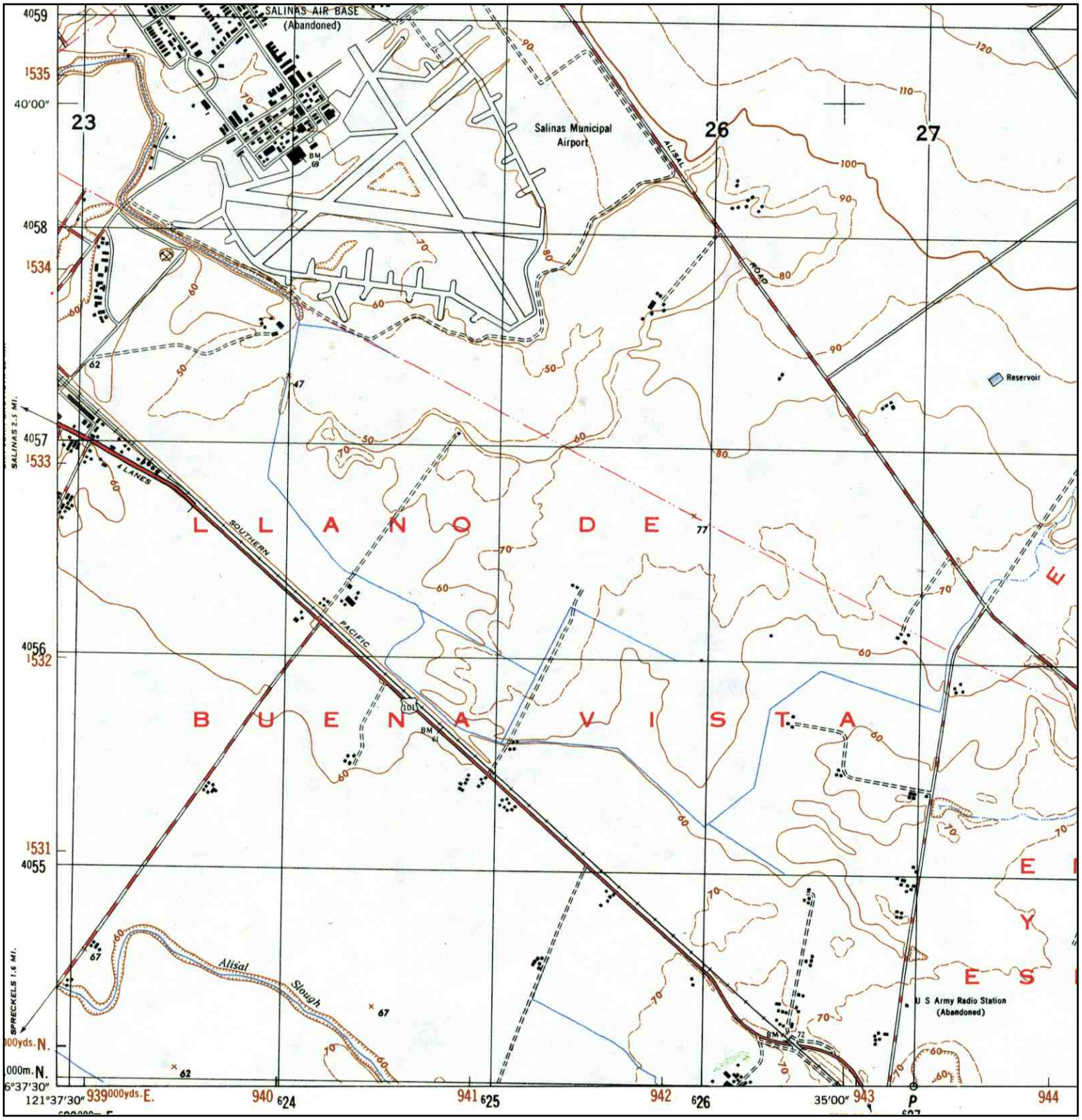


N	TARGET QUAD NAME: SALINAS MAP YEAR: 1940 SERIES: 15 SCALE: 1:62500	SITE NAME: Uni-Kool ADDRESS: Abbott Street Salinas, CA 93901 LAT/LONG: 36.6461 / 121.621	CLIENT: O'Brien & Gere Companies CONTACT: Janelle Amendola INQUIRY#: 2211225.4 RESEARCH DATE: 05/05/2008

Historical Topographic Map

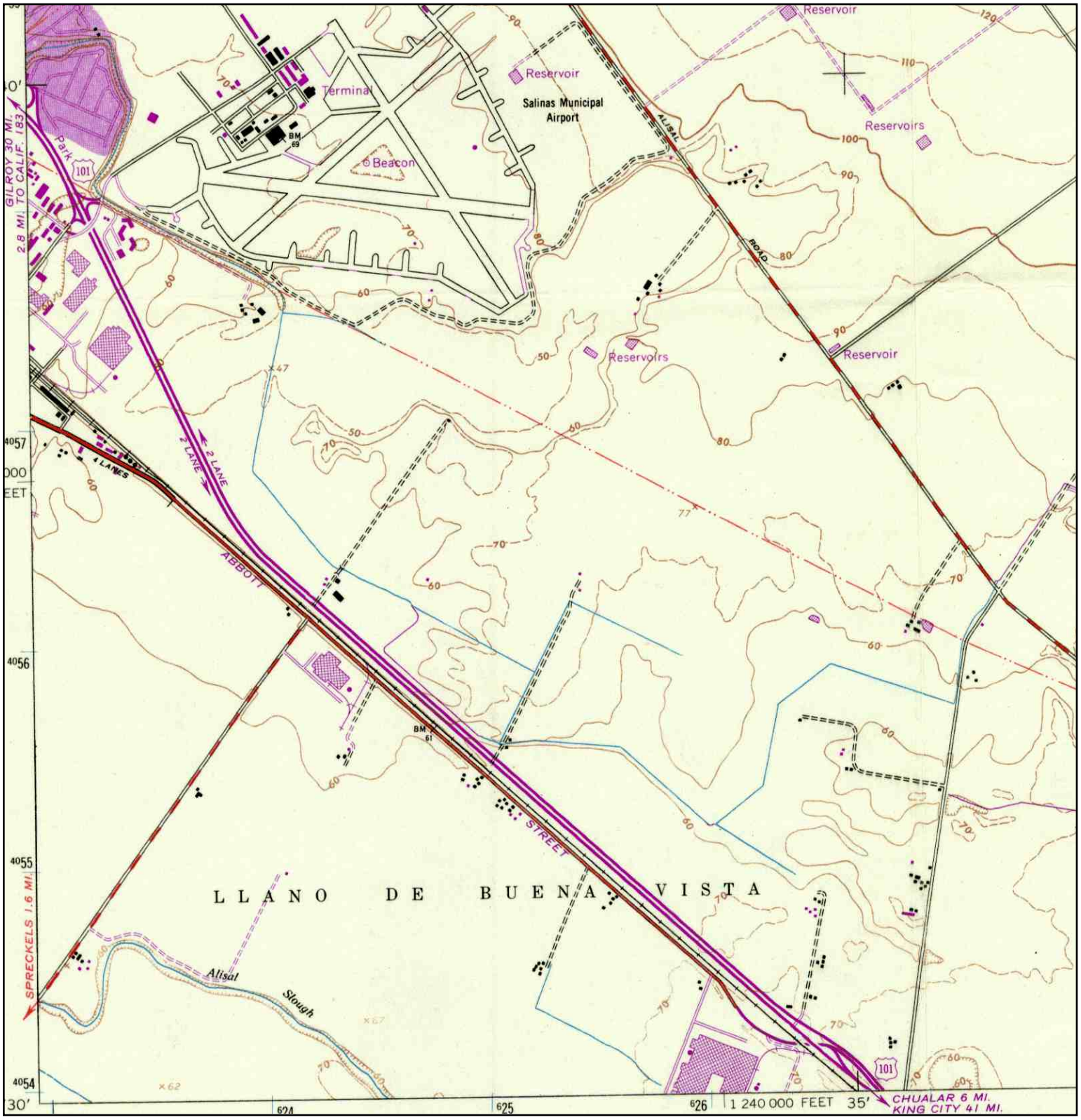
N	TARGET QUAD NAME: SALINAS MAP YEAR: 1947 SERIES: 15 SCALE: 1:62500	SITE NAME: Uni-Kool ADDRESS: Abbott Street Salinas, CA 93901 LAT/LONG: 36.6461 / 121.621	CLIENT: O'Brien & Gere Companies CONTACT: Janelle Amendola INQUIRY#: 2211225.4 RESEARCH DATE: 05/05/2008

Historical Topographic Map



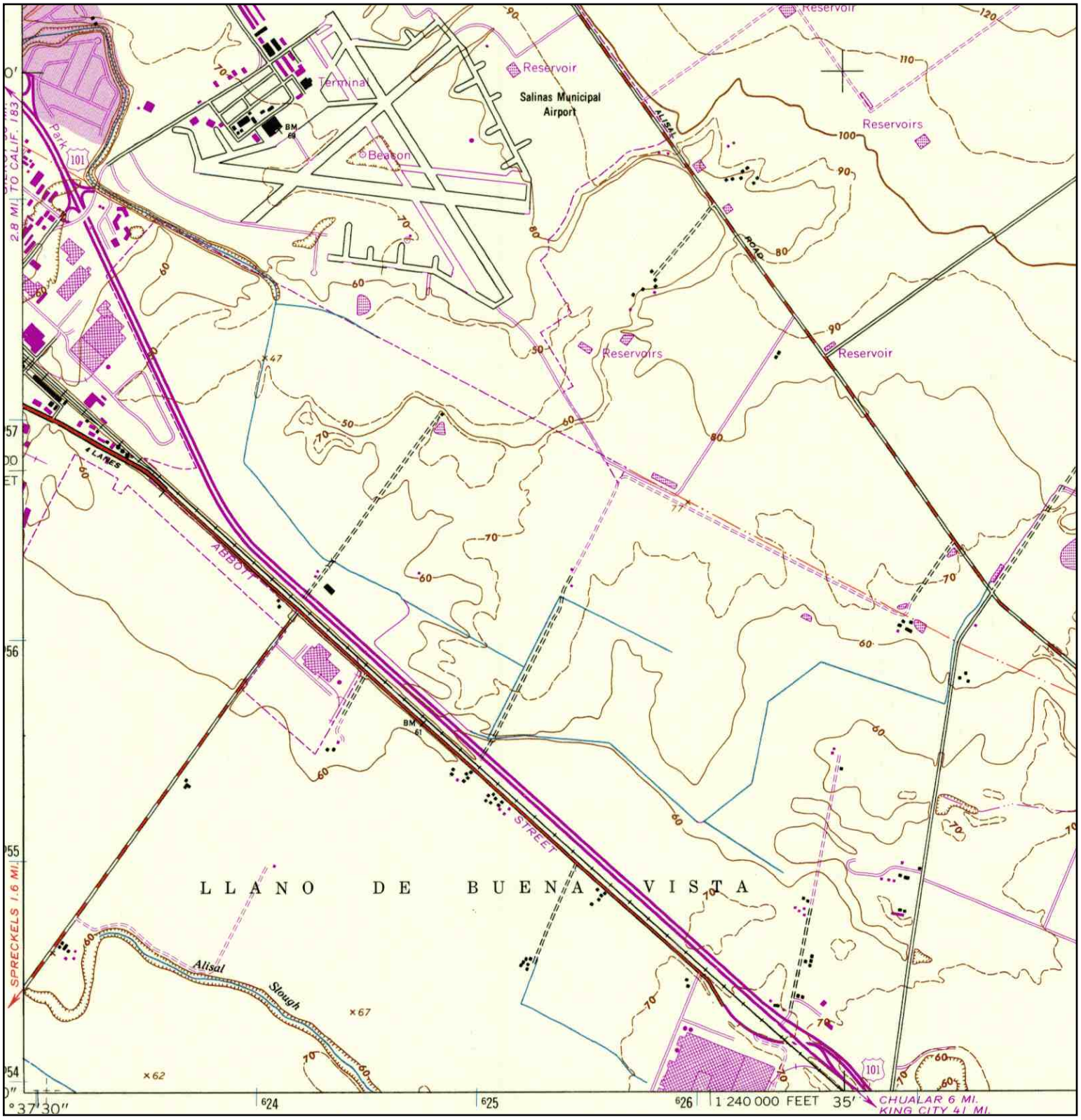
N	TARGET QUAD NAME: NATIVIDAD MAP YEAR: 1950 SERIES: 7.5 SCALE: 1:25000	SITE NAME: Uni-Kool ADDRESS: Abbott Street Salinas, CA 93901 LAT/LONG: 36.6461 / 121.621	CLIENT: O'Brien & Gere Companies CONTACT: Janelle Amendola INQUIRY#: 2211225.4 RESEARCH DATE: 05/05/2008

Historical Topographic Map



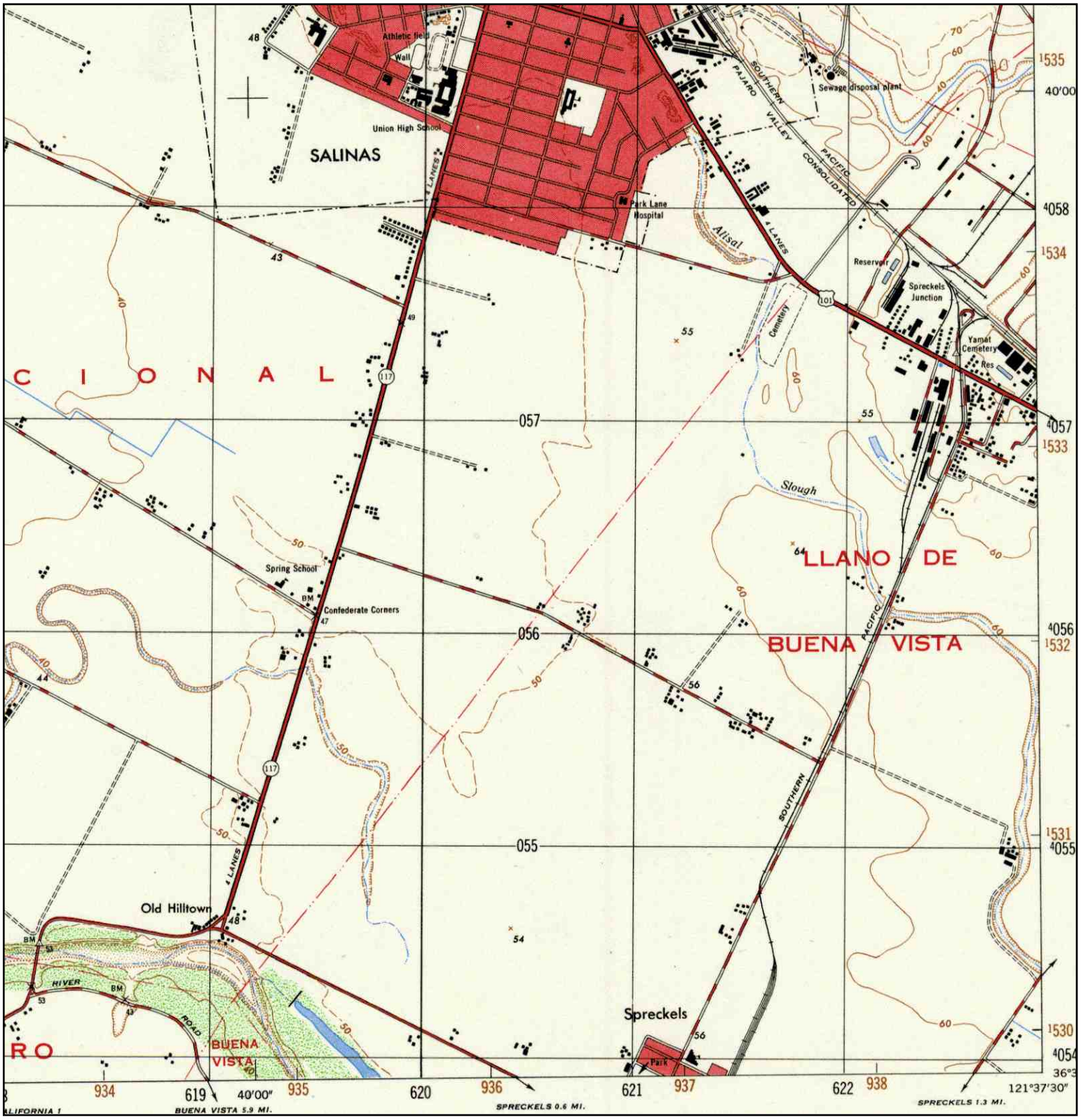
N	TARGET QUAD NAME: NATIVIDAD MAP YEAR: 1968 PHOTOREVISED FROM:1947 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Uni-Kool ADDRESS: Abbott Street Salinas, CA 93901 LAT/LONG: 36.6461 / 121.621	CLIENT: O'Brien & Gere Companies CONTACT: Janelle Amendola INQUIRY#: 2211225.4 RESEARCH DATE: 05/05/2008

Historical Topographic Map



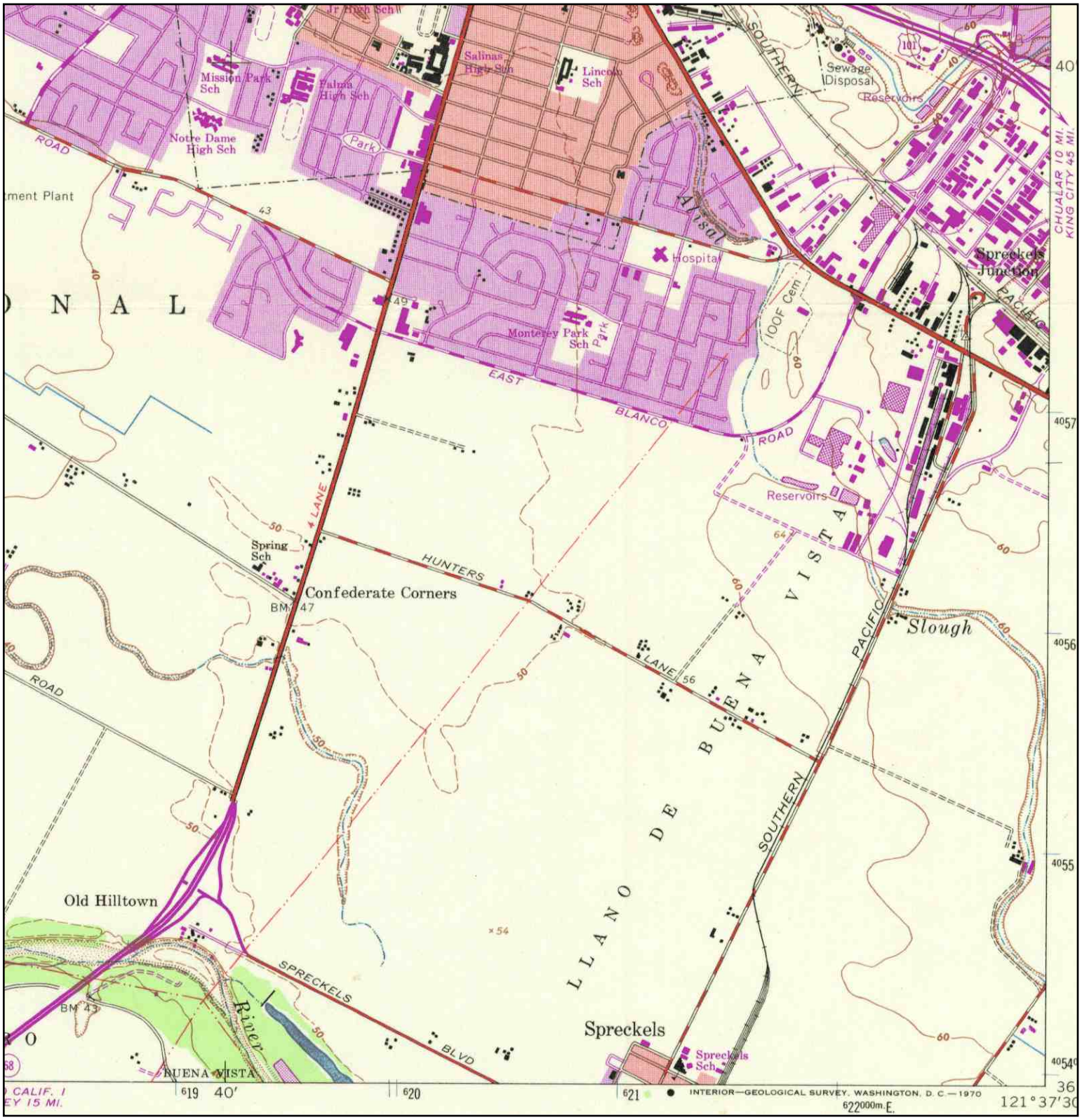
N	TARGET QUAD NAME: NATIVIDAD MAP YEAR: 1984 PHOTOREVISED FROM:1947 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Uni-Kool ADDRESS: Abbott Street Salinas, CA 93901 LAT/LONG: 36.6461 / 121.621	CLIENT: O'Brien & Gere Companies CONTACT: Janelle Amendola INQUIRY#: 2211225.4 RESEARCH DATE: 05/05/2008

Historical Topographic Map



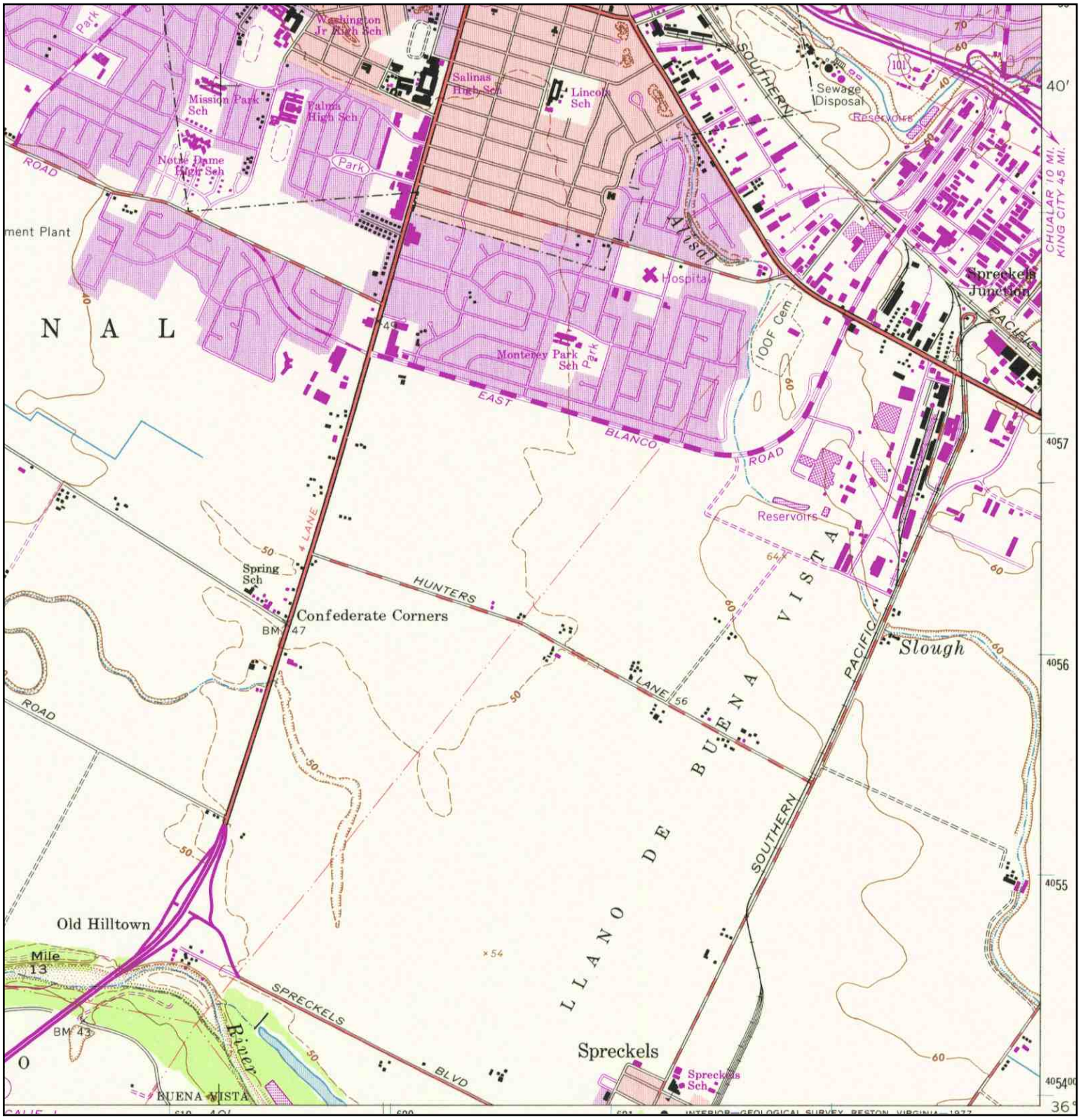
N	ADJOINING QUAD NAME: SALINAS MAP YEAR: 1948 SERIES: 7.5 SCALE: 1:25000	SITE NAME: Uni-Kool ADDRESS: Abbott Street Salinas, CA 93901 LAT/LONG: 36.6461 / 121.621	CLIENT: O'Brien & Gere Companies CONTACT: Janelle Amendola INQUIRY#: 2211225.4 RESEARCH DATE: 05/05/2008

Historical Topographic Map



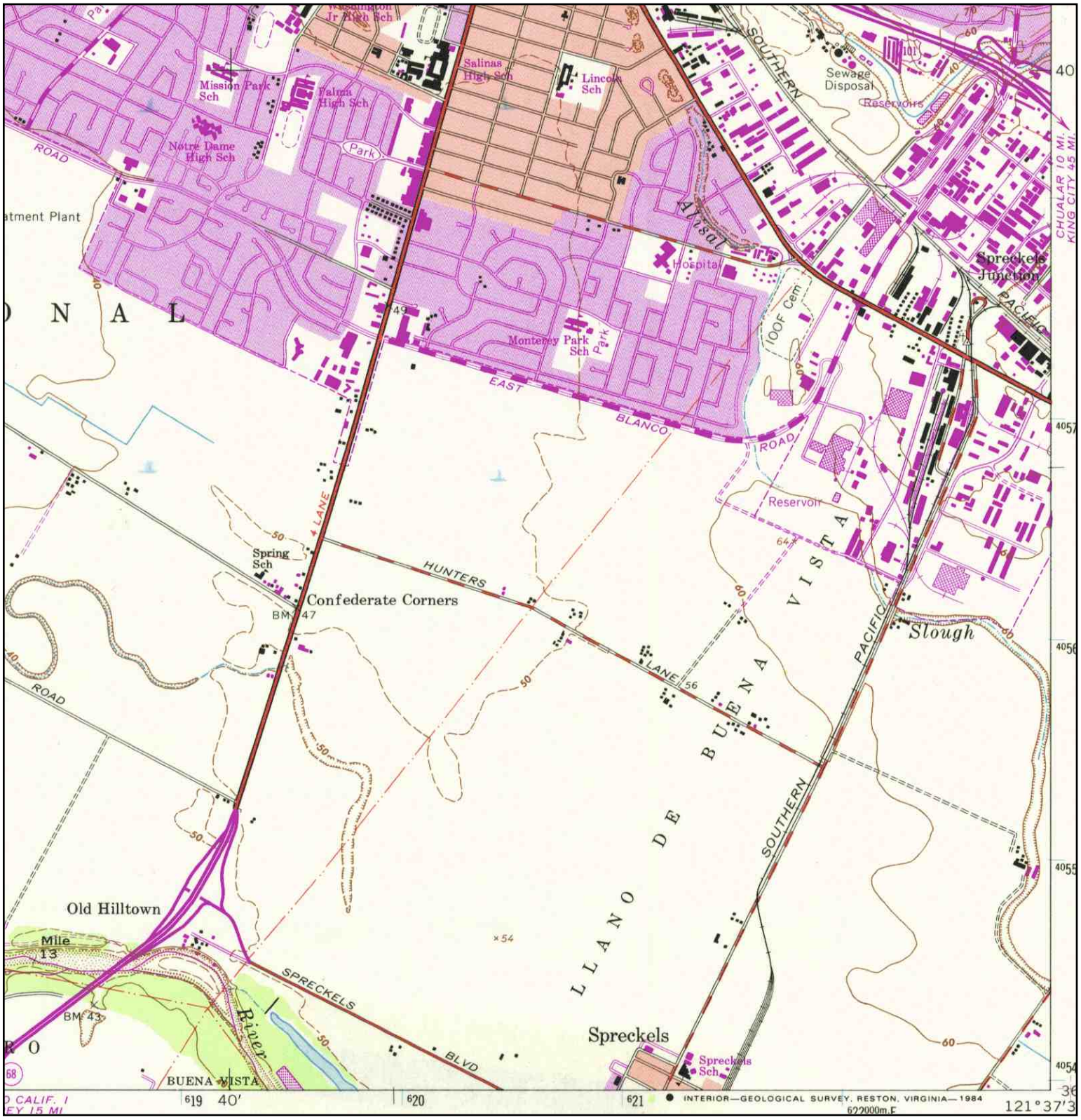
N	ADJOINING QUAD NAME: SALINAS MAP YEAR: 1968 PHOTOREVISED FROM:1947 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Uni-Kool ADDRESS: Abbott Street Salinas, CA 93901 LAT/LONG: 36.6461 / 121.621	CLIENT: O'Brien & Gere Companies CONTACT: Janelle Amendola INQUIRY#: 2211225.4 RESEARCH DATE: 05/05/2008

Historical Topographic Map



N	ADJOINING QUAD NAME: SALINAS MAP YEAR: 1975 PHOTOREVISED FROM:1947 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Uni-Kool ADDRESS: Abbott Street Salinas, CA 93901 LAT/LONG: 36.6461 / 121.621	CLIENT: O'Brien & Gere Companies CONTACT: Janelle Amendola INQUIRY#: 2211225.4 RESEARCH DATE: 05/05/2008

Historical Topographic Map



N	ADJOINING QUAD NAME: SALINAS MAP YEAR: 1984 PHOTOREVISED FROM:1947 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Uni-Kool ADDRESS: Abbott Street Salinas, CA 93901 LAT/LONG: 36.6461 / 121.621	CLIENT: O'Brien & Gere Companies CONTACT: Janelle Amendola INQUIRY#: 2211225.4 RESEARCH DATE: 05/05/2008

Appendix 6

City directory abstract

The EDR-City Directory
Abstract

Uni-Kool
1776 Abbott Street
Salinas, CA 93901

Inquiry Number: 2211225.6

Friday, May 09, 2008

EDR® Environmental Data Resources Inc

The Standard in Environmental Risk Information

440 Wheelers Farms Road
Milford, Connecticut 06461

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

EDR City Directory Abstract

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening report designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

SUMMARY

- ***City Directories:***

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1962 through 2003. (These years are not necessarily inclusive.) A summary of the information obtained is provided in the text of this report.

Date EDR Searched Historical Sources: May 9, 2008

Target Property:
1776 Abbott Street
Salinas, CA 93901

Year	Uses	Source
1962	Address Not Listed in Research Source	Polk's City Directory
1968	Address Not Listed in Research Source	Polk's City Directory
1973	Address Not Listed in Research Source	Polk's City Directory
1977	Address Not Listed in Research Source	Polk's City Directory
1983	Address Not Listed in Research Source	Polk's City Directory
1989	Address Not Listed in Research Source	Polk's City Directory
1997	Address Not Listed in Research Source	Polk's City Directory
2003	Residence	Polk's City Directory

Adjoining Properties

SURROUNDING

Multiple Addresses
Salinas, CA 93901

Year	Uses	Source
1962	****ABBOTT ST****	Polk's City Directory
	Address not listed in research source (1800)	Polk's City Directory
	No addresses listed past 1511	Polk's City Directory
1968	****ABBOTT ST****	Polk's City Directory
	Address not listed in research source (1800)	Polk's City Directory
	No addresses listed past 1511	Polk's City Directory
1973	****ABBOTT ST****	Polk's City Directory
	Peter Paul Co (candy mfr) (1800)	Polk's City Directory
	No other addresses listed past 1511	Polk's City Directory
1977	****ABBOTT ST****	Polk's City Directory

Year	***Uses***	***Source***
1977	Peter Paul Co (candy mfr) (1800)	Polk's City Directory
	No other addresses listed past 1511	Polk's City Directory
1983	****ABBOTT ST****	Polk's City Directory
	Radionics (1800)	Polk's City Directory
	No other addresses listed past 1511	Polk's City Directory
1989	****ABBOTT ST****	Polk's City Directory
	Radionics (burglar alarms) (1800)	Polk's City Directory
	No other addresses listed past 1511	Polk's City Directory
1997	****ABBOTT ST****	Polk's City Directory
	Radionics (1800)	Polk's City Directory
	No other addresses listed past 1511	Polk's City Directory
2003	****ABBOTT ST****	Polk's City Directory
	No other addresses listed past 1511	Polk's City Directory

Appendix 7

Sanborn Fire Insurance Map search report

Certified Sanborn® Map Report

Sanborn® Library search results
Certification # C9C4-487D-AE64

Uni-Kool
Abbott Street
Salinas, CA 93901

Inquiry Number 2211225.3

May 05, 2008

The Standard in Environmental Risk Information

440 Wheelers Farms Rd
Milford, Connecticut 06461

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

Certified Sanborn® Map Report

5/05/08

Site Name:
Uni-Kool
Abbott Street
Salinas, CA 93901

Client Name:
O''Brien & Gere Companies
2366 Walsh Avenue
Santa Clara, CA 95051

EDR Inquiry # 2211225.3

Contact: Janelle Amendola

EDR® Environmental Data Resources Inc

The complete Sanborn Library collection has been searched by EDR, and fire insurance maps covering the target property location provided by O''Brien & Gere Companies were identified for the years listed below. The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by Sanborn Library LLC, the copyright holder for the collection.

Certified Sanborn Results:

Site Name: Uni-Kool
Address: Abbott Street
City, State, Zip: Salinas, CA 93901
Cross Street:
P.O. # 42784
Project: 13284-42784
Certification # C9C4-487D-AE64

Sanborn® Library search results
Certification # C9C4-487D-AE64

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

The Sanborn Library includes more than 1.2 million Sanborn fire insurance maps, which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ✓ Library of Congress
- ✓ University Publications of America
- ✓ EDR Private Collection

Total Maps: 0

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Appendix 8

Environmental lien search report

The EDR Environmental LienSearch™ Report

Uni-Kool
Abbott Street
Salinas, CA 93901

Inquiry Number: 2211225.7

Monday, May 05, 2008

EDR® Environmental Data Resources Inc

The Standard in Environmental Risk Information

440 Wheelers Farms Road
Milford, Connecticut 06461

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

The EDR Environmental LienSearch™ Report

The EDR Environmental LienSearch Report provides results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied address information to:

- search for parcel information and/or legal description;
- search for ownership information;
- research official land title documents recorded at jurisdictional agencies such as recorders' offices, registries of deeds, county clerks' offices, etc.;
- access a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument(s) (title, parties involved, and description); and
- provide a copy of the deed or cite documents reviewed.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

The EDR Environmental LienSearch™ Report

TARGET PROPERTY INFORMATION

ADDRESS

Abbott Street
Uni-Kool
Salinas, CA 93901

RESEARCH SOURCE

Source 1:

Montrey Recorder
Monterey, CA

PROPERTY INFORMATION

Deed 1:

Type of Deed:	deed
Title is vested in:	The Uni-Kool Partners LP
Title received from:	Harden Foundation
Deed Dated	9/21/2005
Deed Recorded:	9/23/2005
Book:	NA
Page:	na
Volume:	na
Instrument:	na
Docket:	NA
Land Record Comments:	see exhibit
Miscellaneous Comments:	na
Legal Description:	see exhibit
Legal Current Owner:	The Uni-Kool Partners LP
Property Identifiers:	177-133-007, 177-133-005, 177-133-004
Comments:	see exhibit

ENVIRONMENTAL LIEN

Environmental Lien: Found ☐ Not Found ☒

If found:

1st Party:
2nd Party:
Dated:
Recorded:
Book:
Page:
Docket:

Volume:
Instrument:
Comments:
Miscellaneous Comments:

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

AULs: Found ☐ Not Found ☒
If found:

1st Party:
2nd Party:
Dated:
Recorded:
Book:
Page:
Docket:
Volume:
Instrument:
Comments:
Miscellaneous Comments:

Deed Exhibit 1

RECORDING REQUESTED BY:
Chicago Title Company
Escrow No.: 05-**52102024**-KH
Locate No.: CACTI7727-7727-4521-0052102024
Title No.: 05-**52102024**-JF

When Recorded Mail Document and Tax Statement To:
The Uni Kool Partners
P. O. Box 3140
Salinas, CA 93912

Stephen L. Vagnini
Monterey County Recorder
Recorded at the request of
Chicago Title

CRMARIA
9/23/2005
8:00:00

DOCUMENT: **2005099784**

Titles: 1/ Pages: 3
Fees.... 12.00
Taxes... 17,600.00
Other...
AMT PAID 17,612.00

APN: 177-133-004, 177-133-005, 177-133-007

SPACE ABOVE THIS LINE FOR RECORDER'S USE

GRANT DEED

The undersigned grantor(s) declare(s)
Documentary transfer tax is $17,600.00
[X] computed on full value of property conveyed, or
[ ] computed on full value less value of liens or encumbrances remaining at time of sale,
[X] Unincorporated Area City of

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, Harden Foundation, a Non-Profit Corporation

hereby GRANT(S) to The Uni-Kool Partners, a California General Partnership

the following described real property in the County of **Monterey**, State of **California:**
SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

DATED: September 21, 2005

Harden Foundation, a Non-Profit Corporation

by: Frank E. Ferriasci
Treasurer

STATE OF CALIFORNIA
COUNTY OF Monterey
ON September 22, 2005 before me,
the undersigned Notary Public personally appeared
Frank E. Ferriasci

personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

VRS2 CAROLYN WYLIE
COMM. # 1343190
Notary Public-California
County of Monterey
My Comm. Exp. March 9, 2006 VRS2

Witness my hand and official seal.

Signature

MAIL TAX STATEMENTS AS DIRECTED ABOVE

Escrow No.: 05-**52102024**-KH
Locate No.: CACTI7727-7727-4521-0052102024
Title No.: 05-**52102024**-JF

EXHIBIT "A"

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF MONTEREY, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

PARCEL I:

That certain Parcel of land conveyed by Spreckels Sugar Company, a Corporation, to M.P. Johansen and Cora Johansen, his wife, by Deed dated December 13, 1934 and recorded December 29, 1934 in Volume 421 of Official Records at Page 144, Monterey County Records, and being particularly described as follows:

Beginning at a 4" x 4" post painted white, and marked 25, 26, set in the fence on the Eastern bank of San Jon Del Alisal Slough, from which the Southeastern corner of that certain 400 acre parcel of land conveyed by John D., Lillie C., and Adolph B. Spreckels to Spreckels Sugar Company, by Deed dated the 8th Day of November, 1897 and recorded November 13, 1897 in Volume 54 of Deeds, at Page 1, Records of Monterey County, California, bears South 66° 22' East, 3809.50 feet; thence North 23° 44' East. 3226.20 feet to a 4" x 4" post painted white and marked NJP, 1, SH, standing in the Western boundary of the State Highway leading Southeasterly from the city of Salinas; thence along said Western boundary of the State Highway, South 62° 10' East, 907.00 feet to a 4" x 4" post painted white and marked NPJ, 2, SH; thence leaving said State Highway boundary, South 23° 44' West, 3160.40 feet to a 4" x 4" post painted white and marked NPJ, 3, standing in the fence on the Western boundary of the above mentioned 400 acre parcel of land; thence along said Western boundary, North 66° 22' West, 904.70 feet to the point of beginning, being a portion of Rancho Llano De Buena Vista.

Excepting therefrom the following three (3) Parcels:

FIRST

Commencing at a 2 x 4 survey stake standing on the Southeast side the said Johansen 66.323 acre tract of the Southwest side of the California State Highway, also known as U.S. Highway No. 101, as widened to width of 110 feet, by that certain 0.21 acre tract conveyed by N.P. Johansen and Cora Johansen, to State of California, by Deed dated January 14, 1943 and recorded March 2, 1943 in Volume 792 of Official Records at Page 113, therein, Records of Monterey County, California, and from which a 4"x 4" survey post marked NPJ, 2, SH, standing at the most Easterly corner of the said Johansen 66.323 acre tract bears North 23° 44' East, 10.47 feet distant, as shown on State of California, Department of Public Works Plans, Dist. V, County of Monterey, Route 2, Section B, Sheet No. 4 approved September 25, 1944, and running thence along the Southeast side of said Johansen 66.323 acre tract.

(1) South 23° 44' West, 363.94 feet to a 2 x 4 survey post; thence leave the Southeast side of the said 66.323 acre tract, and running,

(2) North 62° 7' West, 120 feet to a 2 x 4 survey post; thence

(3) North 23° 44' East, 363.94 feet to a 2 x 4 survey post standing on the Southwest side of said 0.21 acre widening strip of said State Highway,

(4) South 62° 7' East, 120 feet to the place of beginning.

SECOND

All that portion conveyed by N.P. Johansen and Cora Johansen, his wife, to State of California, being a portion of the State Highway, by Deed dated January 14, 1943 and recorded March 2, 1943 in Volume 792 Official Records, at Page 113, Monterey County Records.

THIRD

All that portion conveyed to Salinas Valley Memorial Hospital Foundation by Deed recorded October 4, 1991 in Reel 2701 at Page 517, Monterey County Records.

Initials: _____

PARCEL II:

That portion of the Rancho Llano De Buena Vista which is designated on Record of Survey of Land belonging to Spreckels Sugar Company recorded in Monterey County Records on March 13, 1951 in Volume 4 of Surveys, at Page 85 as "Parcel D".

Excepting and reserving therefrom 50% of all oil, gas and other hydrocarbons substance and all other minerals of very kind, together with the right of entry, as reserved in the Deed from Spreckels Sugar Company, a California Corporation, recorded April 12, 1951 in Book 1295 of Official Records, at Page 186.

Also excepting therefrom that portion of land conveyed to the County of Monterey by Deed recorded May 22, 1970 in Reel 848 of Official Records, at Page 669.

END OF DOCUMENT

Initials: _____

Appendix 9

Well Testing Results

RUGGERI-JENSEN-AZAR ENGINEERS ■ PLANNERS ■ SURVEYORS

FAX TRANSMITTAL

To: JENEL AMENDOLA Date: 5/13/08

Fax #: 408-496-0806 Job #: 072067

From: Carly for Jorge Duran Pages: 23 (incl. cover sheet)

Subject: Salinas Ag-Industrial Project

Comments:

Jenel,

On behalf of Jorge Duran, attached is the information received from uni-kool regarding pumps/wells @ the Salinas Ag-Industrial Project.

Thanks,

Carly

Copies To:

8055 CAMINO ARROYO, GILROY, CA 95020 T: (408) 848-0300 / F: (408) 848-0302 / www.rja-gps.com

Facsimile Cover Sheet

To: Steve RE
Company: RJA
Phone:
Fax: 408-848-0302

From: Steve / Bob
Company: UNI-KOOL
Phone: (831) 424-6613
Fax: (831) 424-9038

Date: 2/13/08
Pages including this cover page: 22

Comments: Pumps 1, 2, 3 + 4
Pumps 3 + 4 Currently not in use - Pump #4 has power dis-connected

PUMP #	CAPACITY SPM
1	1,100
2	1,000
3	770
4	740

HARDEN RANCH 5

CHUALAR DISTRICT

PREPARED FOR

ROYAL PACKING CO.

BY

AG SURVEYS, INC.

66 SALINAS-MONTEREY HWY SALINAS

303 N. MAIN ST. (831) 753-2521 GONZALES

SCALE: 1" = 200'

REVISED JAN '08

Monterey County Pump Testing Service

P.O. Box 7413 • Spreckels, CA • 93962-7413

Test No.: 7125
MCWRA# : 01688

Pump no.: 1
Test Date: 05-Oct-07

Operator: THE UNI-KOOL PARTNERS
Address: P.O. Box 3140
City: Salinas, California 93912

Pumping plant location: HARDIN RANCH 5

PG&E location No.: 94423
Pump make: Johnston
Motor make: General Electric
Horsepower: 75

Meter No.: 239R01
Serial No.: Na
Serial No.: PE6789736
Motor efficiency: 91.5%

PUMPTEST REPORT

Datum=c/l discharge pipe.	RUN #1	RUN #2	SHUT OFF
Static Water Level, feet	94.5	94.5	94.5
PUMPING WATER LEVEL, feet	107.3	100.4	94.5
Drawdown, feet (dd)	12.8	5.9	0.0
Discharge pressure, psi	7.0	34.0	52.0
Discharge pressure, feet	16.2	78.5	120.1
TOTAL DYNAMIC HEAD, feet	123.5	178.9	214.6
Avg. disch. pipe velocity, fps	6.13	3.25	0.00
CAPACITY, gpm	1,497	794	0
YIELD OF WELL, gpm/ft.dd	117	135	NA
Water pumped per day, acre feet	6.61	3.51	NA
Measured speed, rpm	1765	1765	1765
Kilowatt input, kw	60.3	59.6	64.4
Horsepower input, hp	80.9	79.9	86.4
Kilowatt hours/acre foot	217	404	NA
OVERALL PLANT EFFICIENCY	57.7%	44.9%	NA
Motor load, % full load	98.7%	97.5%	105.4%
ENERGY COST, $/ac-ft.	$26.04	$48.50	NA
(Based on $0.12 per kwhr.)			
Pump tested by:			TR/MR
Test witnessed by:			NONE

Remarks:
HYDRAULIC SECTION: GOOD TEST SECTION.
WELL ENTRANCE: SOUNDING TUBE WITH CAP.
SCHLUMBERGER KILOWATT HOUR METER - 30715 KW-HRS.
FLOWMETER MAKE/SN.: McCROMETER / 93 10 3110
FLOWMETER READING: 834.042
THE PERFORMANCE OF THE PUMP FOR RUN 1 IS FAIR/GOOD.
THE PERFORMANCE OF THE PUMP FOR RUN 2 IS POOR.
THE YIELD OF THE WELL IS VERY GOOD.
THE WELL PUMP MOTOR IS PROPERLY LOADED.
EXCESSIVE OIL IN WELL.

Monterey County Pump Testing Service

P.O. Box 7413 • Spreckels, CA • 93962-7413

Test No.: 7125
MCWRA# 01688

Pump no.: 1
Test Date: 05-Oct-07

Operator THE UNI-KOOL PARTNERS
Address: P.O. Box 3140
City: Salinas, California 93912

Pumping plant location: HARDIN RANCH 5

PG&E Location No.: 94423 PG&E Meter No.: 239R01

FLOWMETER TEST REPORT

FLOWMETER MAKE/#: McCROMETER / 93 10 3110 SEALED: YES
FLOWMETER READING: 834.042
UNITS OF MEASUREMENT: 0.00100
DISCHARGE PIPE NOMINAL DIAMETER, INCHES 10
DISCHARGE PIPE INSIDE DIAMETER, INCHES 10.250

7.10 * STRAIGHT PIPE UPSTREAM OF FLOWMETER, PIPE DIAMETERS.
3.50 * STRAIGHT PIPE DOWNSTREAM OF FLOWMETER, PIPE DIAMETERS.
* exceeds minimum required. ** less than minimum required.

RUN #	FLOWMETER READING, GPM	TEST HAND READING, GPM	MANOMETER READING, GPM	CALIBRATION FACTOR	
RUN1	1,450	1,495	1,497	1.0013	
RUN2	750	812	794	0.9785	
RUN3					
AVERAGE	1,100	1,153	1,145	0.9899	= 1,100 GPM

REMARKS:
This meter is within the accuracy requirements of Ordinance 3663 (0.95 - 1.05) and is properly installed, except:

No exceptions.

::

Harden Well 1 8-18-07

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.testamericainc.com

4 September, 2007

Ed Rosales
Western Farm Service - Salinas
1143 Terven Avenue
Salinas, CA 93901

RE: -
Work Order: MQH0540

Enclosed are the results of analyses for samples received by the laboratory on 08/18/07 15:25. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Theresa Allen

Theresa Allen For Douglas Clark
Project Manager

CA ELAP Certificate # 1210

The Chain(s) of Custody, 3 pages, are included and are an integral part of this report.

The reported results were obtained in compliance with the 2003 NELAC standards unless otherwise noted.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.testamericainc.com

Western Farm Service - Salinas 1143 Terven Avenue Salinas CA, 93901	Project: - Project Number: [none] Project Manager: Ed Rosales	MQH0540 Reported: 09/04/07 11:09

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Harden Well 1	MQH0540-01	Water	08/18/07 09:25	08/18/07 15:25

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.testamericainc.com

Western Farm Service - Salinas	Project: -	MQH0540
1143 Terven Avenue	Project Number: [none]	Reported:
Salinas CA, 93901	Project Manager: Ed Rosales	09/04/07 11:09

Microbiological Parameters by APHA Standard Methods

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Harden Well 1 (MQH0540-01) Water Sampled: 08/18/07 09:25 Received: 08/18/07 15:25									**H3**
E. Coli	ND	2.0	MPN/100 ml	1	7H20027	08/18/07 18:00	08/20/07	IDEXX	
Total Coliforms	ND	1.0	"	"	"	"	"	SM 9223	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-7600
FAX (408) 782-6308
www.testamericainc.com

Western Farm Service - Salinas	Project: -	MQH0540
1143 Terven Avenue	Project Number: [none]	Reported:
Salinas CA, 93901	Project Manager: Ed Rosales	09/04/07 11:09

Microbiological Parameters by APHA Standard Methods - Quality Control

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7H20027 - General Preparation / IDEXX										
Blank (7H20027-BLK1)				Prepared: 08/18/07 Analyzed: 08/20/07						
E. Coli	ND	2.0	MPN/100 ml							
Batch 7H20027 - General Preparation / SM 9223										
Blank (7H20027-BLK1)				Prepared: 08/18/07 Analyzed: 08/20/07						
Total Coliforms	ND	1.0	"							

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.testamericainc.com

Western Farm Service - Salinas	Project: -	MQH0540
1143 Terven Avenue	Project Number: [none]	Reported:
Salinas CA, 93901	Project Manager: Ed Rosales	09/04/07 11:09

Notes and Definitions

H3	Sample was received and analyzed past holding time.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

☐ 885 Jarvis Drive • **Morgan Hill, CA 95037** • (408) 776-9600 • FAX (408) 782-6308
☐ 1455 N. McDowell Blvd, Suite D. • **Petaluma, CA 94954** • (707) 792-1865 • FAX (707) 792-0
☐ 819 Striker Ave., Suite 8 • **Sacramento, CA 95834** • (916) 921-9600 • FAX (916) 921-0100
☐ 404 N. Wiget Lane • **Walnut Creek, CA 94598** • (925) 988-9600 • FAX (925) 988-9673

Company Name: Western Farm Service		Project:	
Mailing Address: 1143 Terven Ave		Billing Address (if different):	
City: Salinas	State: Ca Zip Code: 93901		
Telephone: (831) 809-6913	Fax #:	P.O. #:	
Report To: Ed	E-mail Address: EdRozales@sbcglobal.net	QC Data: ☐ Level II (standard) ☐ Level III ☐ Level IV	
Sampler: Ed	Date / Time Results Required:	Sequoia's Work Order #	MSH0546

Turnaround Time: ☐ 10-15 Working Days (Standard TAT) ☐ 7 Working Days ☐ 5 Working Days ☐ 72 Hours ☐ 48 Hours ☐ 24 Hours ☐ 2-8 Hours

MANDATORY:
☐ SDWA (Drinking Water)
☐ CWA (Waste Water)
☐ RCRA (Hazardous Waste)
☒ Other Agwater

ANALYSES REQUESTED (Please provide method)

Client Sample I.D.	Date / Time Sampled	Matrix Desc.	# of Cont.	Container Type	Sequoia's Sample #	Ecoli MMN	Total Coliform MPN								Comm Temp.(If re
Harden 1. well 1	8-18-07 9:25 AM		1		01	X	X								
2.															
3.															
4.															
5.															
6.															
7.															
8.															
9.															
10.															

Relinquished by / Co.:	Received by / Co.: Cindy Medeiros TAMH	Date / Time / Temp.: 8/18/07 15:25
Relinquished by / Co.:	Received by / Co.:	Date / Time / Temp.:
Relinquished by / Co.:	Received by / Co.:	Date / Time / Temp.:
Relinquished by / Co.:	Received by / Co.:	Date / Time / Temp.:

Were Samples Received in Good Condition? ☒ Yes ☐ No Samples on Ice? ☒ Yes ☐ No Method of Shipment: Client Page 1 of

White: Sequoia Yellow: Sequoia Pink: Client

TEST AMERICA SAMPLE RECEIPT LOG

CLIENT NAME: Western Farm Service
REC. BY (PRINT): A.M.
WORKORDER: MOH0540

DATE REC'D AT LAB: 8/18/07
TIME REC'D AT LAB: 15:25
DATE LOGGED IN: 8/18/07

For Regulatory Purposes?
DRINKING WATER YES (NO)
WASTE WATER YES (NO)

CIRCLE THE APPROPRIATE RESPONSE		LAB SAMPLE #	CLIENT ID	CONTAINER DESCRIPTION	PRESERVATIVE	pH	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s)	Present / Absent Intact / Broken*								
2. Chain-of-Custody	Present / Absent*								
3. Traffic Reports or Packing List:	Present / Absent								
4. Airbill:	Airbill / Sticker Present / Absent								
5. Airbill #:									
6. Sample Labels:	Present / Absent								
7. Sample IDs:	Listed / Not Listed on Chain-of-Custody								
8. Sample Condition:	Intact / Broken* / Leaking*								
9. Does information on chain-of-custody, traffic reports and sample labels agree?	Yes / No*								
10. Sample received within hold time?	Yes / No*								
11. Adequate sample volume received?	Yes / No*								
12. Proper preservatives used?	Yes / No*								
13. Trip Blank / Temp Blank Received? (circle which, if yes)	Yes / No*								
14. Read Temp: 17.0C Corrected Temp: 15.0C Is corrected temp 4 +/-2°C?	Yes / No*								

(Acceptance range for samples requiring thermal pres.)
**Exception (if any): METALS / OFF ON ICE or Problem COC

See COC 8/18/07 A.M.

SRL Revision 6

*IF CIRCLED, CONTACT PROJECT MANAGER AND ATTACH RECORD OF RESOLUTION.

TEST AMERICA SAMPLE RECEIPT LOG

CLIENT NAME: Western Farm Service
REC. BY (PRNT) A.M
WORKORDER: MBH0540

DATE REC'D AT LAB: 8/18/07
TIME REC'D AT LAB: 15:25
DATE LOGGED IN: 8/18/07

For Regulatory Purposes?
DRINKING WATER YES (NO)
WASTE WATER YES (NO)

CIRCLE THE APPROPRIATE RESPONSE		LAB SAMPLE #	CLIENT ID	CONTAINER DESCRIPTION	PRESERVATIVE	pH	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s	Present / Absent Intact / Broken*								
2. Chain-of-Custoy	Present / Absent*								
3. Traffic Reports or Packing List:	Present / Absent								
4. Airbill:	Airbill / Sticker Present / Absent								
5. Airbill #:									
6. Sample Labels:	Present / Absent								
7. Sample IDs:	Listed / Not Listed on Chain-of-Custody								
8. Sample Condition:	Intact / Broken* / Leaking*								
9. Does information on chain-of-custody, traffic reports and sample labels agree?	Yes / No*								
10. Sample received within hold time?	Yes / No*								
11. Adequate sample volume received?	Yes / No*								
12. Proper preservatives used?	Yes / No*								
13. Trip Blank / Tem Blank Received? (circle which, if yes)	Yes / No*								
14. Read Temp: 17.0°C Corrected Temp: 15.0°C Is corrected temp 4 +/-2°C?	Yes / No**								

(Acceptance range for samples requiring thermal pres.)
**Exception (if any): METALS / OFF ON ICE or Problem COC

See COC 8/18/07 A.M.

SRL Revision 8

*IF CIRCLED, CONTACT PROJECT MANAGER AND ATTACH RECORD OF RESOLUTION.

Monterey County Pump Testing Service

P.O. Box 7413 • Spreckels, CA • 93962-7413

Test No.: 7126
MCWRA# : 01689

Pump no.: 2
Test Date: 05-Oct-07

Operator: THE UNI-KOOL PARTNERS
Address: P.O. Box 3140
City: Salinas, California 93912

Pumping plant location: HARDIN RANCH 5

PG&E location No.: NA
Pump make: Fairbanks Morse
Motor make: General Electric
Horsepower: 60

Meter No.: 7P2238
Serial No.: PM9897
Serial No.: Na
Motor efficiency: 90.0%

PUMPTEST REPORT

Datum=c/l discharge pipe.	RUN #1	RUN #2	SHUT OFF
Static Water Level, feet	92.1	92.1	92.1
PUMPING WATER LEVEL, feet	98.5	95.7	92.1
Drawdown, feet (dd)	6.4	3.6	0.0
Discharge pressure, psi	8.0	27.0	37.0
Discharge pressure, feet	18.5	62.4	85.5
TOTAL DYNAMIC HEAD, feet	117.0	158.1	177.6
Avg. disch. pipe velocity, fps	6.03	3.25	0.00
CAPACITY, gpm	1,401	756	0
YIELD OF WELL, gpm/ft.dd	219	210	NA
Water pumped per day, acre feet	6.19	3.34	NA
Measured speed, rpm	1765	1765	1765
Kilowatt input, kw	49.1	40.6	33.6
Horsepower input, hp	65.9	54.4	45.1
Kilowatt hours/acre foot	189	289	NA
OVERALL PLANT EFFICIENCY,	62.8%	55.4%	NA
Motor load, % full load	98.8%	81.6%	67.6%
ENERGY COST, $/ac-ft.	$22.65	$34.69	NA
(Based on $0.12 per kwhr.)			
Pump tested by:			TR/MR
Test witnessed by:			NONE

=1000 GPM

Remarks:
HYDRAULIC SECTION: POOR TEST SECTION.
WELL ENTRANCE: IN PUMP HEAD.
LANDIS & GYR KILOWATT HOUR METER - 03986 KW-HRS.
FLOWMETER MAKE/SN.: NONE
FLOWMETER READING: NA
THE PERFORMANCE OF THE PUMP FOR RUN 1 IS GOOD.
THE PERFORMANCE OF THE PUMP FOR RUN 2 IS FAIR.
THE YIELD OF THE WELL IS EXCELLENT.
THE WELL PUMP MOTOR IS PROPERLY LOADED.
EXCESSIVE OIL IN WELL.

No Flow meter
per Tim Ryan
11/8/07

Hamilton well 2 5-23-07

TestAmerica
ANALYTICAL TESTING CORPORATION

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.testamericainc.com

7 June, 2007

Ed Rosales
Western Farm Service - Salinas
1143 Terven Avenue
Salinas, CA 93901

RE: -
Work Order: MQE0855

Enclosed are the results of analyses for samples received by the laboratory on 05/23/07 14:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Theresa Allen

Theresa Allen For Douglas Clark
Project Manager

CA ELAP Certificate # 1210

The Chain(s) of Custody, 2 pages, are included and are an integral part of this report.

The reported results were obtained in compliance with the 2003 NELAC standards unless otherwise noted.

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Western Farm Service - Salinas	Project: -	MQE0855
1143 Teryen Avenue	Project Number: [none]	Reported:
Salinas CA, 93901	Project Manager: Ed Rosales	06/07/07 10:11

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Harden Well 2	MQE0855-01	Water	05/23/07 09:31	05/23/07 14:45

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Western Farm Service - Salinas	Project: -	MQE0855
1143 Terven Avenue	Project Number: [none]	**Reported:**
Salinas CA, 93901	Project Manager: Ed Rosales	06/07/07 10:11

Microbiological Parameters by APHA Standard Methods

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Harden Well 2 (MQE0855-01) Water Sampled: 05/23/07 09:31 Received: 05/23/07 14:45									
E. Coli	ND	2.0	MPN/100 ml	1	7E25042	05/23/07 16:00	05/24/07	SM 9221	
Total Coliforms	**1.0**	1.0	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. Unless otherwise stated, results are reported on a wet weight basis. This analytical report must be reproduced in its entirety.

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www.testamericainc.com

Western Farm Service - Salinas	Project: -	MQE0855
1143 Terven Avenue	Project Number: [none]	Reported:
Salinas CA, 93901	Project Manager: Ed Rosales	06/07/07 10:11

Microbiological Parameters by APHA Standard Methods - Quality Control

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7E25042 - General Preparation / SM 9221										
Blank (7E25042-BLK1)			Prepared: 05/23/07 Analyzed: 05/24/07							
E. Coli	ND	2.0	MPN/100 ml							
Total Coliforms	ND	1.0	"							

TestAmerica
ANALYTICAL TESTING CORPORATION

885 Jarvis Drive
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www.testmericainc.com

Western Farm Service - Salinas	Project: -	MQE0855
1143 Terven Avenue	Project Number: [none]	Reported:
Salinas CA, 93901	Project Manager: Ed Rosales	06/07/07 10:11

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

- 885 Jarvis Drive • **Morgan Hill, CA 95037** • (408) 776-9600 • FAX (408) 782-6308
- 1455 N. McDowell Blvd, Suite D. • **Petaluma, CA 94954** • (707) 792-1865 • FAX (707) 792-0342
- 819 Striker Ave., Suite 8 • **Sacramento, CA 95834** • (916) 921-9600 • FAX (916) 921-0100
- 404 N. Wiget Lane • **Walnut Creek, CA 94598** • (925) 988-9600 • FAX (925) 988-9673

Company Name: WESTERN FARM SERVICE
Project:
Address: 1143 TERVEN AVE
Billing Address (if different):
City: SALINAS State: CA Zip Code: 93901
Phone (831) 809-6913 Fax #:
P.O. #:
Report To: Ed E-mail Address: EdRosales@SBC
QC Data: ☐ Level II (standard) ☐ Level III ☐ Level IV
Sampler: Ed Date / Time Results Required:
Sequoia's Work Order # MQE0855

Turnaround Time:
- ☑ 10-15 Working Days (Standard TAT)
- ☐ 7 Working Days
- ☐ 5 Working Days
- ☐ 72 Hours
- ☐ 48 Hours
- ☐ 24 Hours
- ☐ 2-8 Hours

MANDATORY:
- ☐ SDWA (Drinking Water)
- ☐ CWA (Waste Water)
- ☐ RCRA (Hazardous Waste)
- ☑ Other AG WATER

ANALYSES REQUESTED (Please provide method)

Client Sample I.D.	Date / Time Sampled	Matrix Desc.	# of Cont.	Container Type	Sequoia's Sample #	COLI-MPN	TOTAL COLIFORM MPN							Comments/ Temp.(If required)
GOLDEN WELL 2	5/23/07 0931		1			+	+							

Relinquished by / Co.: Elizabeth Urbina Received by / Co.: Tiffany TAMH Date / Time / Temp.: 5/23/07 1445
Relinquished by / Co.: Received by / Co.: Date / Time / Temp.:
Relinquished by / Co.: Received by / Co.: Date / Time / Temp.:
Relinquished by / Co.: Received by / Co.: Date / Time / Temp.:

Samples Received in Good Condition? ☑ Yes ☐ No Samples on Ice? ☑ Yes ☐ No Method of Shipment: CLIENT Page 1 of 1

White: Sequoia Yellow: Sequoia Pink: Client

TEST AMERICA SAMPLE RECEIPT LOG

CLIENT NAME: WESTERN FARM SERV.
REC. BY (PRINT) PH
WORKORDER: MQE0455

DATE REC'D AT LAB: 5/25/07
TIME REC'D AT LAB: 1445
DATE LOGGED IN: 5/24/07

For Regulatory Purposes?
DRINKING WATER YES (NO)
WASTE WATER YES / (NO)

CIRCLE THE APPROPRIATE RESPONSE		LAB SAMPLE #	CLIENT ID	CONTAINER DESCRIPTION	PRESERVATIVE	pH	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ET)
1. Custody Seal(s)	Present / (Absent) Intact / Broken*								
2. Chain-of-Custody	(Present) / Absent*								
3. Traffic Reports or Packing List:	Present / (Absent)								
4. Airbill:	Airbill / Sticker (Present) / Absent								
5. Airbill #:									
6. Sample Labels:	(Present) / Absent								
7. Sample IDs:	(Listed) / Not Listed on Chain-of-Custody								
8. Sample Condition:	(Intact) / Broken* / Leaking*								
9. Does information on chain-of-custody, traffic reports and sample labels agree?	(Yes) / No*								
10. Sample received within hold time?	(Yes) / No*								
11. Adequate sample volume received?	(Yes) / No*								
12. Proper preservatives used?	(Yes) / No*								
13. Trip Blank / Temp Blank Received? (circle which, if yes)	Yes / (No)*								
14. Read Temp: 5.4°C Corrected Temp: 3.4°C Is corrected temp 4 +/-2°C? (Yes) / No**									

(Acceptance range for samples requiring thermal pres.)
**Exception (if any): METALS / OFF ON ICE or Problem COC

Relinquished 5/25/07

*IF CIRCLED, CONTACT PROJECT MANAGER AND ATTACH RECORD OF RESOLUTION.

SRL Revision 8
Replaces Rev 7 (07/19/05)

Page 1 of 1

MONTEREY COUNTY PUMPTESTing SERVICE

POST OFFICE BOX 7413, SPRECKELS, CALIFORNIA 93962 (408)455-1960

Test No.: 993453
MCWRA #: 01690

Pump no.: 03
Test Date: 29-Sep-99

Operator/Owner: ROYAL PACKING COMPANY
Address: P.O. BOX 82157
City: SALINAS, CALIF 93912

Pumping plant location:
RANCH #5

PG&E location No.: 91705
Pump make: BYRON JACKSON
Motor make: US
Horsepower: 30

Meter No.: 07R180
Serial No.: 94790
Serial No.: 46374
Motor efficiency: 91.5%

\027\014\027\108\007
PUMPTEST REPORT
\027\069\027\108\008

Datum=c/l discharge pipe.

	RUN #1	RUN #2	SHUT-OFF
Static Water Level, feet	74.7	74.7	74.7
PUMPING WATER LEVEL, feet	81.1	77.8	74.7
Drawdown, feet (dd)	6.4	3.1	0.0
Discharge pressure, psi	7.0	21.0	36.0
Discharge pressure, feet	16.2	48.5	83.2
TOTAL DYNAMIC HEAD, feet	97.3	126.3	157.9
Avg. disch. pipe velocity, fps	6.3	3.50	0.00
CAPACITY, gpm	993	554	0 ≃ 770 GPM
YIELD OF WELL, gpm/ft.dd	155	179	NA
Water pumped per day, acre feet	4.39	2.45	NA
Measured speed, rpm	1800	1800	1800
Kilowatt input, kw	26.9	22.9	18.7
Horsepower input, hp	36.0	30.7	25.1
Kilowatt hours/acre foot	146	223	NA
OVERALL PLANT EFFICIENCY,	67.7%	57.5%	NA
Motor load, % full load	106.9%	93.7%	76.4%
ENERGY COST, $/ac-ft	$17.48	$26.73	NA
(Based on $0.12 per kwhr.)			
Pump tested by:			TER / MSR
Test witnessed by:			NONE

Remarks:
HYDRAULIC SECTION: POOR.
WELL ENTRANCE: HOLE CUT IN CASING.
G.E. KILOWATT HOUR METER - 77359 KW-HRS.
FLOWMETER MAKE / SN. : NONE
FLOWMETER READING: NA
THE PERFORMANCE OF THE PUMP FOR RUN 1 IS VERY GOOD.
THE PERFORMANCE OF THE PUMP FOR RUN 2 IS FAIR/GOOD.
THE YIELD OF THE WELL IS EXCELLENT.
THE WELL PUMP MOTOR IS LOADED WITHIN THE SERVICE FACTOR.
THE ELECTRIC PANEL NEEDS SUPPORT.
Calculated and printed on 04-Oct-99 at 03:58 PM

Monterey County Pump Testing Service

P.O. Box 7413 • Spreckels, CA • 93962-7413

Test No.: 4192
MCWRA #: Na

Pump no.: 4
Test Date: 15-Oct-04

Operator: ROYAL PACKING COMPANY
Address: P.O. Box 82157
City: Salinas, California 93912

Pumping plant location: RANCH 5

PG&E location No.: NA
Pump make: Byron Jackson
Motor make: US Motor
Horsepower: 30

Meter No.: 73583T
Serial No.: 95463
Serial No.: 80093
Motor efficiency: 89.0%

PUMPTEST REPORT

Datum=c/l discharge pipe.	RUN #1	RUN #2	SHUT OFF
Static Water Level, feet	86.4	86.4	86.4
PUMPING WATER LEVEL, feet	94.2	89.8	86.4
Drawdown, feet (dd)	7.8	3.4	0.0
Discharge pressure, psi	5.0	30.0	47.0
Discharge pressure, feet	11.6	69.3	108.6
TOTAL DYNAMIC HEAD, feet	105.8	159.1	195.0
Avg. disch. pipe velocity, fps	6.65	3.30	0.00
CAPACITY, gpm	990	491	0 → 740 GPM
YIELD OF WELL, gpm/ft.dd	127	144	NA
Water pumped per day, acre feet	4.37	2.17	NA
Measured speed, rpm	1800	1800	1800
Kilowatt input, kw	32.3	28.3	25.7
Horsepower input, hp	43.4	37.9	34.5
Kilowatt hours/acre foot	176	310	NA
OVERALL PLANT EFFICIENCY,	61.0%	52.1%	NA
Motor load, % full load	128.6%	112.4%	102.2%
ENERGY COST, $/ac-ft. (Based on $0.12 per kwhr.)	$21.11	$37.16	NA
Pump tested by:			TR/MR
Test witnessed by:			NONE

Remarks:
HYDRAULIC SECTION: GOOD TEST SECTION.
WELL ENTRANCE: SOUNDING TUBE - NOT CAPPED.
SANGAMO KILOWATT HOUR METER - 41931 KW-HRS.
FLOWMETER MAKE/SN.: McCROMETER / 93 B 7038
FLOWMETER READING: 354.071
THE PERFORMANCE OF THE PUMP FOR RUN 1 IS GOOD.
THE PERFORMANCE OF THE PUMP FOR RUN 2 IS FAIR/POOR.
THE YIELD OF THE WELL IS VERY GOOD.
THE WELL PUMP MOTOR IS SUBSTANTIALLY OVERLOADED.
EXCESSIVE OIL IN WELL.
→ THE FLOWMETER IS NOT OPERATIONAL.

Appendix 10

Pesticide use

From: "Desjarlais, Nathanael x7311" <DesjarlaisN@co.monterey.ca.us>
To: <amendojt@obg.com>
Date: 5/12/2008 11:12 AM
Subject: Information Request: Harden Ranch 2005-2007 PURs
Attachments: HardenRanch2005.xls; HardenRanch2006.xls; HardenRanch2007.xls

Janelle,

As per your request received May 5, 2008, here is your completed information request. The three attached files contain the pesticide use reports (PURs) entered in our databases for the Harden Ranch for 2005-2007. In 2005 the grower was Royal Packing Company, and in 2006-2007 it was Boss Farms LLC.

This information is based upon information that has been reported to the office pursuant to California Code of Regulations, Sections 6626 and 6627 (regarding use reports). Monterey County is releasing this information in order to comply with the California Public Records Act. The Monterey County Agricultural Commissioner is not liable for any errors or omissions whether intentional or unintentional on the part of the reporting party/parties.

If you have any questions or need clarification on anything, feel free to contact me.

--Nathan

Nathan Desjarlais

Inspector/Biologist

Monterey County Agricultural Commissioner's Office

(831)759-7325

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Appr	Meth	planted	Units	Commodity
27S023A	ROYAL PA	050001	6/23/2005	17.1	A	DACTHAL W-75	5481	490	AA	0	51	LB	10	15S	03E		G	17.1	A	BROCCOLI
27S023A	ROYAL PA	050001	6/23/2005	17.1	A	LORSBAN 15G GRAI	62719	34	AA	0	119	LB	10	15S	03E		G	17.1	A	BROCCOLI
27S023A	ROYAL PA	050001	8/11/2005	8.75	A	DIMETHOATE 4E	51036	110	AA	0	1.09	GA	10	15S	03E	WESTERN	G	8.75	A	BROCCOLI
27S023A	ROYAL PA	050001	8/11/2005	8.75	A	DU PONT AVAUNT II	352	597	AA	0	30.63	OZ	10	15S	03E	WESTERN	G	8.75	A	BROCCOLI
27S023A	ROYAL PA	050001	8/11/2005	8.75	A	FIRST CHOICE SPRI	11656	50021	ZB	0	0.14	GA	10	15S	03E	WESTERN	G	8.75	A	BROCCOLI
27S023A	ROYAL PA	050001	8/11/2005	8.75	A	FULFILL	100	912	ZA	0	24.06	OZ	10	15S	03E	WESTERN	G	8.75	A	BROCCOLI
27S023A	ROYAL PA	050001	8/11/2005	8.75	A	MSR SPRAY CONCE	10163	220	ZC	0	2.19	GA	10	15S	03E	WESTERN	G	8.75	A	BROCCOLI
27S023A	ROYAL PA	050001	9/7/2005	17.5	A	ASSAIL BRAND 70W	264	609	AA	0	1.31	LB	10	15S	03E	GOMES FA	A	17.5	A	BROCCOLI
27S023A	ROYAL PA	050001	9/7/2005	17.5	A	DU PONT AVAUNT II	352	597	AA	0	3.83	LB	10	15S	03E	GOMES FA	A	17.5	A	BROCCOLI
27S023A	ROYAL PA	050001	9/7/2005	17.5	A	FIRST CHOICE SPRI	11656	50021	ZA	0	1.09	QT	10	15S	03E	GOMES FA	A	17.5	A	BROCCOLI
27S023A	ROYAL PA	050001	9/7/2005	17.5	A	FULFILL	100	912	AA	0	3.01	LB	10	15S	03E	GOMES FA	A	17.5	A	BROCCOLI
27S023A	ROYAL PA	050001	9/7/2005	17.5	A	PROVADO 1.6 FLOW	3125	457	AA	0	0.51	GA	10	15S	03E	GOMES FA	A	17.5	A	BROCCOLI
27S023A	ROYAL PA	050012	2/26/2005	13.9	A	DREXEL DIMETHOA	19713	231	AA	0	1.74	GA	10	15S	03E	GOMES FA	A	13.9	A	BROCCOLI
27S023A	ROYAL PA	050012	2/26/2005	13.9	A	METASYSTOX-R SP	10163	220	ZA	0	3.48	GA	10	15S	03E	GOMES FA	A	13.9	A	BROCCOLI
27S023A	ROYAL PA	050012	2/26/2005	13.9	A	NO FOAM B	11656	50009	AA	0	0.52	GA	10	15S	03E	GOMES FA	A	13.9	A	BROCCOLI
27S023A	ROYAL PA	05	4/20/2005	13.2	A	DACTHAL W-75	5481	490	AA	0	39.5	LB	10	15S	03E		G	13.2	A	CABBAGE
27S023A	ROYAL PA	05	4/20/2005	13.2	A	LORSBAN 15G GRAI	62719	34	AA	0	92.5	LB	10	15S	03E		G	13.2	A	CABBAGE
27S023A	ROYAL PA	050002	1/14/2005	19.8	A	DACTHAL W-75	5481	490	AA	0	60	LB	10	15S	03E		G	19.8	A	CABBAGE
27S023A	ROYAL PA	050002	1/14/2005	19.8	A	LORSBAN 15G GRAI	62719	34	AA	0	140	LB	10	15S	03E		G	19.8	A	CABBAGE
27S023A	ROYAL PA	050002	3/17/2005	19.8	A	DU PONT AVAUNT II	352	597	AA	0	59.4	OZ	10	15S	03E	WESTERN	G	19.8	A	CABBAGE
27S023A	ROYAL PA	050002	3/17/2005	19.8	A	FIRST CHOICE BRE/	11656	50095	AA	0	1.24	QT	10	15S	03E	WESTERN	G	19.8	A	CABBAGE
27S023A	ROYAL PA	050002	3/17/2005	19.8	A	METASYSTOX-R 2 C	10163	220	AA	0	7.43	GA	10	15S	03E	WESTERN	G	19.8	A	CABBAGE
27S023A	ROYAL PA	050002	3/17/2005	19.8	A	RIDOMIL GOLD BRA	100	800	AA	0	29.7	LB	10	15S	03E	WESTERN	G	19.8	A	CABBAGE
27S023A	ROYAL PA	050002	4/13/2005	19.8	A	DU PONT ASANA XL	352	515	AA	0	1.24	GA	10	15S	03E	WESTERN	G	19.8	A	CABBAGE
27S023A	ROYAL PA	050002	4/13/2005	19.8	A	DU PONT AVAUNT II	352	597	AA	0	69.3	OZ	10	15S	03E	WESTERN	G	19.8	A	CABBAGE
27S023A	ROYAL PA	050002	4/13/2005	19.8	A	FIRST CHOICE BRE/	11656	50095	AA	0	1.86	QT	10	15S	03E	WESTERN	G	19.8	A	CABBAGE
27S023A	ROYAL PA	050002	4/13/2005	19.8	A	METASYSTOX-R 2 C	10163	220	AA	0	7.43	GA	10	15S	03E	WESTERN	G	19.8	A	CABBAGE
27S023A	ROYAL PA	050002	4/13/2005	19.8	A	RIDOMIL GOLD BRA	100	800	AA	0	29.7	LB	10	15S	03E	WESTERN	G	19.8	A	CABBAGE
27S023A	ROYAL PA	050002	5/13/2005	13	A	DIMETHOATE 4E	51036	110	AA	0	6.5	QT	10	15S	03E	GOMES FA	A	19.8	A	CABBAGE
27S023A	ROYAL PA	050002	5/13/2005	13	A	DU PONT ASANA XL	352	515	AA	0	0.61	GA	10	15S	03E	GOMES FA	A	19.8	A	CABBAGE
27S023A	ROYAL PA	050002	5/13/2005	13	A	DU PONT AVAUNT II	352	597	AA	0	2.84	LB	10	15S	03E	GOMES FA	A	19.8	A	CABBAGE
27S023A	ROYAL PA	050002	5/13/2005	13	A	FIRST CHOICE SPRI	11656	50021	ZA	0	0.81	QT	10	15S	03E	GOMES FA	A	19.8	A	CABBAGE
27S023A	ROYAL PA	050002	5/13/2005	13	A	PROVADO 1.6 FLOW	3125	457	AA	0	0.38	GA	10	15S	03E	GOMES FA	A	19.8	A	CABBAGE
27S023A	ROYAL PA	050007	6/10/2005	13.2	A	DIMETHOATE 4E	51036	110	AA	0	1.65	GA	10	15S	03E	WESTERN	G	13.2	A	CABBAGE
27S023A	ROYAL PA	050007	6/10/2005	13.2	A	DU PONT ASANA XL	352	515	AA	0	0.82	GA	10	15S	03E	WESTERN	G	13.2	A	CABBAGE
27S023A	ROYAL PA	050007	6/10/2005	13.2	A	DU PONT AVAUNT II	352	597	AA	0	46.2	OZ	10	15S	03E	WESTERN	G	13.2	A	CABBAGE
27S023A	ROYAL PA	050007	6/10/2005	13.2	A	FIRST CHOICE BRE/	11656	50095	AA	0	1.24	QT	10	15S	03E	WESTERN	G	13.2	A	CABBAGE
27S023A	ROYAL PA	050007	6/10/2005	13.2	A	MSR SPRAY CONCE	10163	220	ZC	0	4.95	GA	10	15S	03E	WESTERN	G	13.2	A	CABBAGE
27S023A	ROYAL PA	050007	6/10/2005	13.2	A	RIDOMIL GOLD BRA	100	800	ZA	0	19.8	LB	10	15S	03E	WESTERN	G	13.2	A	CABBAGE
27S023A	ROYAL PA	050003	6/11/2005	11	A	DACTHAL FLOWABL	5481	487	AA	0	2.75	GA	10	15S	03E	WESTERN	G	11	A	CAULIFLOWER
27S023A	ROYAL PA	050003	6/11/2005	11	A	LORSBAN-4E	62719	220	ZA	0	2.75	GA	10	15S	03E	WESTERN	G	11	A	CAULIFLOWER
27S023A	ROYAL PA	050003	7/6/2005	11	A	FIRST CHOICE BRE/	11656	50095	AA	0	1.03	QT	10	15S	03E	WESTERN	G	11	A	CAULIFLOWER
27S023A	ROYAL PA	050003	7/6/2005	11	A	LORSBAN-75WG	62719	301	AA	0	14.63	LB	10	15S	03E	WESTERN	G	11	A	CAULIFLOWER
27S023A	ROYAL PA	050003	7/6/2005	11	A	PERM-UP 3.2 EC INS	70506	9	AA	0	0.34	GA	10	15S	03E	WESTERN	G	11	A	CAULIFLOWER
27S023A	ROYAL PA	050003	7/29/2005	11	A	DIMETHOATE 4E	51036	110	AA	0	1.38	GA	10	15S	03E	WESTERN	G	11	A	CAULIFLOWER
27S023A	ROYAL PA	050003	7/29/2005	11	A	DU PONT AVAUNT II	352	597	AA	0	38.5	OZ	10	15S	03E	WESTERN	G	11	A	CAULIFLOWER
27S023A	ROYAL PA	050003	7/29/2005	11	A	FIRST CHOICE BRE/	11656	50095	AA	0	1.03	QT	10	15S	03E	WESTERN	G	11	A	CAULIFLOWER
27S023A	ROYAL PA	050003	7/29/2005	11	A	MSR SPRAY CONCE	10163	220	ZC	0	2.75	GA	10	15S	03E	WESTERN	G	11	A	CAULIFLOWER
27S023A	ROYAL PA	050003	8/11/2005	11	A	DIBROM 8 EMULSIV	11656	8	AA	0	2.75	GA	10	15S	03E	GOMES FA	A	11	A	CAULIFLOWER
27S023A	ROYAL PA	050003	8/11/2005	11	A	DU PONT ASANA XL	352	515	AA	0	0.52	GA	10	15S	03E	GOMES FA	A	11	A	CAULIFLOWER
27S023A	ROYAL PA	050003	8/11/2005	11	A	FULFILL	100	912	AA	0	1.89	LB	10	15S	03E	GOMES FA	A	11	A	CAULIFLOWER
27S023A	ROYAL PA	050003	8/11/2005	11	A	NO FOAM B	11656	50009	AA	0	0.41	GA	10	15S	03E	GOMES FA	A	11	A	CAULIFLOWER
27S023A	ROYAL PA	050003	8/11/2005	11	A	PROVADO 1.6 FLOW	3125	457	AA	0	0.32	GA	10	15S	03E	GOMES FA	A	11	A	CAULIFLOWER

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Appr	Meth	planted	Units	Commodity
27S023A	ROYAL PA	050004	6/4/2005	11	A	DACTHAL FLOWABL	5481	487	AA	0	2.75	GA	10	15S	03E	WESTERN	G	11	A	CAULIFLOWER
27S023A	ROYAL PA	050004	6/4/2005	11	A	LORSBAN-4E	62719	220	ZA	0	2.75	GA	10	15S	03E	WESTERN	G	11	A	CAULIFLOWER
27S023A	ROYAL PA	050004	6/25/2005	11	A	FIRST CHOICE BRE/	11656	50095	AA	0	1.03	QT	10	15S	03E	WESTERN	G	11	A	CAULIFLOWER
27S023A	ROYAL PA	050004	6/25/2005	11	A	LORSBAN 50-W	62719	221	AA	10163	22	LB	10	15S	03E	WESTERN	G	11	A	CAULIFLOWER
27S023A	ROYAL PA	050004	6/25/2005	11	A	MUSTANG INSECTIC	279	3126	ZB	0	0.37	GA	10	15S	03E	WESTERN	G	11	A	CAULIFLOWER
27S023A	ROYAL PA	050004	7/23/2005	11	A	DIMETHOATE 4E	51036	110	AA	0	1.38	GA	10	15S	03E	WESTERN	G	11	A	CAULIFLOWER
27S023A	ROYAL PA	050004	7/23/2005	11	A	DU PONT AVAUNT II	352	597	AA	0	38.5	OZ	10	15S	03E	WESTERN	G	11	A	CAULIFLOWER
27S023A	ROYAL PA	050004	7/23/2005	11	A	FIRST CHOICE BRE/	11656	50095	AA	0	1.03	QT	10	15S	03E	WESTERN	G	11	A	CAULIFLOWER
27S023A	ROYAL PA	050004	7/23/2005	11	A	MSR SPRAY CONCE	10163	220	ZC	0	2.75	GA	10	15S	03E	WESTERN	G	11	A	CAULIFLOWER
27S023A	ROYAL PA	050005	8/17/2005	17.9	A	DACTHAL FLOWABL	5481	487	AA	0	4.48	GA	10	15S	03E	WESTERN	G	17.9	A	CAULIFLOWER
27S023A	ROYAL PA	050005	8/17/2005	17.9	A	LORSBAN-4E	62719	220	ZA	0	4.48	GA	10	15S	03E	WESTERN	G	17.9	A	CAULIFLOWER
27S023A	ROYAL PA	050005	9/4/2005	17.9	A	ACEPHATE 75SP AG	51036	236	AA	0	23.81	LB	10	15S	03E	WESTERN	G	17.9	A	CAULIFLOWER
27S023A	ROYAL PA	050005	9/4/2005	17.9	A	FIRST CHOICE BRE/	11656	50095	AA	0	1.68	QT	10	15S	03E	WESTERN	G	17.9	A	CAULIFLOWER
27S023A	ROYAL PA	050005	9/4/2005	17.9	A	LORSBAN-75WG	62719	301	AA	0	23.81	LB	10	15S	03E	WESTERN	G	17.9	A	CAULIFLOWER
27S023A	ROYAL PA	050005	9/4/2005	17.9	A	PERM-UP 3.2 EC INS	70506	9	AA	0	0.56	GA	10	15S	03E	WESTERN	G	17.9	A	CAULIFLOWER
27S023A	ROYAL PA	050005	10/2/2005	17.9	A	DU PONT AVAUNT II	352	597	AA	0	62.65	OZ	10	15S	03E	WESTERN	G	17.9	A	CAULIFLOWER
27S023A	ROYAL PA	050005	10/2/2005	17.9	A	FULFILL	100	912	ZA	0	49.23	OZ	10	15S	03E	WESTERN	G	17.9	A	CAULIFLOWER
27S023A	ROYAL PA	050005	10/2/2005	17.9	A	LORSBAN-75WG	62719	301	AA	0	23.81	LB	10	15S	03E	WESTERN	G	17.9	A	CAULIFLOWER
27S023A	ROYAL PA	050005	10/2/2005	17.9	A	MSR SPRAY CONCE	10163	220	ZC	0	4.48	GA	10	15S	03E	WESTERN	G	17.9	A	CAULIFLOWER
27S023A	ROYAL PA	050006	3/8/2005	9.25	A	DACTHAL FLOWABL	5481	487	AA	0	2.31	GA	10	15S	03E	WESTERN	G	18.5	A	CAULIFLOWER
27S023A	ROYAL PA	050006	3/8/2005	9.25	A	LORSBAN 4E-HF	62719	220	AA	0	2.31	GA	10	15S	03E	WESTERN	G	18.5	A	CAULIFLOWER
27S023A	ROYAL PA	050006	3/9/2005	9.25	A	DACTHAL FLOWABL	5481	487	AA	0	2.31	GA	10	15S	03E	WESTERN	G	18.5	A	CAULIFLOWER
27S023A	ROYAL PA	050006	3/9/2005	9.25	A	LORSBAN 4E-HF	62719	220	AA	0	2.31	GA	10	15S	03E	WESTERN	G	18.5	A	CAULIFLOWER
27S023A	ROYAL PA	050006	4/14/2005	18.5	A	41-A	2839	50021	AA	0	111	OZ	10	15S	03E	WESTERN	G	18.5	A	CAULIFLOWER
27S023A	ROYAL PA	050006	4/14/2005	18.5	A	FIRST CHOICE BRE/	11656	50095	AA	0	1.74	QT	10	15S	03E	WESTERN	G	18.5	A	CAULIFLOWER
27S023A	ROYAL PA	050006	4/14/2005	18.5	A	LORSBAN 50W INSE	62719	221	AA	0	37	LB	10	15S	03E	WESTERN	G	18.5	A	CAULIFLOWER
27S023A	ROYAL PA	050006	4/14/2005	18.5	A	POUNCE 25 WP	279	3051	AA	0	7.4	LB	10	15S	03E	WESTERN	G	18.5	A	CAULIFLOWER
27S023A	ROYAL PA	050006	5/13/2005	18.5	A	41-A	2839	50021	AA	0	111	OZ	10	15S	03E	WESTERN	G	18.5	A	CAULIFLOWER
27S023A	ROYAL PA	050006	5/13/2005	18.5	A	DREXEL DIMETHOA	19713	231	AA	0	2.31	GA	10	15S	03E	WESTERN	G	18.5	A	CAULIFLOWER
27S023A	ROYAL PA	050006	5/13/2005	18.5	A	DU PONT ASANA XL	352	515	AA	0	0.87	GA	10	15S	03E	WESTERN	G	18.5	A	CAULIFLOWER
27S023A	ROYAL PA	050006	5/13/2005	18.5	A	DU PONT AVAUNT II	352	597	AA	0	64.75	OZ	10	15S	03E	WESTERN	G	18.5	A	CAULIFLOWER
27S023A	ROYAL PA	050006	5/13/2005	18.5	A	FIRST CHOICE BRE/	11656	50095	AA	0	1.74	QT	10	15S	03E	WESTERN	G	18.5	A	CAULIFLOWER
27S023A	ROYAL PA	050006	5/13/2005	18.5	A	PROVADO 1.6 FLOW	264	763	AA	0	0.54	GA	10	15S	03E	WESTERN	G	18.5	A	CAULIFLOWER
27S023A	ROYAL PA	050016	2/26/2005	12.2	A	DREXEL DIMETHOA	19713	231	AA	0	1.53	GA	10	15S	03E	WESTERN	G	12.2	A	CAULIFLOWER
27S023A	ROYAL PA	050016	2/26/2005	12.2	A	DU PONT AVAUNT II	352	597	AA	0	36.6	OZ	10	15S	03E	WESTERN	G	12.2	A	CAULIFLOWER
27S023A	ROYAL PA	050016	2/26/2005	12.2	A	METASYSTOX-R 2 C	10163	220	AA	0	3.05	GA	10	15S	03E	WESTERN	G	12.2	A	CAULIFLOWER
27S023A	ROYAL PA	050016	2/26/2005	12.2	A	PENTATHLON	1812	251	ZB	0	4.88	GA	10	15S	03E	WESTERN	G	12.2	A	CAULIFLOWER
27S023A	ROYAL PA	050016	2/26/2005	12.2	A	SOURCE 1 NO FOAM	11656	50009	ZA	0	1.14	GA	10	15S	03E	WESTERN	G	12.2	A	CAULIFLOWER
27S023A	ROYAL PA	050010	4/7/2005	8.5	A	RIDOMIL GOLD EC	100	801	AA	0	2.13	GA	10	15S	03E	WESTERN	G	8.5	A	SPINACH
27S023A	ROYAL PA	050010	4/7/2005	8.5	A	RO-NEET 6-E	73637	5	AA	56077	1.59	GA	10	15S	03E	WESTERN	G	8.5	A	SPINACH
27S023A	ROYAL PA	050010	4/13/2005	8.5	A	RIDOMIL GOLD EC	100	801	AA	0	2.13	GA	10	15S	03E	WESTERN	G	8.5	A	SPINACH
27S023A	ROYAL PA	050010	4/13/2005	8.5	A	RO-NEET 6-E	73637	5	AA	56077	1.59	GA	10	15S	03E	WESTERN	G	8.5	A	SPINACH
27S023A	ROYAL PA	050010	4/30/2005	8.5	A	POUNCE 25 WP	279	3051	AA	0	3.19	LB	10	15S	03E	WESTERN	G	8.5	A	SPINACH
27S023A	ROYAL PA	050010	4/30/2005	8.5	A	TRIGARD	100	654	AA	0	1.41	LB	10	15S	03E	WESTERN	G	8.5	A	SPINACH
27S023A	ROYAL PA	050010	5/4/2005	8.5	A	POUNCE 25 WP	279	3051	AA	0	3.19	LB	10	15S	03E	WESTERN	G	8.5	A	SPINACH
27S023A	ROYAL PA	050010	5/4/2005	8.5	A	TRIGARD	100	654	AA	0	1.41	LB	10	15S	03E	WESTERN	G	8.5	A	SPINACH
27S023A	ROYAL PA	050010	5/14/2005	8.5	A	AGRI-MEK 0.15 EC M	100	898	AA	0	2.66	QT	10	15S	03E	GOMES FA	A	17	A	SPINACH
27S023A	ROYAL PA	050010	5/14/2005	8.5	A	FULFILL	100	912	AA	0	1.46	LB	10	15S	03E	GOMES FA	A	17	A	SPINACH
27S023A	ROYAL PA	050010	5/14/2005	8.5	A	INTREPID 2F	62719	442	AA	0	0.53	GA	10	15S	03E	GOMES FA	A	17	A	SPINACH
27S023A	ROYAL PA	050010	6/12/2005	17.1	A	AGRI-MEK 0.15 EC M	100	898	AA	0	5.34	QT	10	15S	03E	GOMES FA	A	17.5	A	SPINACH
27S023A	ROYAL PA	050010	6/12/2005	17.1	A	POUNCE 25 WP	279	3051	AA	0	8.55	LB	10	15S	03E	GOMES FA	A	17.5	A	SPINACH
27S023A	ROYAL PA	050010	6/12/2005	17.1	A	SUCCESS	62719	292	AA	0	3.21	QT	10	15S	03E	GOMES FA	A	17.5	A	SPINACH
27S023A	ROYAL PA	050010	6/19/2005	17.1	A	POUNCE 25 WP	279	3051	AA	0	0.53	LB	10	15S	03E	GOMES FA	A	17.5	A	SPINACH

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Appr	Meth	planted	Units	Commodity
27S023A	ROYAL PA	050010	6/19/2005	17.1	A	SUCCESS	62719	292	AA	0	3.21	QT	10	15S	03E	GOMES F/	A	17.5	A	SPINACH
27S023A	ROYAL PA	050013	8/10/2005	7.2	A	RO-NEET 6-E	73637	5	AA	74530	2.25	GA	10	15S	03E	WESTERN	G	7.2	A	SPINACH
27S023A	ROYAL PA	050013	9/1/2005	7.2	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	72	OZ	10	15S	03E	WESTERN	G	7.2	A	SPINACH
27S023A	ROYAL PA	050013	9/1/2005	7.2	A	ASSAIL 70WP INSEC	8033	23	AA	4581	8.64	OZ	10	15S	03E	WESTERN	G	7.2	A	SPINACH
27S023A	ROYAL PA	050013	9/1/2005	7.2	A	FULFILL	100	912	ZA	0	19.8	OZ	10	15S	03E	WESTERN	G	7.2	A	SPINACH
27S023A	ROYAL PA	050013	9/1/2005	7.2	A	SUCCESS	62719	292	AA	0	1.8	QT	10	15S	03E	WESTERN	G	7.2	A	SPINACH
27S023A	ROYAL PA	050013	9/11/2005	7.2	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	72	OZ	10	15S	03E	WESTERN	G	7.2	A	SPINACH
27S023A	ROYAL PA	050013	9/11/2005	7.2	A	BLOCKADE 50WG P	100	922	ZB	0	5.4	OZ	10	15S	03E	WESTERN	G	7.2	A	SPINACH
27S023A	ROYAL PA	050013	9/11/2005	7.2	A	MUSTANG INSECTIC	279	3126	ZB	0	0.24	GA	10	15S	03E	WESTERN	G	7.2	A	SPINACH
27S023A	ROYAL PA	050013	9/18/2005	7.2	A	ASSAIL BRAND 70W	264	609	AA	0	0.54	LB	10	15S	03E	GOMES F/	A	7.2	A	SPINACH
27S023A	ROYAL PA	050013	9/18/2005	7.2	A	FOSPHITE FUNGICII	68573	2	AA	0	3.6	GA	10	15S	03E	GOMES F/	A	7.2	A	SPINACH
27S023A	ROYAL PA	050013	9/18/2005	7.2	A	FULFILL	100	912	AA	0	1.24	LB	10	15S	03E	GOMES F/	A	7.2	A	SPINACH
27S023A	ROYAL PA	050013	9/18/2005	7.2	A	INTREPID 2F	62719	442	AA	0	0.45	GA	10	15S	03E	GOMES F/	A	7.2	A	SPINACH
27S023A	ROYAL PA	050013	9/18/2005	7.2	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.24	GA	10	15S	03E	GOMES F/	A	7.2	A	SPINACH
27S023A	ROYAL PA	050013	9/18/2005	7.2	A	TRIGARD	100	654	AA	0	1.2	LB	10	15S	03E	GOMES F/	A	7.2	A	SPINACH
27S023A	ROYAL PA	050013	9/22/2005	7.2	A	DU PONT LANNATE	352	342	ZA	0	7.2	LB	10	15S	03E	GOMES F/	A	7.2	A	SPINACH
27S023A	ROYAL PA	050013	9/22/2005	7.2	A	PROVADO 1.6 FLOW	3125	457	AA	0	0.21	GA	10	15S	03E	GOMES F/	A	7.2	A	SPINACH
27S023A	ROYAL PA	050013	10/9/2005	7.2	A	DIAZINON AG 500	66222	9	ZA	0	0.9	GA	10	15S	03E	GOMES F/	A	7.2	A	SPINACH
27S023A	ROYAL PA	050013	10/9/2005	7.2	A	DIMETHOATE 4E	51036	110	AA	0	1.8	QT	10	15S	03E	GOMES F/	A	7.2	A	SPINACH
27S023A	ROYAL PA	050013	10/9/2005	7.2	A	PROVADO 1.6 FLOW	3125	457	AA	0	0.21	GA	10	15S	03E	GOMES F/	A	7.2	A	SPINACH
27S023A	ROYAL PA	050013	10/9/2005	7.2	A	SUCCESS	62719	292	AA	0	0.9	QT	10	15S	03E	GOMES F/	A	7.2	A	SPINACH
27S023A	ROYAL PA	050013	10/9/2005	7.2	A	TRIGARD	100	654	AA	0	1.2	LB	10	15S	03E	GOMES F/	A	7.2	A	SPINACH
27S023A	ROYAL PA	050013	10/12/2005	7.2	A	ASSAIL 70WP INSEC	8033	23	AA	4581	12.24	OZ	10	15S	03E	WESTERN	G	7.2	A	SPINACH
27S023A	ROYAL PA	050013	10/12/2005	7.2	A	BLOCKADE 50WG P	100	922	ZB	0	5.4	OZ	10	15S	03E	WESTERN	G	7.2	A	SPINACH
27S023A	ROYAL PA	050013	10/12/2005	7.2	A	DU PONT LANNATE	352	342	ZB	0	7.2	LB	10	15S	03E	WESTERN	G	7.2	A	SPINACH
27S023A	ROYAL PA	050013	10/12/2005	7.2	A	FULFILL	100	912	ZA	0	19.8	OZ	10	15S	03E	WESTERN	G	7.2	A	SPINACH
27S023A	ROYAL PA	050013	10/12/2005	7.2	A	TRIGARD	100	654	AA	0	1.2	LB	10	15S	03E	WESTERN	G	7.2	A	SPINACH
27S023A	ROYAL PA	050013	10/19/2005	11.7	A	FULFILL	100	912	AA	0	2.01	LB	10	15S	03E	GOMES F/	A	7.2	A	SPINACH
27S023A	ROYAL PA	050013	10/19/2005	11.7	A	PROVADO 1.6 FLOW	3125	457	AA	0	0.34	GA	10	15S	03E	GOMES F/	A	7.2	A	SPINACH
27S023A	ROYAL PA	050013	10/19/2005	11.7	A	SUCCESS	62719	292	AA	0	1.83	QT	10	15S	03E	GOMES F/	A	7.2	A	SPINACH
27S023A	ROYAL PA	050013	10/19/2005	11.7	A	TRIGARD	100	654	AA	0	1.95	LB	10	15S	03E	GOMES F/	A	7.2	A	SPINACH
27S023A	ROYAL PA	050014	8/10/2005	11.7	A	RO-NEET 6-E	73637	5	AA	74530	3.66	GA	10	15S	03E	WESTERN	G	11.7	A	SPINACH
27S023A	ROYAL PA	050014	9/1/2005	11.7	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	117	OZ	10	15S	03E	WESTERN	G	11.7	A	SPINACH
27S023A	ROYAL PA	050014	9/1/2005	11.7	A	ASSAIL 70WP INSEC	8033	23	AA	4581	14.04	OZ	10	15S	03E	WESTERN	G	11.7	A	SPINACH
27S023A	ROYAL PA	050014	9/1/2005	11.7	A	FULFILL	100	912	ZA	0	32.18	OZ	10	15S	03E	WESTERN	G	11.7	A	SPINACH
27S023A	ROYAL PA	050014	9/1/2005	11.7	A	SUCCESS	62719	292	AA	0	2.93	QT	10	15S	03E	WESTERN	G	11.7	A	SPINACH
27S023A	ROYAL PA	050014	9/10/2005	11.7	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	117	OZ	10	15S	03E	WESTERN	G	11.7	A	SPINACH
27S023A	ROYAL PA	050014	9/10/2005	11.7	A	BLOCKADE 50WG P	100	922	ZB	0	8.78	OZ	10	15S	03E	WESTERN	G	11.7	A	SPINACH
27S023A	ROYAL PA	050014	9/10/2005	11.7	A	MUSTANG INSECTIC	279	3126	ZB	0	0.39	GA	10	15S	03E	WESTERN	G	11.7	A	SPINACH
27S023A	ROYAL PA	050014	9/18/2005	11.7	A	ASSAIL BRAND 70W	264	609	AA	0	0.88	LB	10	15S	03E	GOMES F/	A	11.7	A	SPINACH
27S023A	ROYAL PA	050014	9/18/2005	11.7	A	FOSPHITE FUNGICII	68573	2	AA	0	5.85	GA	10	15S	03E	GOMES F/	A	11.7	A	SPINACH
27S023A	ROYAL PA	050014	9/18/2005	11.7	A	FULFILL	100	912	AA	0	2.01	LB	10	15S	03E	GOMES F/	A	11.7	A	SPINACH
27S023A	ROYAL PA	050014	9/18/2005	11.7	A	INTREPID 2F	62719	442	AA	0	0.73	GA	10	15S	03E	GOMES F/	A	11.7	A	SPINACH
27S023A	ROYAL PA	050014	9/18/2005	11.7	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.39	GA	10	15S	03E	GOMES F/	A	11.7	A	SPINACH
27S023A	ROYAL PA	050014	9/18/2005	11.7	A	TRIGARD	100	654	AA	0	1.95	LB	10	15S	03E	GOMES F/	A	11.7	A	SPINACH
27S023A	ROYAL PA	050014	9/22/2005	11.7	A	DU PONT LANNATE	352	342	ZA	0	11.7	LB	10	15S	03E	GOMES F/	A	11.7	A	SPINACH
27S023A	ROYAL PA	050014	9/22/2005	11.7	A	PROVADO 1.6 FLOW	3125	457	AA	0	0.34	GA	10	15S	03E	GOMES F/	A	11.7	A	SPINACH
27S023A	ROYAL PA	050014	10/9/2005	11.7	A	DIAZINON AG 500	66222	9	ZA	0	1.46	GA	10	15S	03E	GOMES F/	A	11.7	A	SPINACH
27S023A	ROYAL PA	050014	10/9/2005	11.7	A	DIMETHOATE 4E	51036	110	AA	0	2.93	QT	10	15S	03E	GOMES F/	A	11.7	A	SPINACH
27S023A	ROYAL PA	050014	10/9/2005	11.7	A	PROVADO 1.6 FLOW	3125	457	AA	0	0.34	GA	10	15S	03E	GOMES F/	A	11.7	A	SPINACH
27S023A	ROYAL PA	050014	10/9/2005	11.7	A	SUCCESS	62719	292	AA	0	1.46	QT	10	15S	03E	GOMES F/	A	11.7	A	SPINACH
27S023A	ROYAL PA	050014	10/9/2005	11.7	A	TRIGARD	100	654	AA	0	1.95	LB	10	15S	03E	GOMES F/	A	11.7	A	SPINACH
27S023A	ROYAL PA	050014	10/14/2005	11.7	A	ASSAIL 70WP INSEC	8033	23	AA	4581	19.89	OZ	10	15S	03E	WESTERN	G	11.7	A	SPINACH

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Appr	Meth	planted	Units	Commodity
27S023A	ROYAL PA	050014	10/14/2005	11.7	A	BLOCKADE 50WG P	100	922	ZB	0	8.78	OZ	10	15S	03E	WESTERN	G	11.7	A	SPINACH
27S023A	ROYAL PA	050014	10/14/2005	11.7	A	DU PONT LANNATE	352	342	ZB	0	11.7	LB	10	15S	03E	WESTERN	G	11.7	A	SPINACH
27S023A	ROYAL PA	050014	10/14/2005	11.7	A	FULFILL	100	912	ZA	0	32.18	OZ	10	15S	03E	WESTERN	G	11.7	A	SPINACH
27S023A	ROYAL PA	050014	10/14/2005	11.7	A	TRIGARD	100	654	AA	0	1.95	LB	10	15S	03E	WESTERN	G	11.7	A	SPINACH
27S023A	ROYAL PA	050014	10/19/2005	11.7	A	FULFILL	100	912	AA	0	2.01	LB	10	15S	03E	GOMES F/	A	11.7	A	SPINACH
27S023A	ROYAL PA	050014	10/19/2005	11.7	A	PROVADO 1.6 FLOW	3125	457	AA	0	0.34	GA	10	15S	03E	GOMES F/	A	11.7	A	SPINACH
27S023A	ROYAL PA	050014	10/19/2005	11.7	A	SUCCESS	62719	292	AA	0	1.83	QT	10	15S	03E	GOMES F/	A	11.7	A	SPINACH
27S023A	ROYAL PA	050014	10/19/2005	11.7	A	TRIGARD	100	654	AA	0	1.95	LB	10	15S	03E	GOMES F/	A	11.7	A	SPINACH
27S023A	ROYAL PA	050015	9/1/2005	12.6	A	ASSAIL BRAND 70W	264	609	AA	0	0.95	LB	10	15S	03E	GOMES F/	A	12.6	A	SPINACH
27S023A	ROYAL PA	050015	9/1/2005	12.6	A	DU PONT LANNATE	352	342	ZA	0	12.6	LB	10	15S	03E	GOMES F/	A	12.6	A	SPINACH
27S023A	ROYAL PA	050015	9/1/2005	12.6	A	FOSPHITE FUNGICII	68573	2	AA	0	6.3	GA	10	15S	03E	GOMES F/	A	12.6	A	SPINACH
27S023A	ROYAL PA	050015	9/1/2005	12.6	A	FULFILL	100	912	AA	0	2.17	LB	10	15S	03E	GOMES F/	A	12.6	A	SPINACH
27S023A	ROYAL PA	050015	9/1/2005	12.6	A	SUCCESS	62719	292	AA	0	2.76	QT	10	15S	03E	GOMES F/	A	12.6	A	SPINACH
27S023A	ROYAL PA	050015	9/1/2005	12.6	A	TRIGARD	100	654	AA	0	2.1	LB	10	15S	03E	GOMES F/	A	12.6	A	SPINACH
27S023A	ROYAL PA	050015	9/4/2005	12.6	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	151.2	OZ	10	15S	03E	WESTERN	G	12.6	A	SPINACH
27S023A	ROYAL PA	050015	9/4/2005	12.6	A	BLOCKADE 50WG P	100	922	ZB	0	9.45	OZ	10	15S	03E	WESTERN	G	12.6	A	SPINACH
27S023A	ROYAL PA	050015	9/4/2005	12.6	A	MUSTANG INSECTIC	279	3126	ZB	0	0.42	GA	10	15S	03E	WESTERN	G	12.6	A	SPINACH
27S023A	ROYAL PA	050015	9/11/2005	12.6	A	PERM-UP 3.2 EC INS	70506	9	AA	0	0.39	GA	10	15S	03E	GOMES F/	A	12.6	A	SPINACH
27S023A	ROYAL PA	050015	9/11/2005	12.6	A	SUCCESS	62719	292	AA	0	2.76	QT	10	15S	03E	GOMES F/	A	12.6	A	SPINACH
27S023A	ROYAL PA	050015	9/11/2005	12.6	A	TRIGARD	100	654	AA	0	2.1	LB	10	15S	03E	GOMES F/	A	12.6	A	SPINACH
27S023A	ROYAL PA	050015	9/18/2005	12.6	A	ASSAIL BRAND 70W	264	609	AA	0	0.95	LB	10	15S	03E	GOMES F/	A	12.6	A	SPINACH
27S023A	ROYAL PA	050015	9/18/2005	12.6	A	FOSPHITE FUNGICII	68573	2	AA	0	6.3	GA	10	15S	03E	GOMES F/	A	12.6	A	SPINACH
27S023A	ROYAL PA	050015	9/18/2005	12.6	A	FULFILL	100	912	AA	0	2.17	LB	10	15S	03E	GOMES F/	A	12.6	A	SPINACH
27S023A	ROYAL PA	050015	9/18/2005	12.6	A	INTREPID 2F	62719	442	AA	0	0.79	GA	10	15S	03E	GOMES F/	A	12.6	A	SPINACH
27S023A	ROYAL PA	050015	9/18/2005	12.6	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.42	GA	10	15S	03E	GOMES F/	A	12.6	A	SPINACH
27S023A	ROYAL PA	050015	9/18/2005	12.6	A	TRIGARD	100	654	AA	0	2.1	LB	10	15S	03E	GOMES F/	A	12.6	A	SPINACH
27S023A	ROYAL PA	050015	9/22/2005	12.6	A	DU PONT LANNATE	352	342	ZA	0	12.6	LB	10	15S	03E	GOMES F/	A	12.6	A	SPINACH
27S023A	ROYAL PA	050015	9/22/2005	12.6	A	PROVADO 1.6 FLOW	3125	457	AA	0	0.37	GA	10	15S	03E	GOMES F/	A	12.6	A	SPINACH
27S023A	ROYAL PA	050015	10/9/2005	12.6	A	DIAZINON AG 500	66222	9	ZA	0	1.58	GA	10	15S	03E	GOMES F/	A	12.6	A	SPINACH
27S023A	ROYAL PA	050015	10/9/2005	12.6	A	DIMETHOATE 4E	51036	110	AA	0	3.15	QT	10	15S	03E	GOMES F/	A	12.6	A	SPINACH
27S023A	ROYAL PA	050015	10/9/2005	12.6	A	PROVADO 1.6 FLOW	3125	457	AA	0	0.37	GA	10	15S	03E	GOMES F/	A	12.6	A	SPINACH
27S023A	ROYAL PA	050015	10/9/2005	12.6	A	SUCCESS	62719	292	AA	0	1.58	QT	10	15S	03E	GOMES F/	A	12.6	A	SPINACH
27S023A	ROYAL PA	050015	10/9/2005	12.6	A	TRIGARD	100	654	AA	0	2.1	LB	10	15S	03E	GOMES F/	A	12.6	A	SPINACH
27S023A	ROYAL PA	050015	10/13/2005	12.6	A	ASSAIL 70WP INSEC	8033	23	AA	4581	21.42	OZ	10	15S	03E	WESTERN	G	12.6	A	SPINACH
27S023A	ROYAL PA	050015	10/13/2005	12.6	A	BLOCKADE 50WG P	100	922	ZB	0	9.45	OZ	10	15S	03E	WESTERN	G	12.6	A	SPINACH
27S023A	ROYAL PA	050015	10/13/2005	12.6	A	DU PONT LANNATE	352	342	ZB	0	12.6	LB	10	15S	03E	WESTERN	G	12.6	A	SPINACH
27S023A	ROYAL PA	050015	10/13/2005	12.6	A	FULFILL	100	912	ZA	0	34.65	OZ	10	15S	03E	WESTERN	G	12.6	A	SPINACH
27S023A	ROYAL PA	050015	10/13/2005	12.6	A	TRIGARD	100	654	AA	0	2.09	LB	10	15S	03E	WESTERN	G	12.6	A	SPINACH
27S023A	ROYAL PA	050015	10/19/2005	12.6	A	FULFILL	100	912	AA	0	2.17	LB	10	15S	03E	GOMES F/	A	12.6	A	SPINACH
27S023A	ROYAL PA	050015	10/19/2005	12.6	A	PROVADO 1.6 FLOW	3125	457	AA	0	0.37	GA	10	15S	03E	GOMES F/	A	12.6	A	SPINACH
27S023A	ROYAL PA	050015	10/19/2005	12.6	A	SUCCESS	62719	292	AA	0	1.97	QT	10	15S	03E	GOMES F/	A	12.6	A	SPINACH
27S023A	ROYAL PA	050015	10/19/2005	12.6	A	TRIGARD	100	654	AA	0	2.1	LB	10	15S	03E	GOMES F/	A	12.6	A	SPINACH
27S023A	ROYAL PA	050007	10/30/2005	13.2	A	ACROBAT 50 WP FU	241	410	AA	0	5.28	LB	10	15S	03E	GOMES F/	A	13.2	A	LETTUCE LEAF
27S023A	ROYAL PA	050007	10/30/2005	13.2	A	ASSAIL BRAND 70W	264	609	AA	0	0.99	LB	10	15S	03E	GOMES F/	A	13.2	A	LETTUCE LEAF
27S023A	ROYAL PA	050007	10/30/2005	13.2	A	FIRST CHOICE SPRI	11656	50021	ZA	0	0.83	QT	10	15S	03E	GOMES F/	A	13.2	A	LETTUCE LEAF
27S023A	ROYAL PA	050007	10/30/2005	13.2	A	FOSPHITE FUNGICII	68573	2	AA	0	6.6	GA	10	15S	03E	GOMES F/	A	13.2	A	LETTUCE LEAF
27S023A	ROYAL PA	050007	10/30/2005	13.2	A	FULFILL	100	912	AA	0	2.27	LB	10	15S	03E	GOMES F/	A	13.2	A	LETTUCE LEAF
27S023A	ROYAL PA	050007	10/30/2005	13.2	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.44	GA	10	15S	03E	GOMES F/	A	13.2	A	LETTUCE LEAF
27S023A	ROYAL PA	050007	8/23/2005	13.2	A	BOTRAN 5F	10163	226	AA	0	13	PT	10	15S	03E		G	242.9	A	LETTUCE ROMAINE
27S023A	ROYAL PA	050007	8/23/2005	13.2	A	GOWAN DIAZINON 5	10163	116	AA	0	130	LB	10	15S	03E		G	242.9	A	LETTUCE ROMAINE
27S023A	ROYAL PA	050007	8/23/2005	13.2	A	KERB 50-W IN WATE	62719	397	AA	0	13	LB	10	15S	03E		G	242.9	A	LETTUCE ROMAINE
27S023A	ROYAL PA	050007	9/19/2005	13.2	A	ASSAIL 70WP INSEC	8033	23	AA	4581	22.44	OZ	10	15S	03E	WESTERN	G	13.2	A	LETTUCE ROMAINE
27S023A	ROYAL PA	050007	9/19/2005	13.2	A	DIAZINON AG 500	66222	9	ZA	0	1.65	GA	10	15S	03E	WESTERN	G	13.2	A	LETTUCE ROMAINE

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Appr	Meth	planted	Units	Commodity
27S023A	ROYAL PA	050007	9/19/2005	13.2	A	IPRODIONE 4L AG	51036	340	AA	0	3.3	GA	10	15S	03E	WESTERN	G	13.2	A	LETTUCE ROMAINE
27S023A	ROYAL PA	050007	9/19/2005	13.2	A	MANEX	1812	251	AA	0	5.28	GA	10	15S	03E	WESTERN	G	13.2	A	LETTUCE ROMAINE
27S023A	ROYAL PA	050007	9/19/2005	13.2	A	SUCCESS	62719	292	AA	0	2.07	QT	10	15S	03E	WESTERN	G	13.2	A	LETTUCE ROMAINE
27S023A	ROYAL PA	050007	10/12/2005	13.2	A	CLEAN CROP MALA	34704	474	AA	0	3.3	GA	10	15S	03E	WESTERN	G	13.2	A	LETTUCE ROMAINE
27S023A	ROYAL PA	050007	10/12/2005	13.2	A	DIAZINON AG 500	66222	9	ZA	0	1.65	GA	10	15S	03E	WESTERN	G	13.2	A	LETTUCE ROMAINE
27S023A	ROYAL PA	050007	10/12/2005	13.2	A	FIRST CHOICE SPRI	11656	50021	ZB	0	0.21	GA	10	15S	03E	WESTERN	G	13.2	A	LETTUCE ROMAINE
27S023A	ROYAL PA	050007	10/12/2005	13.2	A	MANEX	1812	251	AA	0	5.28	GA	10	15S	03E	WESTERN	G	13.2	A	LETTUCE ROMAINE
27S023A	ROYAL PA	050007	10/12/2005	13.2	A	MUSTANG INSECTIC	279	3126	ZB	0	0.44	GA	10	15S	03E	WESTERN	G	13.2	A	LETTUCE ROMAINE
27S023A	ROYAL PA	050007	10/12/2005	13.2	A	PROVADO 1.6 FLOW	264	763	AA	0	0.39	GA	10	15S	03E	WESTERN	G	13.2	A	LETTUCE ROMAINE
27S023A	ROYAL PA	050011	8/11/2005	13.2	A	BOTRAN 5F	10163	226	AA	0	13	PT	10	15S	03E		G	242.9	A	LETTUCE ROMAINE
27S023A	ROYAL PA	050011	8/11/2005	13.2	A	GOWAN DIAZINON 5	10163	116	AA	0	130	LB	10	15S	03E		G	242.9	A	LETTUCE ROMAINE
27S023A	ROYAL PA	050011	8/11/2005	13.2	A	KERB 50-W IN WATE	62719	397	AA	0	13	LB	10	15S	03E		G	242.9	A	LETTUCE ROMAINE
27S023A	ROYAL PA	050011	9/7/2005	13.2	A	DIAZINON AG 500	66222	9	ZA	0	1.65	GA	10	15S	03E	WESTERN	G	13.2	A	LETTUCE ROMAINE
27S023A	ROYAL PA	050011	9/7/2005	13.2	A	FIRST CHOICE BRE	11656	50095	AA	0	0.83	QT	10	15S	03E	WESTERN	G	13.2	A	LETTUCE ROMAINE
27S023A	ROYAL PA	050011	9/7/2005	13.2	A	MANEX	1812	251	AA	0	5.28	GA	10	15S	03E	WESTERN	G	13.2	A	LETTUCE ROMAINE
27S023A	ROYAL PA	050011	9/7/2005	13.2	A	MUSTANG INSECTIC	279	3126	ZB	0	0.41	GA	10	15S	03E	WESTERN	G	13.2	A	LETTUCE ROMAINE
27S023A	ROYAL PA	050011	9/7/2005	13.2	A	PROVADO 1.6 FLOW	264	763	AA	0	0.39	GA	10	15S	03E	WESTERN	G	13.2	A	LETTUCE ROMAINE
27S023A	ROYAL PA	050011	9/7/2005	13.2	A	ROVRAL 4 FLOWAB	264	482	AA	0	3.3	GA	10	15S	03E	WESTERN	G	13.2	A	LETTUCE ROMAINE
27S023A	ROYAL PA	050011	9/7/2005	13.2	A	TRIGARD	100	654	AA	0	2.19	LB	10	15S	03E	WESTERN	G	13.2	A	LETTUCE ROMAINE
27S023A	ROYAL PA	050011	9/17/2005	13.2	A	ASSAIL 70WP INSEC	8033	23	AA	4581	22.44	OZ	10	15S	03E	WESTERN	G	13.2	A	LETTUCE ROMAINE
27S023A	ROYAL PA	050011	9/17/2005	13.2	A	DIAZINON AG 500	66222	9	ZA	0	1.65	GA	10	15S	03E	WESTERN	G	13.2	A	LETTUCE ROMAINE
27S023A	ROYAL PA	050011	9/17/2005	13.2	A	FIRST CHOICE SPRI	11656	50021	ZB	0	0.21	GA	10	15S	03E	WESTERN	G	13.2	A	LETTUCE ROMAINE
27S023A	ROYAL PA	050011	9/17/2005	13.2	A	INTREPID 2F	62719	442	AA	0	0.82	GA	10	15S	03E	WESTERN	G	13.2	A	LETTUCE ROMAINE
27S023A	ROYAL PA	050011	9/17/2005	13.2	A	MANEX	1812	251	AA	0	5.28	GA	10	15S	03E	WESTERN	G	13.2	A	LETTUCE ROMAINE
27S023A	ROYAL PA	050011	9/17/2005	13.2	A	MUSTANG INSECTIC	279	3126	ZB	0	0.44	GA	10	15S	03E	WESTERN	G	13.2	A	LETTUCE ROMAINE
27S023A	ROYAL PA	050011	10/11/2005	13.2	A	ACROBAT 50 WP FU	241	410	AA	0	5.28	LB	10	15S	03E	WESTERN	G	13.2	A	LETTUCE ROMAINE
27S023A	ROYAL PA	050011	10/11/2005	13.2	A	ASSAIL 70WP INSEC	8033	23	AA	4581	19.8	OZ	10	15S	03E	WESTERN	G	13.2	A	LETTUCE ROMAINE
27S023A	ROYAL PA	050011	10/11/2005	13.2	A	FOSPHITE FUNGICII	68573	2	AA	0	6.6	GA	10	15S	03E	WESTERN	G	13.2	A	LETTUCE ROMAINE
27S023A	ROYAL PA	050011	10/11/2005	13.2	A	SUCCESS	62719	292	AA	0	2.07	QT	10	15S	03E	WESTERN	G	13.2	A	LETTUCE ROMAINE
27S023A	ROYAL PA	050011	10/11/2005	13.2	A	TRIGARD	100	654	AA	0	2.19	LB	10	15S	03E	WESTERN	G	13.2	A	LETTUCE ROMAINE
27S023A	ROYAL PA	05	2/11/2005	14	A	BOTRAN 5F	10163	226	AA	0	14	PT	10	15S	03E		G	14	A	LETTUCE HEAD
27S023A	ROYAL PA	05	2/11/2005	14	A	GOWAN DIAZINON 5	10163	116	AA	0	14	LB	10	15S	03E		G	14	A	LETTUCE HEAD
27S023A	ROYAL PA	05	2/11/2005	14	A	KERB 50-W IN WATE	62719	397	AA	0	14	LB	10	15S	03E		G	14	A	LETTUCE HEAD
27S023A	ROYAL PA	05	2/23/2005	17.5	A	BOTRAN 5F	10163	226	AA	0	17.5	PT	10	15S	03E		G	17.5	A	LETTUCE HEAD
27S023A	ROYAL PA	05	2/23/2005	17.5	A	GOWAN DIAZINON 5	10163	116	AA	0	17.5	LB	10	15S	03E		G	17.5	A	LETTUCE HEAD
27S023A	ROYAL PA	05	2/23/2005	17.5	A	KERB 50-W IN WATE	62719	397	AA	0	17.5	LB	10	15S	03E		G	17.5	A	LETTUCE HEAD
27S023A	ROYAL PA	05	3/10/2005	13	A	BOTRAN 5F	10163	226	AA	0	13	PT	10	15S	03E		G	13	A	LETTUCE HEAD
27S023A	ROYAL PA	05	3/10/2005	13	A	GOWAN DIAZINON 5	10163	116	AA	0	130	LB	10	15S	03E		G	13	A	LETTUCE HEAD
27S023A	ROYAL PA	05	3/10/2005	13	A	KERB 50-W	62719	397	ZC	0	13	LB	10	15S	03E		G	13	A	LETTUCE HEAD
27S023A	ROYAL PA	05	4/16/2005	12.6	A	BOTRAN 5F	10163	226	AA	0	12.5	PT	10	15S	03E		G	12.6	A	LETTUCE HEAD
27S023A	ROYAL PA	05	4/16/2005	12.6	A	GOWAN DIAZINON 5	10163	116	AA	0	125	LB	10	15S	03E		G	12.6	A	LETTUCE HEAD
27S023A	ROYAL PA	05	4/16/2005	12.6	A	KERB 50-W IN WATE	62719	397	AA	0	12.5	LB	10	15S	03E		G	12.6	A	LETTUCE HEAD
27S023A	ROYAL PA	05	4/25/2005	11.7	A	BOTRAN 5F	10163	226	AA	0	11.5	PT	10	15S	03E		G	11.7	A	LETTUCE HEAD
27S023A	ROYAL PA	05	4/25/2005	11.7	A	GOWAN DIAZINON 5	10163	116	AA	0	115	LB	10	15S	03E		G	11.7	A	LETTUCE HEAD
27S023A	ROYAL PA	05	4/25/2005	11.7	A	KERB 50-W IN WATE	62719	397	AA	0	11.5	LB	10	15S	03E		G	11.7	A	LETTUCE HEAD
27S023A	ROYAL PA	05	4/25/2005	6.7	A	BOTRAN 5F	10163	226	AA	0	6.5	PT	10	15S	03E		G	6.7	A	LETTUCE HEAD
27S023A	ROYAL PA	05	4/25/2005	6.7	A	GOWAN DIAZINON 5	10163	116	AA	0	65	LB	10	15S	03E		G	6.7	A	LETTUCE HEAD
27S023A	ROYAL PA	05	4/25/2005	6.7	A	KERB 50-W IN WATE	62719	397	AA	0	6.5	LB	10	15S	03E		G	6.7	A	LETTUCE HEAD
27S023A	ROYAL PA	05	4/29/2005	13.2	A	BOTRAN 5F	10163	226	AA	0	13	PT	10	15S	03E		G	13.2	A	LETTUCE HEAD
27S023A	ROYAL PA	05	4/29/2005	13.2	A	GOWAN DIAZINON 5	10163	116	AA	0	130	LB	10	15S	03E		G	13.2	A	LETTUCE HEAD
27S023A	ROYAL PA	05	4/29/2005	13.2	A	KERB 50-W IN WATE	62719	397	AA	0	13	LB	10	15S	03E		G	13.2	A	LETTUCE HEAD
27S023A	ROYAL PA	05	5/27/2005	13.9	A	BOTRAN 5F	10163	226	AA	0	14	PT	10	15S	03E		G	13.9	A	LETTUCE HEAD
27S023A	ROYAL PA	05	5/27/2005	13.9	A	GOWAN DIAZINON 5	10163	116	AA	0	140	LB	10	15S	03E		G	13.9	A	LETTUCE HEAD

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Appr	Meth	planted	Units	Commodity
27S023A	ROYAL PA	05	5/27/2005	13.9	A	KERB 50-W	62719	397	ZC	0	14	LB	10	15S	03E		G	13.9	A	LETTUCE HEAD
27S023A	ROYAL PA	05	5/30/2005	12.2	A	BOTRAN 5F	10163	226	AA	0	12	PT	10	15S	03E		G	12.2	A	LETTUCE HEAD
27S023A	ROYAL PA	05	5/30/2005	12.2	A	GOWAN DIAZINON 5	10163	116	AA	0	120	LB	10	15S	03E		G	12.2	A	LETTUCE HEAD
27S023A	ROYAL PA	05	5/30/2005	12.2	A	KERB 50-W	62719	397	ZC	0	12	LB	10	15S	03E		G	12.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050001	4/12/2005	17.5	A	DU PONT ASANA XL	352	515	AA	0	1.09	GA	10	15S	03E	GOMES F/	A	8.7	A	LETTUCE HEAD
27S023A	ROYAL PA	050001	4/12/2005	17.5	A	FIRST CHOICE SPRI	11656	50021	ZA	0	1.09	QT	10	15S	03E	GOMES F/	A	8.7	A	LETTUCE HEAD
27S023A	ROYAL PA	050001	4/12/2005	17.5	A	MANEX	1812	251	AA	0	7	GA	10	15S	03E	GOMES F/	A	8.7	A	LETTUCE HEAD
27S023A	ROYAL PA	050001	4/12/2005	17.5	A	TENKOZ PERMETHF	279	3014	AA	55467	1.09	GA	10	15S	03E	GOMES F/	A	8.7	A	LETTUCE HEAD
27S023A	ROYAL PA	050001	4/16/2005	17	A	LANCER 75SP	70506	1	AA	0	22.61	LB	10	15S	03E	WESTERN	G	17	A	LETTUCE HEAD
27S023A	ROYAL PA	050001	4/16/2005	17	A	POUNCE 25 WP	279	3051	AA	0	8.5	LB	10	15S	03E	WESTERN	G	17	A	LETTUCE HEAD
27S023A	ROYAL PA	050001	4/16/2005	17	A	PROVADO 1.6 FLOW	264	763	AA	0	0.5	GA	10	15S	03E	WESTERN	G	17	A	LETTUCE HEAD
27S023A	ROYAL PA	050001	4/16/2005	17	A	ROVRAL 4 FLOWAB	264	482	AA	0	4.25	GA	10	15S	03E	WESTERN	G	17	A	LETTUCE HEAD
27S023A	ROYAL PA	050001	4/16/2005	17	A	SOURCE 1 NO FOAM	11656	50009	ZA	0	0.1	GA	10	15S	03E	WESTERN	G	17	A	LETTUCE HEAD
27S023A	ROYAL PA	050001	5/4/2005	17.5	A	AMAZIN ZINC ENRIC	2749	36	AA	0	35	LB	10	15S	03E	WESTERN	G	17.5	A	LETTUCE HEAD
27S023A	ROYAL PA	050001	5/4/2005	17.5	A	DUPONT TANOS FU	352	604	AA	0	8.75	LB	10	15S	03E	WESTERN	G	17.5	A	LETTUCE HEAD
27S023A	ROYAL PA	050001	5/4/2005	17.5	A	FIRST CHOICE SPRI	11656	50021	ZA	0	0.27	GA	10	15S	03E	WESTERN	G	17.5	A	LETTUCE HEAD
27S023A	ROYAL PA	050001	5/4/2005	17.5	A	FURY 1.5 EW INSEC	279	3126	AA	0	0.59	GA	10	15S	03E	WESTERN	G	17.5	A	LETTUCE HEAD
27S023A	ROYAL PA	050001	5/4/2005	17.5	A	PROVADO 1.6 FLOW	264	763	AA	0	0.51	GA	10	15S	03E	WESTERN	G	17.5	A	LETTUCE HEAD
27S023A	ROYAL PA	050001	5/11/2005	17.5	A	ACROBAT 50 WP FU	241	410	AA	0	7	LB	10	15S	03E	GOMES F/	A	8.7	A	LETTUCE HEAD
27S023A	ROYAL PA	050001	5/11/2005	17.5	A	FIRST CHOICE SPRI	11656	50021	ZA	0	35	QT	10	15S	03E	GOMES F/	A	8.7	A	LETTUCE HEAD
27S023A	ROYAL PA	050001	5/11/2005	17.5	A	FOSPHITE FUNGICII	68573	2	AA	0	8.75	GA	10	15S	03E	GOMES F/	A	8.7	A	LETTUCE HEAD
27S023A	ROYAL PA	050001	5/11/2005	17.5	A	FULFILL	100	912	AA	0	3.01	LB	10	15S	03E	GOMES F/	A	8.7	A	LETTUCE HEAD
27S023A	ROYAL PA	050001	5/11/2005	17.5	A	TENKOZ PERMETHF	279	3014	AA	55467	1.09	GA	10	15S	03E	GOMES F/	A	8.7	A	LETTUCE HEAD
27S023A	ROYAL PA	050001	5/14/2005	17.5	A	ALIETTE WDG FUNC	264	516	AA	0	70	LB	10	15S	03E	GOMES F/	A	8.7	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	3/14/2005	12.2	A	ACEPHATE 75SP AG	51036	236	AA	0	16.23	LB	10	15S	03E	WESTERN	G	12.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	3/14/2005	12.2	A	DUPONT TANOS FU	352	604	AA	0	6.1	LB	10	15S	03E	WESTERN	G	12.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	3/14/2005	12.2	A	FIRST CHOICE BRE/	11656	50095	AA	0	0.76	QT	10	15S	03E	WESTERN	G	12.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	3/14/2005	12.2	A	METASYSTOX-R 2 C	10163	220	AA	0	3.05	GA	10	15S	03E	WESTERN	G	12.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	3/14/2005	12.2	A	PENTATHLON	1812	251	ZB	0	4.88	GA	10	15S	03E	WESTERN	G	12.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	6/25/2005	19.8	A	BOTRAN 5F	10163	226	AA	0	20	PT	10	15S	03E		G	19.8	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	6/25/2005	19.8	A	GOWAN DIAZINON 5	10163	116	AA	0	200	LB	10	15S	03E		G	19.8	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	6/25/2005	19.8	A	KERB 50-W IN WATE	62719	397	AA	0	20	LB	10	15S	03E		G	19.8	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	7/21/2005	10	A	ACEPHATE 75SP AG	51036	236	AA	0	13.3	LB	10	15S	03E	WESTERN	G	10	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	7/21/2005	10	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	80	OZ	10	15S	03E	WESTERN	G	10	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	7/21/2005	10	A	DIMETHOATE 4E	51036	110	AA	0	0.63	GA	10	15S	03E	WESTERN	G	10	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	7/21/2005	10	A	FIRST CHOICE BRE/	11656	50095	AA	0	0.94	QT	10	15S	03E	WESTERN	G	10	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	7/21/2005	10	A	MANEX	1812	251	AA	0	4	GA	10	15S	03E	WESTERN	G	10	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	7/21/2005	10	A	MSR SPRAY CONCE	10163	220	ZC	0	2.5	GA	10	15S	03E	WESTERN	G	10	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	7/21/2005	10	A	ROVRAL 4 FLOWAB	264	482	AA	0	2.5	GA	10	15S	03E	WESTERN	G	10	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	7/25/2005	10	A	ACEPHATE 75SP AG	51036	236	AA	0	13.3	LB	10	15S	03E	WESTERN	G	10	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	7/25/2005	10	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	80	OZ	10	15S	03E	WESTERN	G	10	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	7/25/2005	10	A	DIMETHOATE 4E	51036	110	AA	0	0.63	GA	10	15S	03E	WESTERN	G	10	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	7/25/2005	10	A	FIRST CHOICE BRE/	11656	50095	AA	0	0.94	QT	10	15S	03E	WESTERN	G	10	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	7/25/2005	10	A	MANEX	1812	251	AA	0	4	GA	10	15S	03E	WESTERN	G	10	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	7/25/2005	10	A	MSR SPRAY CONCE	10163	220	ZC	0	2.5	GA	10	15S	03E	WESTERN	G	10	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	7/25/2005	10	A	ROVRAL 4 FLOWAB	264	482	AA	0	2.5	GA	10	15S	03E	WESTERN	G	10	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	7/29/2005	10	A	ACEPHATE 75SP AG	51036	236	AA	0	13.3	LB	10	15S	03E	WESTERN	G	10	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	7/29/2005	10	A	DIMETHOATE 4E	51036	110	AA	0	0.63	GA	10	15S	03E	WESTERN	G	10	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	7/29/2005	10	A	FIRST CHOICE SPRI	11656	50021	ZB	0	0.16	GA	10	15S	03E	WESTERN	G	10	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	7/29/2005	10	A	MANEX	1812	251	AA	0	4	GA	10	15S	03E	WESTERN	G	10	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	7/29/2005	10	A	MSR SPRAY CONCE	10163	220	ZC	0	2.5	GA	10	15S	03E	WESTERN	G	10	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	7/29/2005	10	A	PROVADO 1.6 FLOW	264	763	AA	0	0.29	GA	10	15S	03E	WESTERN	G	10	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	8/2/2005	10	A	ACEPHATE 75SP AG	51036	236	AA	0	13.3	LB	10	15S	03E	WESTERN	G	10	A	LETTUCE HEAD

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Appr	Meth	planted	Units	Commodity
27S023A	ROYAL PA	050002	8/2/2005	10	A	FIRST CHOICE BRE/	11656	50095	AA	0	0.94	QT	10	15S	03E	WESTERN	G	10	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	8/2/2005	10	A	MANEX	1812	251	AA	0	4	GA	10	15S	03E	WESTERN	G	10	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	8/2/2005	10	A	MSR SPRAY CONCE	10163	220	ZC	0	2.5	GA	10	15S	03E	WESTERN	G	10	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	8/2/2005	10	A	PROVADO 1.6 FLOW	264	763	AA	0	0.29	GA	10	15S	03E	WESTERN	G	10	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	8/13/2005	10	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	100	OZ	10	15S	03E	WESTERN	G	10	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	8/13/2005	10	A	ASSAIL 70WP INSEC	8033	23	AA	4581	17	OZ	10	15S	03E	WESTERN	G	10	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	8/13/2005	10	A	CLEAN CROP MALA	34704	474	AA	0	2.5	GA	10	15S	03E	WESTERN	G	10	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	8/13/2005	10	A	FIRST CHOICE SPRI	11656	50021	ZB	0	5	GA	10	15S	03E	WESTERN	G	10	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	8/13/2005	10	A	INTREPID 2F	62719	442	AA	0	0.62	GA	10	15S	03E	WESTERN	G	10	A	LETTUCE HEAD
27S023A	ROYAL PA	050002	8/13/2005	10	A	MANEX	1812	251	AA	0	4	GA	10	15S	03E	WESTERN	G	10	A	LETTUCE HEAD
27S023A	ROYAL PA	050003	1/17/2005	10.9	A	BOTRAN 5F	10163	226	AA	0	11	PT	10	15S	03E		G	10.9	A	LETTUCE HEAD
27S023A	ROYAL PA	050003	1/17/2005	10.9	A	GOWAN DIAZINON 5	10163	116	AA	0	110	LB	10	15S	03E		G	10.9	A	LETTUCE HEAD
27S023A	ROYAL PA	050003	1/17/2005	10.9	A	KERB 50-W IN WATE	62719	397	AA	0	11	LB	10	15S	03E		G	10.9	A	LETTUCE HEAD
27S023A	ROYAL PA	050003	3/14/2005	11	A	ACEPHATE 75SP AG	51036	236	AA	0	14.63	LB	10	15S	03E	WESTERN	G	11	A	LETTUCE HEAD
27S023A	ROYAL PA	050003	3/14/2005	11	A	FIRST CHOICE BRE/	11656	50095	AA	0	0.69	QT	10	15S	03E	WESTERN	G	11	A	LETTUCE HEAD
27S023A	ROYAL PA	050003	3/14/2005	11	A	METASYSTOX-R 2 C	10163	220	AA	0	2.75	GA	10	15S	03E	WESTERN	G	11	A	LETTUCE HEAD
27S023A	ROYAL PA	050003	3/14/2005	11	A	PENTATHLON	1812	251	ZB	0	4.4	GA	10	15S	03E	WESTERN	G	11	A	LETTUCE HEAD
27S023A	ROYAL PA	050003	3/21/2005	11	A	ALIETTE WDG FUNC	264	516	AA	0	33	LB	10	15S	03E	WESTERN	G	11	A	LETTUCE HEAD
27S023A	ROYAL PA	050003	3/21/2005	11	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.34	GA	10	15S	03E	WESTERN	G	11	A	LETTUCE HEAD
27S023A	ROYAL PA	050003	3/21/2005	11	A	PENTATHLON	1812	251	ZB	0	4.4	GA	10	15S	03E	WESTERN	G	11	A	LETTUCE HEAD
27S023A	ROYAL PA	050003	3/21/2005	11	A	PROVADO 1.6 FLOW	264	763	AA	0	0.32	GA	10	15S	03E	WESTERN	G	11	A	LETTUCE HEAD
27S023A	ROYAL PA	050003	4/9/2005	11	A	DUPONT TANOS FU	352	604	AA	0	5.5	LB	10	15S	03E	GOMES FA	A	11	A	LETTUCE HEAD
27S023A	ROYAL PA	050003	4/9/2005	11	A	FIRST CHOICE SPRI	11656	50021	ZA	0	0.55	QT	10	15S	03E	GOMES FA	A	11	A	LETTUCE HEAD
27S023A	ROYAL PA	050003	4/9/2005	11	A	MANEX	1812	251	AA	0	4.4	GA	10	15S	03E	GOMES FA	A	11	A	LETTUCE HEAD
27S023A	ROYAL PA	050003	4/9/2005	11	A	PROVADO 1.6 FLOW	3125	457	AA	0	0.32	GA	10	15S	03E	GOMES FA	A	11	A	LETTUCE HEAD
27S023A	ROYAL PA	050003	4/9/2005	11	A	TENKOZ PERMETHF	279	3014	AA	55467	0.69	GA	10	15S	03E	GOMES FA	A	11	A	LETTUCE HEAD
27S023A	ROYAL PA	050004	1/19/2005	11	A	BOTRAN 5F	10163	226	AA	0	11	PT	10	15S	03E		G	11	A	LETTUCE HEAD
27S023A	ROYAL PA	050004	1/19/2005	11	A	GOWAN DIAZINON 5	10163	116	AA	0	110	LB	10	15S	03E		G	11	A	LETTUCE HEAD
27S023A	ROYAL PA	050004	1/19/2005	11	A	KERB 50-W IN WATE	62719	397	AA	0	11	LB	10	15S	03E		G	11	A	LETTUCE HEAD
27S023A	ROYAL PA	050004	2/27/2005	10.9	A	FIRST CHOICE BRE/	11656	50095	AA	0	0.09	GA	10	15S	03E	GOMES FA	A	11	A	LETTUCE HEAD
27S023A	ROYAL PA	050004	2/27/2005	10.9	A	MANEX	1812	251	AA	0	4.36	GA	10	15S	03E	GOMES FA	A	11	A	LETTUCE HEAD
27S023A	ROYAL PA	050004	2/27/2005	10.9	A	METASYSTOX-R SP	10163	220	ZA	0	2.73	GA	10	15S	03E	GOMES FA	A	11	A	LETTUCE HEAD
27S023A	ROYAL PA	050004	2/27/2005	10.9	A	SEDAGRI ACEPHAT	70506	1	AA	264	14.5	LB	10	15S	03E	GOMES FA	A	11	A	LETTUCE HEAD
27S023A	ROYAL PA	050004	3/17/2005	11	A	ACEPHATE 75SP AG	51036	236	AA	0	14.63	LB	10	15S	03E	WESTERN	G	11	A	LETTUCE HEAD
27S023A	ROYAL PA	050004	3/17/2005	11	A	FIRST CHOICE BRE/	11656	50095	AA	0	0.69	QT	10	15S	03E	WESTERN	G	11	A	LETTUCE HEAD
27S023A	ROYAL PA	050004	3/17/2005	11	A	METASYSTOX-R 2 C	10163	220	AA	0	2.75	GA	10	15S	03E	WESTERN	G	11	A	LETTUCE HEAD
27S023A	ROYAL PA	050004	3/17/2005	11	A	PENTATHLON	1812	251	ZB	0	4.4	GA	10	15S	03E	WESTERN	G	11	A	LETTUCE HEAD
27S023A	ROYAL PA	050004	4/9/2005	11	A	DUPONT TANOS FU	352	604	AA	0	5.5	LB	10	15S	03E	GOMES FA	A	11	A	LETTUCE HEAD
27S023A	ROYAL PA	050004	4/9/2005	11	A	FIRST CHOICE SPRI	11656	50021	ZA	0	0.55	QT	10	15S	03E	GOMES FA	A	11	A	LETTUCE HEAD
27S023A	ROYAL PA	050004	4/9/2005	11	A	MANEX	1812	251	AA	0	4.4	GA	10	15S	03E	GOMES FA	A	11	A	LETTUCE HEAD
27S023A	ROYAL PA	050004	4/9/2005	11	A	PROVADO 1.6 FLOW	3125	457	AA	0	0.32	GA	10	15S	03E	GOMES FA	A	11	A	LETTUCE HEAD
27S023A	ROYAL PA	050004	4/9/2005	11	A	TENKOZ PERMETHF	279	3014	AA	55467	0.69	GA	10	15S	03E	GOMES FA	A	11	A	LETTUCE HEAD
27S023A	ROYAL PA	050005	6/4/2005	9	A	DIAZINON AG 500	66222	9	ZA	0	1.13	GA	10	15S	03E	WESTERN	G	9	A	LETTUCE HEAD
27S023A	ROYAL PA	050005	6/4/2005	9	A	FIRST CHOICE SPRI	11656	50021	ZB	0	0.14	GA	10	15S	03E	WESTERN	G	9	A	LETTUCE HEAD
27S023A	ROYAL PA	050005	6/4/2005	9	A	MANEX	1812	251	AA	0	3.6	GA	10	15S	03E	WESTERN	G	9	A	LETTUCE HEAD
27S023A	ROYAL PA	050005	6/4/2005	9	A	ROVRAL 4 FLOWAB	264	482	AA	0	2.25	GA	10	15S	03E	WESTERN	G	9	A	LETTUCE HEAD
27S023A	ROYAL PA	050005	6/4/2005	9	A	TENKOZ ACEPHATE	70506	1	AA	55467	11.97	LB	10	15S	03E	WESTERN	G	9	A	LETTUCE HEAD
27S023A	ROYAL PA	050005	6/18/2005	18	A	DIAZINON AG 500	66222	9	ZA	0	2.25	GA	10	15S	03E	WESTERN	G	18	A	LETTUCE HEAD
27S023A	ROYAL PA	050005	6/18/2005	18	A	FIRST CHOICE BRE/	11656	50095	AA	0	1.69	QT	10	15S	03E	WESTERN	G	18	A	LETTUCE HEAD
27S023A	ROYAL PA	050005	6/18/2005	18	A	MANEX	1812	251	AA	0	7.2	GA	10	15S	03E	WESTERN	G	18	A	LETTUCE HEAD
27S023A	ROYAL PA	050005	6/18/2005	18	A	MSR SPRAY CONCE	10163	220	ZC	0	4.5	GA	10	15S	03E	WESTERN	G	18	A	LETTUCE HEAD
27S023A	ROYAL PA	050005	6/18/2005	18	A	TENKOZ ACEPHATE	70506	1	AA	55467	23.94	LB	10	15S	03E	WESTERN	G	18	A	LETTUCE HEAD
27S023A	ROYAL PA	050005	6/27/2005	18	A	AMAZIN ZINC ENRIC	2749	36	AA	0	36	LB	10	15S	03E	WESTERN	G	18	A	LETTUCE HEAD

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Appr	Meth	planted	Units	Commodity
27S023A	ROYAL PA	050005	6/27/2005	18	A	ASSAIL BRAND 70W	264	609	AA	0	30.6	OZ	10	15S	03E	WESTERN	G	18	A	LETTUCE HEAD
27S023A	ROYAL PA	050005	6/27/2005	18	A	FIRST CHOICE SPRI	11656	50021	ZB	0	0.28	GA	10	15S	03E	WESTERN	G	18	A	LETTUCE HEAD
27S023A	ROYAL PA	050005	6/27/2005	18	A	FULFILL	100	912	ZA	0	49.5	OZ	10	15S	03E	WESTERN	G	18	A	LETTUCE HEAD
27S023A	ROYAL PA	050005	6/27/2005	18	A	MUSTANG INSECTIC	279	3126	ZB	0	0.6	GA	10	15S	03E	WESTERN	G	18	A	LETTUCE HEAD
27S023A	ROYAL PA	050008	3/17/2005	14	A	ACEPHATE 75SP AG	51036	236	AA	0	18.62	LB	10	15S	03E	WESTERN	G	14	A	LETTUCE HEAD
27S023A	ROYAL PA	050008	3/17/2005	14	A	ENDURA FUNGICIDE	7969	197	AA	0	154	OZ	10	15S	03E	WESTERN	G	14	A	LETTUCE HEAD
27S023A	ROYAL PA	050008	3/17/2005	14	A	FIRST CHOICE BRE/	11656	50095	AA	0	0.88	QT	10	15S	03E	WESTERN	G	14	A	LETTUCE HEAD
27S023A	ROYAL PA	050008	3/17/2005	14	A	METASYSTOX-R 2 C	10163	220	AA	0	3.5	GA	10	15S	03E	WESTERN	G	14	A	LETTUCE HEAD
27S023A	ROYAL PA	050008	3/17/2005	14	A	PENTATHLON	1812	251	ZB	0	5.6	GA	10	15S	03E	WESTERN	G	14	A	LETTUCE HEAD
27S023A	ROYAL PA	050008	4/14/2005	14	A	DUPONT TANOS FU	352	604	AA	0	7	LB	10	15S	03E	WESTERN	G	14	A	LETTUCE HEAD
27S023A	ROYAL PA	050008	4/14/2005	14	A	FIRST CHOICE SPRI	11656	50021	ZB	0	0.22	GA	10	15S	03E	WESTERN	G	14	A	LETTUCE HEAD
27S023A	ROYAL PA	050008	4/14/2005	14	A	PENTATHLON	1812	251	ZB	0	5.6	GA	10	15S	03E	WESTERN	G	14	A	LETTUCE HEAD
27S023A	ROYAL PA	050008	4/14/2005	14	A	POUNCE 3.2 EC	279	3014	AA	0	0.87	GA	10	15S	03E	WESTERN	G	14	A	LETTUCE HEAD
27S023A	ROYAL PA	050008	4/14/2005	14	A	PROVADO 1.6 FLOW	264	763	AA	0	0.41	GA	10	15S	03E	WESTERN	G	14	A	LETTUCE HEAD
27S023A	ROYAL PA	050008	5/3/2005	14	A	ACROBAT 50 WP FU	241	410	AA	0	5.6	LB	10	15S	03E	GOMES FA	A	14	A	LETTUCE HEAD
27S023A	ROYAL PA	050008	5/3/2005	14	A	FIRST CHOICE SPRI	11656	50021	ZA	0	0.44	QT	10	15S	03E	GOMES FA	A	14	A	LETTUCE HEAD
27S023A	ROYAL PA	050008	5/3/2005	14	A	FOSPHITE FUNGICII	68573	2	AA	0	7	GA	10	15S	03E	GOMES FA	A	14	A	LETTUCE HEAD
27S023A	ROYAL PA	050008	5/3/2005	14	A	FULFILL	100	912	AA	0	2.41	LB	10	15S	03E	GOMES FA	A	14	A	LETTUCE HEAD
27S023A	ROYAL PA	050008	5/3/2005	14	A	TENKOZ PERMETHF	279	3014	AA	55467	0.88	GA	10	15S	03E	GOMES FA	A	14	A	LETTUCE HEAD
27S023A	ROYAL PA	050009	6/16/2005	20.8	A	41-A	2839	50021	AA	0	83.2	OZ	10	15S	03E	WESTERN	G	20.8	A	LETTUCE HEAD
27S023A	ROYAL PA	050009	6/16/2005	20.8	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	166.4	OZ	10	15S	03E	WESTERN	G	20.8	A	LETTUCE HEAD
27S023A	ROYAL PA	050009	6/16/2005	20.8	A	FIRST CHOICE BRE/	11656	50095	AA	0	1.3	QT	10	15S	03E	WESTERN	G	20.8	A	LETTUCE HEAD
27S023A	ROYAL PA	050009	6/16/2005	20.8	A	MANEX	1812	251	AA	0	8.32	GA	10	15S	03E	WESTERN	G	20.8	A	LETTUCE HEAD
27S023A	ROYAL PA	050009	6/16/2005	20.8	A	MSR SPRAY CONCE	10163	220	ZC	0	5.2	GA	10	15S	03E	WESTERN	G	20.8	A	LETTUCE HEAD
27S023A	ROYAL PA	050009	6/16/2005	20.8	A	ROVRAL 4 FLOWAB	264	482	AA	0	5.2	GA	10	15S	03E	WESTERN	G	20.8	A	LETTUCE HEAD
27S023A	ROYAL PA	050009	6/16/2005	20.8	A	TENKOZ ACEPHATE	70506	1	AA	55467	27.66	LB	10	15S	03E	WESTERN	G	20.8	A	LETTUCE HEAD
27S023A	ROYAL PA	050010	7/22/2005	17.1	A	BOTRAN 5F	10163	226	AA	0	17	PT	10	15S	03E		G	242.9	A	LETTUCE HEAD
27S023A	ROYAL PA	050010	7/22/2005	17.1	A	GOWAN DIAZINON 5	10163	116	AA	0	170	LB	10	15S	03E		G	242.9	A	LETTUCE HEAD
27S023A	ROYAL PA	050010	7/22/2005	17.1	A	KERB 50-W IN WATE	62719	397	AA	0	17	LB	10	15S	03E		G	242.9	A	LETTUCE HEAD
27S023A	ROYAL PA	050010	8/9/2005	17.1	A	AGRI-MEK 0.15 EC M	100	898	AA	0	4.28	QT	10	15S	03E	GOMES FA	A	17.5	A	LETTUCE HEAD
27S023A	ROYAL PA	050010	8/9/2005	17.1	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.53	GA	10	15S	03E	GOMES FA	A	17.5	A	LETTUCE HEAD
27S023A	ROYAL PA	050010	8/9/2005	17.1	A	NO FOAM B	11656	50009	AA	0	0.64	GA	10	15S	03E	GOMES FA	A	17.5	A	LETTUCE HEAD
27S023A	ROYAL PA	050010	9/14/2005	17	A	ACEPHATE 75SP AG	51036	236	AA	0	22.61	LB	10	15S	03E	WESTERN	G	17	A	LETTUCE HEAD
27S023A	ROYAL PA	050010	9/14/2005	17	A	ASSAIL 70WP INSEC	8033	23	AA	4581	25.5	OZ	10	15S	03E	WESTERN	G	17	A	LETTUCE HEAD
27S023A	ROYAL PA	050010	9/14/2005	17	A	DIAZINON AG 500	66222	9	ZA	0	2.13	GA	10	15S	03E	WESTERN	G	17	A	LETTUCE HEAD
27S023A	ROYAL PA	050010	9/14/2005	17	A	FIRST CHOICE BRE/	11656	50095	AA	0	1.06	QT	10	15S	03E	WESTERN	G	17	A	LETTUCE HEAD
27S023A	ROYAL PA	050010	9/14/2005	17	A	MANEX	1812	251	AA	0	6.8	GA	10	15S	03E	WESTERN	G	17	A	LETTUCE HEAD
27S023A	ROYAL PA	050010	9/14/2005	17	A	MSR SPRAY CONCE	10163	220	ZC	0	4.25	GA	10	15S	03E	WESTERN	G	17	A	LETTUCE HEAD
27S023A	ROYAL PA	050010	9/25/2005	17.1	A	DIMETHOATE 4E	51036	110	AA	0	4.28	QT	10	15S	03E	GOMES FA	A	17.5	A	LETTUCE HEAD
27S023A	ROYAL PA	050010	9/25/2005	17.1	A	DUPONT TANOS FU	352	604	AA	0	8.55	LB	10	15S	03E	GOMES FA	A	17.5	A	LETTUCE HEAD
27S023A	ROYAL PA	050010	9/25/2005	17.1	A	FIRST CHOICE SPRI	11656	50021	ZA	0	1.07	QT	10	15S	03E	GOMES FA	A	17.5	A	LETTUCE HEAD
27S023A	ROYAL PA	050010	9/25/2005	17.1	A	FOSPHITE FUNGICII	68573	2	AA	0	8.55	GA	10	15S	03E	GOMES FA	A	17.5	A	LETTUCE HEAD
27S023A	ROYAL PA	050010	9/25/2005	17.1	A	INTREPID 2F	62719	442	AA	0	1.07	GA	10	15S	03E	GOMES FA	A	17.5	A	LETTUCE HEAD
27S023A	ROYAL PA	050010	9/25/2005	17.1	A	PROVADO 1.6 FLOW	3125	457	AA	0	0.5	GA	10	15S	03E	GOMES FA	A	17.5	A	LETTUCE HEAD
27S023A	ROYAL PA	050010	9/25/2005	17.1	A	SUCCESS	62719	292	AA	0	2.67	QT	10	15S	03E	GOMES FA	A	17.5	A	LETTUCE HEAD
27S023A	ROYAL PA	050011	5/26/2005	13.2	A	41-A	2839	50021	AA	0	52.8	OZ	10	15S	03E	WESTERN	G	13.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050011	5/26/2005	13.2	A	DIAZINON AG 500	66222	9	ZA	0	1.65	GA	10	15S	03E	WESTERN	G	13.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050011	5/26/2005	13.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.24	GA	10	15S	03E	WESTERN	G	13.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050011	5/26/2005	13.2	A	MANEX	1812	251	AA	0	5.28	GA	10	15S	03E	WESTERN	G	13.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050011	5/26/2005	13.2	A	ROVRAL 4 FLOWAB	264	482	AA	0	3.3	GA	10	15S	03E	WESTERN	G	13.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050011	5/26/2005	13.2	A	TENKOZ ACEPHATE	70506	1	AA	55467	17.56	LB	10	15S	03E	WESTERN	G	13.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050011	6/16/2005	13.2	A	FIRST CHOICE BRE/	11656	50095	AA	0	1.24	QT	10	15S	03E	WESTERN	G	13.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050011	6/16/2005	13.2	A	MANEX	1812	251	AA	0	5.28	GA	10	15S	03E	WESTERN	G	13.2	A	LETTUCE HEAD

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Appr	Meth	planted	Units	Commodity
27S023A	ROYAL PA	050011	6/16/2005	13.2	A	MSR SPRAY CONCE	10163	220	ZC	0	3.3	GA	10	15S	03E	WESTERN	G	13.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050011	6/16/2005	13.2	A	MUSTANG INSECTI	279	3126	ZB	0	0.44	GA	10	15S	03E	WESTERN	G	13.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050011	6/16/2005	13.2	A	PROVADO 1.6 FLOW	264	763	AA	0	0.39	GA	10	15S	03E	WESTERN	G	13.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050012	6/26/2005	13.9	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	111.2	OZ	10	15S	03E	WESTERN	G	13.9	A	LETTUCE HEAD
27S023A	ROYAL PA	050012	6/26/2005	13.9	A	FIRST CHOICE BRE/	11656	50095	AA	0	0.87	QT	10	15S	03E	WESTERN	G	13.9	A	LETTUCE HEAD
27S023A	ROYAL PA	050012	6/26/2005	13.9	A	MANEX	1812	251	AA	0	5.56	GA	10	15S	03E	WESTERN	G	13.9	A	LETTUCE HEAD
27S023A	ROYAL PA	050012	6/26/2005	13.9	A	MSR SPRAY CONCE	10163	220	ZC	0	3.48	GA	10	15S	03E	WESTERN	G	13.9	A	LETTUCE HEAD
27S023A	ROYAL PA	050012	6/26/2005	13.9	A	ROVRAL 4 FLOWAB	264	482	AA	0	3.48	GA	10	15S	03E	WESTERN	G	13.9	A	LETTUCE HEAD
27S023A	ROYAL PA	050012	6/26/2005	13.9	A	TENKOZ ACEPHATE	70506	1	AA	55467	18.49	LB	10	15S	03E	WESTERN	G	13.9	A	LETTUCE HEAD
27S023A	ROYAL PA	050012	7/7/2005	13.9	A	FIRST CHOICE BRE/	11656	50095	AA	0	1.31	QT	10	15S	03E	WESTERN	G	13.9	A	LETTUCE HEAD
27S023A	ROYAL PA	050012	7/7/2005	13.9	A	MANEX	1812	251	AA	0	5.56	GA	10	15S	03E	WESTERN	G	13.9	A	LETTUCE HEAD
27S023A	ROYAL PA	050012	7/7/2005	13.9	A	MSR SPRAY CONCE	10163	220	ZC	0	3.48	GA	10	15S	03E	WESTERN	G	13.9	A	LETTUCE HEAD
27S023A	ROYAL PA	050012	7/7/2005	13.9	A	PROVADO 1.6 FLOW	264	763	AA	0	0.41	GA	10	15S	03E	WESTERN	G	13.9	A	LETTUCE HEAD
27S023A	ROYAL PA	050012	7/7/2005	13.9	A	TENKOZ ACEPHATE	70506	1	AA	55467	18.49	LB	10	15S	03E	WESTERN	G	13.9	A	LETTUCE HEAD
27S023A	ROYAL PA	050013	5/25/2005	7.2	A	DIAZINON AG 500	66222	9	ZA	0	0.9	GA	10	15S	03E	WESTERN	G	7.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050013	5/25/2005	7.2	A	ENDURA FUNGICIDE	7969	197	AA	0	79.2	OZ	10	15S	03E	WESTERN	G	7.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050013	5/25/2005	7.2	A	FIRST CHOICE SPRI	11656	50021	ZB	0	0.11	GA	10	15S	03E	WESTERN	G	7.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050013	5/25/2005	7.2	A	MANEX	1812	251	AA	0	2.88	GA	10	15S	03E	WESTERN	G	7.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050013	5/25/2005	7.2	A	ROVRAL 4 FLOWAB	264	482	AA	0	1.8	GA	10	15S	03E	WESTERN	G	7.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050013	5/25/2005	7.2	A	TENKOZ ACEPHATE	70506	1	AA	55467	9.58	LB	10	15S	03E	WESTERN	G	7.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050013	6/16/2005	7.2	A	DIAZINON AG 500	66222	9	ZA	0	0.9	GA	10	15S	03E	WESTERN	G	7.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050013	6/16/2005	7.2	A	FIRST CHOICE SPRI	11656	50021	ZB	0	0.11	GA	10	15S	03E	WESTERN	G	7.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050013	6/16/2005	7.2	A	MANEX	1812	251	AA	0	2.88	GA	10	15S	03E	WESTERN	G	7.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050013	6/16/2005	7.2	A	MUSTANG INSECTI	279	3126	ZB	0	0.17	GA	10	15S	03E	WESTERN	G	7.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050013	6/16/2005	7.2	A	PROVADO 1.6 FLOW	264	763	AA	0	0.21	GA	10	15S	03E	WESTERN	G	7.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050013	6/16/2005	7.2	A	SUCCESS	62719	292	AA	0	0.9	QT	10	15S	03E	WESTERN	G	7.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050014	5/25/2005	11.4	A	DIAZINON AG 500	66222	9	ZA	0	1.43	GA	10	15S	03E	WESTERN	G	11.4	A	LETTUCE HEAD
27S023A	ROYAL PA	050014	5/25/2005	11.4	A	ENDURA FUNGICIDE	7969	197	AA	0	125.4	OZ	10	15S	03E	WESTERN	G	11.4	A	LETTUCE HEAD
27S023A	ROYAL PA	050014	5/25/2005	11.4	A	FIRST CHOICE SPRI	11656	50021	ZB	0	0.18	GA	10	15S	03E	WESTERN	G	11.4	A	LETTUCE HEAD
27S023A	ROYAL PA	050014	5/25/2005	11.4	A	MANEX	1812	251	AA	0	4.56	GA	10	15S	03E	WESTERN	G	11.4	A	LETTUCE HEAD
27S023A	ROYAL PA	050014	5/25/2005	11.4	A	ROVRAL 4 FLOWAB	264	482	AA	0	2.85	GA	10	15S	03E	WESTERN	G	11.4	A	LETTUCE HEAD
27S023A	ROYAL PA	050014	5/25/2005	11.4	A	TENKOZ ACEPHATE	70506	1	AA	55467	15.16	LB	10	15S	03E	WESTERN	G	11.4	A	LETTUCE HEAD
27S023A	ROYAL PA	050014	6/16/2005	11.4	A	41-A	2839	50021	AA	0	45.6	OZ	10	15S	03E	WESTERN	G	11.4	A	LETTUCE HEAD
27S023A	ROYAL PA	050014	6/16/2005	11.4	A	FIRST CHOICE SPRI	11656	50021	ZB	0	0.18	GA	10	15S	03E	WESTERN	G	11.4	A	LETTUCE HEAD
27S023A	ROYAL PA	050014	6/16/2005	11.4	A	MANEX	1812	251	AA	0	4.56	GA	10	15S	03E	WESTERN	G	11.4	A	LETTUCE HEAD
27S023A	ROYAL PA	050014	6/16/2005	11.4	A	MSR SPRAY CONCE	10163	220	ZC	0	2.85	GA	10	15S	03E	WESTERN	G	11.4	A	LETTUCE HEAD
27S023A	ROYAL PA	050014	6/16/2005	11.4	A	MUSTANG INSECTI	279	3126	ZB	0	0.27	GA	10	15S	03E	WESTERN	G	11.4	A	LETTUCE HEAD
27S023A	ROYAL PA	050014	6/16/2005	11.4	A	SUCCESS	62719	292	AA	0	1.43	QT	10	15S	03E	WESTERN	G	11.4	A	LETTUCE HEAD
27S023A	ROYAL PA	050015	5/14/2005	12.6	A	41-A	2839	50021	AA	0	50.4	OZ	10	15S	03E	WESTERN	G	12.6	A	LETTUCE HEAD
27S023A	ROYAL PA	050015	5/14/2005	12.6	A	DIAZINON AG 500	66222	9	ZA	0	1.58	GA	10	15S	03E	WESTERN	G	12.6	A	LETTUCE HEAD
27S023A	ROYAL PA	050015	5/14/2005	12.6	A	FIRST CHOICE SPRI	11656	50021	ZB	0	0.2	GA	10	15S	03E	WESTERN	G	12.6	A	LETTUCE HEAD
27S023A	ROYAL PA	050015	5/14/2005	12.6	A	MANEX	1812	251	AA	0	5.04	GA	10	15S	03E	WESTERN	G	12.6	A	LETTUCE HEAD
27S023A	ROYAL PA	050015	5/14/2005	12.6	A	POUNCE 25 WP	279	3051	AA	0	4.73	LB	10	15S	03E	WESTERN	G	12.6	A	LETTUCE HEAD
27S023A	ROYAL PA	050015	5/14/2005	12.6	A	ROVRAL 4 FLOWAB	264	482	AA	0	3.15	GA	10	15S	03E	WESTERN	G	12.6	A	LETTUCE HEAD
27S023A	ROYAL PA	050015	5/14/2005	12.6	A	TENKOZ ACEPHATE	70506	1	AA	55467	12.6	LB	10	15S	03E	WESTERN	G	12.6	A	LETTUCE HEAD
27S023A	ROYAL PA	050015	6/4/2005	12.6	A	41-A	2839	50021	AA	0	50.4	OZ	10	15S	03E	WESTERN	G	12.6	A	LETTUCE HEAD
27S023A	ROYAL PA	050015	6/4/2005	12.6	A	DIAZINON AG 500	66222	9	ZA	0	1.58	GA	10	15S	03E	WESTERN	G	12.6	A	LETTUCE HEAD
27S023A	ROYAL PA	050015	6/4/2005	12.6	A	FIRST CHOICE BRE/	11656	50095	AA	0	0.79	QT	10	15S	03E	WESTERN	G	12.6	A	LETTUCE HEAD
27S023A	ROYAL PA	050015	6/4/2005	12.6	A	INTREPID 2F	62719	442	AA	0	0.79	GA	10	15S	03E	WESTERN	G	12.6	A	LETTUCE HEAD
27S023A	ROYAL PA	050015	6/4/2005	12.6	A	MANEX	1812	251	AA	0	5.04	GA	10	15S	03E	WESTERN	G	12.6	A	LETTUCE HEAD
27S023A	ROYAL PA	050015	6/4/2005	12.6	A	MSR SPRAY CONCE	10163	220	ZC	0	3.15	GA	10	15S	03E	WESTERN	G	12.6	A	LETTUCE HEAD
27S023A	ROYAL PA	050015	6/18/2005	12.6	A	FOSPHITE FUNGICI	68573	2	AA	0	6.3	GA	10	15S	03E	GOMES FA	A	12.6	A	LETTUCE HEAD
27S023A	ROYAL PA	050015	6/18/2005	12.6	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.42	GA	10	15S	03E	GOMES FA	A	12.6	A	LETTUCE HEAD

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Appr	Meth	planted	Units	Commodity
27S023A	ROYAL PA	050015	6/18/2005	12.6	A	SUCCESS	62719	292	AA	0	2.36	QT	10	15S	03E	GOMES F/	A	12.6	A	LETTUCE HEAD
27S023A	ROYAL PA	050016	6/28/2005	12.2	A	DIAZINON AG 500	66222	9	ZA	0	1.53	GA	10	15S	03E	WESTERN	G	12.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050016	6/28/2005	12.2	A	FIRST CHOICE BRE/	11656	50095	AA	0	0.76	QT	10	15S	03E	WESTERN	G	12.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050016	6/28/2005	12.2	A	MANEX	1812	251	AA	0	4.88	GA	10	15S	03E	WESTERN	G	12.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050016	6/28/2005	12.2	A	MSR SPRAY CONCE	10163	220	ZC	0	3.05	GA	10	15S	03E	WESTERN	G	12.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050016	6/28/2005	12.2	A	ROVRAL 4 FLOWAB	264	482	AA	0	3.05	GA	10	15S	03E	WESTERN	G	12.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050016	6/28/2005	12.2	A	TENKOZ ACEPHATE	70506	1	AA	55467	16.23	LB	10	15S	03E	WESTERN	G	12.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050016	7/8/2005	12.2	A	ACEPHATE 75SP AG	51036	236	AA	0	16.23	LB	10	15S	03E	WESTERN	G	12.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050016	7/8/2005	12.2	A	DIAZINON AG 500	66222	9	ZA	0	1.53	GA	10	15S	03E	WESTERN	G	12.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050016	7/8/2005	12.2	A	DIMETHOATE 4E	51036	110	AA	0	0.76	GA	10	15S	03E	WESTERN	G	12.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050016	7/8/2005	12.2	A	FIRST CHOICE BRE/	11656	50095	AA	0	1.15	QT	10	15S	03E	WESTERN	G	12.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050016	7/8/2005	12.2	A	MANEX	1812	251	AA	0	4.88	GA	10	15S	03E	WESTERN	G	12.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050016	7/8/2005	12.2	A	MSR SPRAY CONCE	10163	220	ZC	0	3.05	GA	10	15S	03E	WESTERN	G	12.2	A	LETTUCE HEAD
27S023A	ROYAL PA	050017	4/15/2005	13	A	DIAZINON AG 500	66222	9	ZA	0	1.63	GA	10	15S	03E	WESTERN	G	13	A	LETTUCE HEAD
27S023A	ROYAL PA	050017	4/15/2005	13	A	LANCER 75SP	70506	1	AA	0	17.29	LB	10	15S	03E	WESTERN	G	13	A	LETTUCE HEAD
27S023A	ROYAL PA	050017	4/15/2005	13	A	PENTATHLON	1812	251	ZB	0	5.2	GA	10	15S	03E	WESTERN	G	13	A	LETTUCE HEAD
27S023A	ROYAL PA	050017	4/15/2005	13	A	POUNCE 3.2 EC	279	3014	AA	0	0.61	GA	10	15S	03E	WESTERN	G	13	A	LETTUCE HEAD
27S023A	ROYAL PA	050017	4/15/2005	13	A	ROVRAL 4 FLOWAB	264	482	AA	0	3.25	GA	10	15S	03E	WESTERN	G	13	A	LETTUCE HEAD
27S023A	ROYAL PA	050017	4/15/2005	13	A	SOURCE 1 NO FOAI	11656	50009	ZA	0	1.22	GA	10	15S	03E	WESTERN	G	13	A	LETTUCE HEAD
27S023A	ROYAL PA	050017	5/6/2005	13	A	DIAZINON AG 500	66222	9	ZA	0	1.63	GA	10	15S	03E	WESTERN	G	13	A	LETTUCE HEAD
27S023A	ROYAL PA	050017	5/6/2005	13	A	FIRST CHOICE SPRI	11656	50021	ZB	0	0.2	GA	10	15S	03E	WESTERN	G	13	A	LETTUCE HEAD
27S023A	ROYAL PA	050017	5/6/2005	13	A	MANEX	1812	251	AA	0	5.2	GA	10	15S	03E	WESTERN	G	13	A	LETTUCE HEAD
27S023A	ROYAL PA	050017	5/6/2005	13	A	MUSTANG INSECTIC	279	3126	ZB	0	0.44	GA	10	15S	03E	WESTERN	G	13	A	LETTUCE HEAD
27S023A	ROYAL PA	050017	5/6/2005	13	A	PROVADO 1.6 FLOW	264	763	AA	0	0.38	GA	10	15S	03E	WESTERN	G	13	A	LETTUCE HEAD
27S023A	ROYAL PA	05002A	8/9/2005	9.9	A	ADMIRE 2 FLOWABL	3125	422	AA	0	216	OZ	10	15S	03E		G	242.9	A	LETTUCE HEAD
27S023A	ROYAL PA	05002B	8/15/2005	9.9	A	ADMIRE 2 FLOWABL	3125	422	AA	0	216	OZ	10	15S	03E		G	242.9	A	LETTUCE HEAD
27S023A	ROYAL PA	05002S	9/3/2005	10	A	FIRST CHOICE SPRI	11656	50021	ZA	0	0.63	QT	10	15S	03E	GOMES F/	A	10	A	LETTUCE HEAD
27S023A	ROYAL PA	05002S	9/3/2005	10	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.34	GA	10	15S	03E	GOMES F/	A	10	A	LETTUCE HEAD
27S023A	ROYAL PA	05002S	9/3/2005	10	A	NEEMIX BOTANICAL	70051	5	AA	0	0.55	GA	10	15S	03E	GOMES F/	A	10	A	LETTUCE HEAD
27S023A	ROYAL PA	05002S	9/3/2005	10	A	PYRELLIN E.C.	30573	2	AA	0	2.5	GA	10	15S	03E	GOMES F/	A	10	A	LETTUCE HEAD
27S023A	ROYAL PA	050	2/11/2005	14	A	BOTRAN 5F	10163	226	AA	0	14	PT	10	15S	03E		G	14	A	LETTUCE HEAD
27S023A	ROYAL PA	050	2/11/2005	14	A	GOWAN DIAZINON 5	10163	116	AA	0	14	LB	10	15S	03E		G	14	A	LETTUCE HEAD
27S023A	ROYAL PA	050	2/11/2005	14	A	KERB 50-W IN WATE	62719	397	AA	0	14	LB	10	15S	03E		G	14	A	LETTUCE HEAD
27S023A	ROYAL PA	050	2/23/2005	17.5	A	BOTRAN 5F	10163	226	AA	0	17.5	PT	10	15S	03E		G	17.5	A	LETTUCE HEAD
27S023A	ROYAL PA	050	2/23/2005	17.5	A	GOWAN DIAZINON 5	10163	116	AA	0	17.5	LB	10	15S	03E		G	17.5	A	LETTUCE HEAD
27S023A	ROYAL PA	050	2/23/2005	17.5	A	KERB 50-W IN WATE	62719	397	AA	0	17.5	LB	10	15S	03E		G	17.5	A	LETTUCE HEAD
27S023A	ROYAL PA	050	3/10/2005	13	A	BOTRAN 5F	10163	226	AA	0	13	PT	10	15S	03E		G	13	A	LETTUCE HEAD
27S023A	ROYAL PA	050	3/10/2005	13	A	GOWAN DIAZINON 5	10163	116	AA	0	130	LB	10	15S	03E		G	13	A	LETTUCE HEAD
27S023A	ROYAL PA	050	3/10/2005	13	A	KERB 50-W	62719	397	ZC	0	13	LB	10	15S	03E		G	13	A	LETTUCE HEAD
27S023A	ROYAL PA	05	9/10/2005	13	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	4.06	QT	10	15S	03E	GOMES F/	A	13	A	CELERY
27S023A	ROYAL PA	05	9/10/2005	13	A	ASSAIL BRAND 70W	264	609	AA	0	0.98	LB	10	15S	03E	GOMES F/	A	13	A	CELERY
27S023A	ROYAL PA	05	9/10/2005	13	A	FIRST CHOICE SPRI	11656	50021	ZA	0	0.81	QT	10	15S	03E	GOMES F/	A	13	A	CELERY
27S023A	ROYAL PA	05	9/10/2005	13	A	FLINT FUNGICIDE	264	777	AA	0	2.44	LB	10	15S	03E	GOMES F/	A	13	A	CELERY
27S023A	ROYAL PA	05	9/10/2005	13	A	INTREPID 2F	62719	442	AA	0	0.81	GA	10	15S	03E	GOMES F/	A	13	A	CELERY
27S023A	ROYAL PA	05	9/10/2005	13	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.44	GA	10	15S	03E	GOMES F/	A	13	A	CELERY
27S023A	ROYAL PA	05	9/11/2005	9.2	A	AQUA MALATHION 8	279	1473	AA	0	1.73	GA	10	15S	03E	GOMES F/	A	9.2	A	CELERY
27S023A	ROYAL PA	05	9/11/2005	9.2	A	ASSAIL BRAND 70W	264	609	AA	0	0.69	LB	10	15S	03E	GOMES F/	A	9.2	A	CELERY
27S023A	ROYAL PA	05	9/11/2005	9.2	A	FIRST CHOICE SPRI	11656	50021	ZA	0	0.58	QT	10	15S	03E	GOMES F/	A	9.2	A	CELERY
27S023A	ROYAL PA	05	9/11/2005	9.2	A	FLINT FUNGICIDE	264	777	AA	0	1.73	LB	10	15S	03E	GOMES F/	A	9.2	A	CELERY
27S023A	ROYAL PA	05	9/11/2005	9.2	A	INTREPID 2F	62719	442	AA	0	0.58	GA	10	15S	03E	GOMES F/	A	9.2	A	CELERY
27S023A	ROYAL PA	05	9/11/2005	9.2	A	SUCCESS	62719	292	AA	0	1.73	QT	10	15S	03E	GOMES F/	A	9.2	A	CELERY
27S023A	ROYAL PA	05	9/11/2005	9.2	A	TRIGARD	100	654	AA	0	1.54	LB	10	15S	03E	GOMES F/	A	9.2	A	CELERY
27S023A	ROYAL PA	05	9/17/2005	13	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	4.06	QT	10	15S	03E	GOMES F/	A	13	A	CELERY

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Appr	Meth	planted	Units	Commodity
27S023A	ROYAL PA	05	9/17/2005	13	A	DIMETHOATE 4E	51036	110	AA	0	6.5	QT	10	15S	03E	GOMES F/	A	13	A	CELERY
27S023A	ROYAL PA	05	9/17/2005	13	A	FIRST CHOICE SPRI	11656	50021	ZA	0	0.81	QT	10	15S	03E	GOMES F/	A	13	A	CELERY
27S023A	ROYAL PA	05	9/17/2005	13	A	FLINT FUNGICIDE	264	777	AA	0	2.44	LB	10	15S	03E	GOMES F/	A	13	A	CELERY
27S023A	ROYAL PA	05	9/17/2005	13	A	INTREPID 2F	62719	442	AA	0	0.81	GA	10	15S	03E	GOMES F/	A	13	A	CELERY
27S023A	ROYAL PA	05	9/17/2005	13	A	SUCCESS	62719	292	AA	0	2.03	QT	10	15S	03E	GOMES F/	A	13	A	CELERY
27S023A	ROYAL PA	050006	7/21/2005	4.6	A	VEGETABLE PRO HI	66222	15	ZA	0	1.44	GA	10	15S	03E	WESTERN	G	4.6	A	CELERY
27S023A	ROYAL PA	050006	8/4/2005	9.2	A	ACEPHATE 75SP AG	51036	236	AA	0	12.24	LB	10	15S	03E	WESTERN	G	9.2	A	CELERY
27S023A	ROYAL PA	050006	8/4/2005	9.2	A	FIRST CHOICE HER	11656	50024	ZC	0	2.3	GA	10	15S	03E	WESTERN	G	9.2	A	CELERY
27S023A	ROYAL PA	050006	8/4/2005	9.2	A	VEGETABLE PRO HI	66222	15	ZA	0	4.03	GA	10	15S	03E	WESTERN	G	9.2	A	CELERY
27S023A	ROYAL PA	050006	8/10/2005	9.2	A	ACEPHATE 75SP AG	51036	236	AA	0	12.24	LB	10	15S	03E	WESTERN	G	9.2	A	CELERY
27S023A	ROYAL PA	050006	8/10/2005	9.2	A	ASSAIL 70WP INSEC	8033	23	AA	4581	11.04	OZ	10	15S	03E	WESTERN	G	9.2	A	CELERY
27S023A	ROYAL PA	050006	8/10/2005	9.2	A	DU PONT VYDATE L	352	372	AA	0	3.45	GA	10	15S	03E	WESTERN	G	9.2	A	CELERY
27S023A	ROYAL PA	050006	8/10/2005	9.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.04	GA	10	15S	03E	WESTERN	G	9.2	A	CELERY
27S023A	ROYAL PA	050006	8/10/2005	9.2	A	INTREPID 2F	62719	442	AA	0	0.57	GA	10	15S	03E	WESTERN	G	9.2	A	CELERY
27S023A	ROYAL PA	050006	8/16/2005	9.2	A	ACEPHATE 75SP AG	51036	236	AA	0	12.24	LB	10	15S	03E	WESTERN	G	9.2	A	CELERY
27S023A	ROYAL PA	050006	8/16/2005	9.2	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	92	OZ	10	15S	03E	WESTERN	G	9.2	A	CELERY
27S023A	ROYAL PA	050006	8/16/2005	9.2	A	ASSAIL 70WP INSEC	8033	23	AA	4581	11.04	OZ	10	15S	03E	WESTERN	G	9.2	A	CELERY
27S023A	ROYAL PA	050006	8/16/2005	9.2	A	DU PONT VYDATE L	352	372	AA	0	3.45	GA	10	15S	03E	WESTERN	G	9.2	A	CELERY
27S023A	ROYAL PA	050006	8/16/2005	9.2	A	FIRST CHOICE SPRI	11656	50021	ZB	0	0.14	GA	10	15S	03E	WESTERN	G	9.2	A	CELERY
27S023A	ROYAL PA	050006	8/16/2005	9.2	A	INTREPID 2F	62719	442	AA	0	0.57	GA	10	15S	03E	WESTERN	G	9.2	A	CELERY
27S023A	ROYAL PA	050006	8/22/2005	9.2	A	ACEPHATE 75SP AG	51036	236	AA	0	12.24	LB	10	15S	03E	WESTERN	G	9.2	A	CELERY
27S023A	ROYAL PA	050006	8/22/2005	9.2	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	73.6	OZ	10	15S	03E	WESTERN	G	9.2	A	CELERY
27S023A	ROYAL PA	050006	8/22/2005	9.2	A	ASSAIL 70WP INSEC	8033	23	AA	4581	11.04	OZ	10	15S	03E	WESTERN	G	9.2	A	CELERY
27S023A	ROYAL PA	050006	8/22/2005	9.2	A	DU PONT VYDATE L	352	372	AA	0	3.45	GA	10	15S	03E	WESTERN	G	9.2	A	CELERY
27S023A	ROYAL PA	050006	8/22/2005	9.2	A	FIRST CHOICE SPRI	11656	50021	ZB	0	0.14	GA	10	15S	03E	WESTERN	G	9.2	A	CELERY
27S023A	ROYAL PA	050006	8/22/2005	9.2	A	INTREPID 2F	62719	442	AA	0	0.57	GA	10	15S	03E	WESTERN	G	9.2	A	CELERY
27S023A	ROYAL PA	050006	9/3/2005	9.2	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	92	OZ	10	15S	03E	WESTERN	G	9.2	A	CELERY
27S023A	ROYAL PA	050006	9/3/2005	9.2	A	BOTRAN 5F	10163	226	AA	0	6.9	GA	10	15S	03E	WESTERN	G	9.2	A	CELERY
27S023A	ROYAL PA	050006	9/3/2005	9.2	A	DIMETHOATE 4E	51036	110	AA	0	1.15	GA	10	15S	03E	WESTERN	G	9.2	A	CELERY
27S023A	ROYAL PA	050006	9/3/2005	9.2	A	DU PONT VYDATE L	352	372	AA	0	3.45	GA	10	15S	03E	WESTERN	G	9.2	A	CELERY
27S023A	ROYAL PA	050006	9/3/2005	9.2	A	FIRST CHOICE SPRI	11656	50021	ZB	0	0.14	GA	10	15S	03E	WESTERN	G	9.2	A	CELERY
27S023A	ROYAL PA	050006	9/3/2005	9.2	A	SUCCESS	62719	292	AA	0	2.02	QT	10	15S	03E	WESTERN	G	9.2	A	CELERY
27S023A	ROYAL PA	050006	9/7/2005	9.2	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	92	OZ	10	15S	03E	WESTERN	G	9.2	A	CELERY
27S023A	ROYAL PA	050006	9/7/2005	9.2	A	CLEAN CROP MALA	34704	474	AA	0	1.73	GA	10	15S	03E	WESTERN	G	9.2	A	CELERY
27S023A	ROYAL PA	050006	9/7/2005	9.2	A	FIRST CHOICE SPRI	11656	50021	ZB	0	0.14	GA	10	15S	03E	WESTERN	G	9.2	A	CELERY
27S023A	ROYAL PA	050006	9/7/2005	9.2	A	FLINT FUNGICIDE	264	777	AA	0	27.6	OZ	10	15S	03E	WESTERN	G	9.2	A	CELERY
27S023A	ROYAL PA	050006	9/7/2005	9.2	A	MUSTANG INSECTIC	279	3126	ZB	0	0.29	GA	10	15S	03E	WESTERN	G	9.2	A	CELERY
27S023A	ROYAL PA	050006	9/7/2005	9.2	A	SUCCESS	62719	292	AA	0	1.73	QT	10	15S	03E	WESTERN	G	9.2	A	CELERY
27S023A	ROYAL PA	050008	6/11/2005	14	A	41-A	2839	50021	AA	0	56	OZ	10	15S	03E	WESTERN	G	14	A	CELERY
27S023A	ROYAL PA	050008	6/11/2005	14	A	VEGETABLE PRO HI	66222	15	ZA	0	5.25	GA	10	15S	03E	WESTERN	G	14	A	CELERY
27S023A	ROYAL PA	050008	7/4/2005	14	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	140	OZ	10	15S	03E	WESTERN	G	14	A	CELERY
27S023A	ROYAL PA	050008	7/4/2005	14	A	DU PONT VYDATE L	352	372	AA	0	5.25	GA	10	15S	03E	WESTERN	G	14	A	CELERY
27S023A	ROYAL PA	050008	7/4/2005	14	A	FIRST CHOICE BRE/	11656	50095	AA	0	0.88	QT	10	15S	03E	WESTERN	G	14	A	CELERY
27S023A	ROYAL PA	050008	7/4/2005	14	A	TENKOZ ACEPHATE	70506	1	AA	55467	14	LB	10	15S	03E	WESTERN	G	14	A	CELERY
27S023A	ROYAL PA	050008	7/15/2005	14	A	ACEPHATE 75SP AG	51036	236	AA	0	18.62	LB	10	15S	03E	WESTERN	G	14	A	CELERY
27S023A	ROYAL PA	050008	7/15/2005	14	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	140	OZ	10	15S	03E	WESTERN	G	14	A	CELERY
27S023A	ROYAL PA	050008	7/15/2005	14	A	DU PONT VYDATE L	352	372	AA	0	5.25	GA	10	15S	03E	WESTERN	G	14	A	CELERY
27S023A	ROYAL PA	050008	7/15/2005	14	A	FIRST CHOICE BRE/	11656	50095	AA	0	0.88	QT	10	15S	03E	WESTERN	G	14	A	CELERY
27S023A	ROYAL PA	050008	7/28/2005	14	A	ASSAIL BRAND 70W	264	609	AA	0	16.8	OZ	10	15S	03E	WESTERN	G	14	A	CELERY
27S023A	ROYAL PA	050008	7/28/2005	14	A	DIMETHOATE 4E	51036	110	AA	0	1.75	GA	10	15S	03E	WESTERN	G	14	A	CELERY
27S023A	ROYAL PA	050008	7/28/2005	14	A	FIRST CHOICE SPRI	11656	50021	ZB	0	0.22	GA	10	15S	03E	WESTERN	G	14	A	CELERY
27S023A	ROYAL PA	050008	7/28/2005	14	A	INTREPID 2F	62719	442	AA	0	0.87	GA	10	15S	03E	WESTERN	G	14	A	CELERY
27S023A	ROYAL PA	050008	7/28/2005	14	A	TRIGARD	100	654	AA	0	2.33	LB	10	15S	03E	WESTERN	G	14	A	CELERY

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Appr	Meth	planted	Units	Commodity
27S023A	ROYAL PA	050008	8/4/2005	14	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	140	OZ	10	15S	03E	WESTERN	G	14	A	CELERY
27S023A	ROYAL PA	050008	8/4/2005	14	A	ASSAIL 70WP INSEC	8033	23	AA	4581	16.8	OZ	10	15S	03E	WESTERN	G	14	A	CELERY
27S023A	ROYAL PA	050008	8/4/2005	14	A	BOTRAN 5F	10163	226	AA	0	10.5	GA	10	15S	03E	WESTERN	G	14	A	CELERY
27S023A	ROYAL PA	050008	8/4/2005	14	A	CLEAN CROP MALA	34704	474	AA	0	2.63	GA	10	15S	03E	WESTERN	G	14	A	CELERY
27S023A	ROYAL PA	050008	8/4/2005	14	A	DU PONT VYDATE L	352	372	AA	0	5.25	GA	10	15S	03E	WESTERN	G	14	A	CELERY
27S023A	ROYAL PA	050008	8/4/2005	14	A	FIRST CHOICE SPRI	11656	50021	ZB	0	0.22	GA	10	15S	03E	WESTERN	G	14	A	CELERY
27S023A	ROYAL PA	050008	8/4/2005	14	A	INTREPID 2F	62719	442	AA	0	0.87	GA	10	15S	03E	WESTERN	G	14	A	CELERY
27S023A	ROYAL PA	050008	8/14/2005	14	A	AQUA MALATHION 8	279	1473	AA	0	2.63	GA	10	15S	03E	GOMES FA	A	14	A	CELERY
27S023A	ROYAL PA	050008	8/14/2005	14	A	FIRST CHOICE SPRI	11656	50021	ZA	0	0.88	QT	10	15S	03E	GOMES FA	A	14	A	CELERY
27S023A	ROYAL PA	050008	8/14/2005	14	A	SUCCESS	62719	292	AA	0	3.06	QT	10	15S	03E	GOMES FA	A	14	A	CELERY
27S023A	ROYAL PA	050008	8/14/2005	14	A	TRIGARD	100	654	AA	0	2.34	LB	10	15S	03E	GOMES FA	A	14	A	CELERY
27S023A	ROYAL PA	050008	8/27/2005	14	A	AGRI-MEK 0.15 EC M	100	898	AA	0	4.38	QT	10	15S	03E	GOMES FA	A	14	A	CELERY
27S023A	ROYAL PA	050008	8/27/2005	14	A	ASSAIL BRAND 70W	264	609	AA	0	1.05	LB	10	15S	03E	GOMES FA	A	14	A	CELERY
27S023A	ROYAL PA	050008	8/27/2005	14	A	FIRST CHOICE SPRI	11656	50021	ZA	0	0.88	QT	10	15S	03E	GOMES FA	A	14	A	CELERY
27S023A	ROYAL PA	050008	8/27/2005	14	A	INTREPID 2F	62719	442	AA	0	0.88	GA	10	15S	03E	GOMES FA	A	14	A	CELERY
27S023A	ROYAL PA	050008	8/27/2005	14	A	SUCCESS	62719	292	AA	0	3.06	QT	10	15S	03E	GOMES FA	A	14	A	CELERY
27S023A	ROYAL PA	050008	9/3/2005	14	A	ASSAIL BRAND 70W	264	609	AA	0	1.05	LB	10	15S	03E	GOMES FA	A	14	A	CELERY
27S023A	ROYAL PA	050008	9/3/2005	14	A	FIRST CHOICE SPRI	11656	50021	ZA	0	0.88	QT	10	15S	03E	GOMES FA	A	14	A	CELERY
27S023A	ROYAL PA	050008	9/3/2005	14	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.44	GA	10	15S	03E	GOMES FA	A	14	A	CELERY
27S023A	ROYAL PA	050008	9/3/2005	14	A	SUCCESS	62719	292	AA	0	3.5	QT	10	15S	03E	GOMES FA	A	14	A	CELERY
27S023A	ROYAL PA	050008	9/3/2005	14	A	TRIGARD	100	654	AA	0	2.34	LB	10	15S	03E	GOMES FA	A	14	A	CELERY
27S023A	ROYAL PA	050008	9/10/2005	14	A	FIRST CHOICE SPRI	11656	50021	ZA	0	0.88	QT	10	15S	03E	GOMES FA	A	14	A	CELERY
27S023A	ROYAL PA	050008	9/10/2005	14	A	PERM-UP 3.2 EC INS	70506	9	AA	0	0.44	GA	10	15S	03E	GOMES FA	A	14	A	CELERY
27S023A	ROYAL PA	050008	9/10/2005	14	A	SUCCESS	62719	292	AA	0	3.06	QT	10	15S	03E	GOMES FA	A	14	A	CELERY
27S023A	ROYAL PA	050017	7/7/2005	13	A	41-A	2839	50021	AA	0	52	OZ	10	15S	03E	WESTERN	G	13	A	CELERY
27S023A	ROYAL PA	050017	7/7/2005	13	A	VEGETABLE PRO HI	66222	15	ZA	0	4.88	GA	10	15S	03E	WESTERN	G	13	A	CELERY
27S023A	ROYAL PA	050017	7/29/2005	13	A	ACEPHATE 75SP AG	51036	236	AA	0	13	LB	10	15S	03E	WESTERN	G	13	A	CELERY
27S023A	ROYAL PA	050017	7/29/2005	13	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	104	OZ	10	15S	03E	WESTERN	G	13	A	CELERY
27S023A	ROYAL PA	050017	7/29/2005	13	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	130	OZ	10	15S	03E	WESTERN	G	13	A	CELERY
27S023A	ROYAL PA	050017	7/29/2005	13	A	DU PONT VYDATE L	352	372	AA	0	4.88	GA	10	15S	03E	WESTERN	G	13	A	CELERY
27S023A	ROYAL PA	050017	7/29/2005	13	A	FIRST CHOICE SPRI	11656	50021	ZB	0	0.2	GA	10	15S	03E	WESTERN	G	13	A	CELERY
27S023A	ROYAL PA	050017	7/29/2005	13	A	INTREPID 2F	62719	442	AA	0	0.81	GA	10	15S	03E	WESTERN	G	13	A	CELERY
27S023A	ROYAL PA	050017	8/9/2005	13	A	ACEPHATE 75SP AG	51036	236	AA	0	17.29	LB	10	15S	03E	WESTERN	G	13	A	CELERY
27S023A	ROYAL PA	050017	8/9/2005	13	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	104	OZ	10	15S	03E	WESTERN	G	13	A	CELERY
27S023A	ROYAL PA	050017	8/9/2005	13	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	130	OZ	10	15S	03E	WESTERN	G	13	A	CELERY
27S023A	ROYAL PA	050017	8/9/2005	13	A	DIMETHOATE 4E	51036	110	AA	0	1.63	GA	10	15S	03E	WESTERN	G	13	A	CELERY
27S023A	ROYAL PA	050017	8/9/2005	13	A	DU PONT VYDATE L	352	372	AA	0	4.88	GA	10	15S	03E	WESTERN	G	13	A	CELERY
27S023A	ROYAL PA	050017	8/9/2005	13	A	FIRST CHOICE SPRI	11656	50021	ZB	0	0.2	GA	10	15S	03E	WESTERN	G	13	A	CELERY
27S023A	ROYAL PA	050017	8/9/2005	13	A	INTREPID 2F	62719	442	AA	0	0.81	GA	10	15S	03E	WESTERN	G	13	A	CELERY
27S023A	ROYAL PA	050017	8/20/2005	13	A	ACEPHATE 75SP AG	51036	236	AA	0	17.29	LB	10	15S	03E	WESTERN	G	13	A	CELERY
27S023A	ROYAL PA	050017	8/20/2005	13	A	ASSAIL 70WP INSEC	8033	23	AA	4581	15.6	OZ	10	15S	03E	WESTERN	G	13	A	CELERY
27S023A	ROYAL PA	050017	8/20/2005	13	A	BOTRAN 5F	10163	226	AA	0	9.75	GA	10	15S	03E	WESTERN	G	13	A	CELERY
27S023A	ROYAL PA	050017	8/20/2005	13	A	DU PONT VYDATE L	352	372	AA	0	4.88	GA	10	15S	03E	WESTERN	G	13	A	CELERY
27S023A	ROYAL PA	050017	8/20/2005	13	A	FIRST CHOICE SPRI	11656	50021	ZB	0	0.2	GA	10	15S	03E	WESTERN	G	13	A	CELERY
27S023A	ROYAL PA	050017	8/20/2005	13	A	INTREPID 2F	62719	442	AA	0	0.81	GA	10	15S	03E	WESTERN	G	13	A	CELERY
27S023A	ROYAL PA	050017	9/3/2005	13	A	AQUA MALATHION 8	279	1473	AA	0	2.44	GA	10	15S	03E	GOMES FA	A	13	A	CELERY
27S023A	ROYAL PA	050017	9/3/2005	13	A	DIMETHOATE 4E	51036	110	AA	0	6.5	QT	10	15S	03E	GOMES FA	A	13	A	CELERY
27S023A	ROYAL PA	050017	9/3/2005	13	A	DU PONT VYDATE L	352	372	AA	0	4.88	GA	10	15S	03E	GOMES FA	A	13	A	CELERY
27S023A	ROYAL PA	050017	9/3/2005	13	A	FIRST CHOICE SPRI	11656	50021	ZA	0	0.81	QT	10	15S	03E	GOMES FA	A	13	A	CELERY
27S023A	ROYAL PA	050017	9/3/2005	13	A	SUCCESS	62719	292	AA	0	2.84	QT	10	15S	03E	GOMES FA	A	13	A	CELERY
27S023A	ROYAL PA	050017	9/3/2005	13	A	TRIGARD	100	654	AA	0	2.17	LB	10	15S	03E	GOMES FA	A	13	A	CELERY
27S023A	ROYAL PA	050017	10/2/2005	13	A	ASSAIL BRAND 70W	264	609	AA	0	0.98	LB	10	15S	03E	GOMES FA	A	13	A	CELERY
27S023A	ROYAL PA	050017	10/2/2005	13	A	DIMETHOATE 4E	51036	110	AA	0	6.5	QT	10	15S	03E	GOMES FA	A	13	A	CELERY

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Appr	Meth	planted	Units	Commodity
27S023A	ROYAL PA	050017	10/2/2005	13	A	FIRST CHOICE SPRI	11656	50021	ZA	0	0.81	QT	10	15S	03E	GOMES FA	A	13	A	CELERY
27S023A	ROYAL PA	050017	10/2/2005	13	A	SUCCESS	62719	292	AA	0	2.03	QT	10	15S	03E	GOMES FA	A	13	A	CELERY
27S023A	ROYAL PA	050017	10/2/2005	13	A	TRIGARD	100	654	AA	0	2.17	LB	10	15S	03E	GOMES FA	A	13	A	CELERY
27S023A	ROYAL PA	05006N	9/18/2005	9.2	A	AGRI-MEK 0.15 EC M	100	898	AA	0	2.88	QT	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006N	9/18/2005	9.2	A	ASSAIL BRAND 70W	264	609	AA	0	0.69	LB	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006N	9/18/2005	9.2	A	DIMETHOATE 4E	51036	110	AA	0	4.6	QT	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006N	9/18/2005	9.2	A	FIRST CHOICE SPRI	11656	50021	ZA	0	0.58	QT	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006N	9/18/2005	9.2	A	INTREPID 2F	62719	442	AA	0	0.58	GA	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006N	9/18/2005	9.2	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.29	GA	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006N	9/18/2005	9.2	A	TILT	100	617	ZB	0	0.29	GA	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006N	10/2/2005	9.2	A	AQUA MALATHION 8	279	1473	AA	0	1.73	GA	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006N	10/2/2005	9.2	A	FIRST CHOICE SPRI	11656	50021	ZA	0	0.58	QT	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006N	10/2/2005	9.2	A	INTREPID 2F	62719	442	AA	0	0.58	GA	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006N	10/2/2005	9.2	A	SUCCESS	62719	292	AA	0	1.44	QT	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006N	10/2/2005	9.2	A	TRIGARD	100	654	AA	0	1.54	LB	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006N	10/22/2005	9.2	A	AGRI-MEK 0.15 EC M	100	898	AA	0	2.88	QT	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006N	10/22/2005	9.2	A	ASSAIL BRAND 70W	264	609	AA	0	0.69	LB	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006N	10/22/2005	9.2	A	DIMETHOATE 4E	51036	110	AA	0	4.6	QT	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006N	10/22/2005	9.2	A	FIRST CHOICE SPRI	11656	50021	ZA	0	0.58	QT	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006N	10/22/2005	9.2	A	INTREPID 2F	62719	442	AA	0	0.58	GA	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006S	9/3/2005	9.2	A	AQUA MALATHION 8	279	1473	AA	0	1.73	GA	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006S	9/3/2005	9.2	A	ASSAIL BRAND 70W	264	609	AA	0	0.69	LB	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006S	9/3/2005	9.2	A	DIMETHOATE 4E	51036	110	AA	0	4.6	QT	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006S	9/3/2005	9.2	A	FIRST CHOICE SPRI	11656	50021	ZA	0	0.58	QT	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006S	9/3/2005	9.2	A	SUCCESS	62719	292	AA	0	2.01	QT	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006S	9/3/2005	9.2	A	TRIGARD	100	654	AA	0	1.54	LB	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006S	9/18/2005	9.2	A	AGRI-MEK 0.15 EC M	100	898	AA	0	2.88	QT	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006S	9/18/2005	9.2	A	ASSAIL BRAND 70W	264	609	AA	0	0.69	LB	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006S	9/18/2005	9.2	A	DIMETHOATE 4E	51036	110	AA	0	4.6	QT	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006S	9/18/2005	9.2	A	FIRST CHOICE SPRI	11656	50021	ZA	0	0.58	QT	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006S	9/18/2005	9.2	A	INTREPID 2F	62719	442	AA	0	0.58	GA	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006S	9/18/2005	9.2	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.29	GA	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006S	9/18/2005	9.2	A	TILT	100	617	ZB	0	0.29	GA	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006S	10/2/2005	9.2	A	AQUA MALATHION 8	279	1473	AA	0	1.73	GA	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006S	10/2/2005	9.2	A	FIRST CHOICE SPRI	11656	50021	ZA	0	0.58	QT	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006S	10/2/2005	9.2	A	INTREPID 2F	62719	442	AA	0	0.58	GA	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006S	10/2/2005	9.2	A	SUCCESS	62719	292	AA	0	1.44	QT	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006S	10/2/2005	9.2	A	TRIGARD	100	654	AA	0	1.54	LB	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006S	10/19/2005	9.2	A	DIMETHOATE 4E	51036	110	AA	0	4.6	QT	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006S	10/19/2005	9.2	A	FIRST CHOICE SPRI	11656	50021	ZA	0	0.58	QT	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006S	10/19/2005	9.2	A	INTREPID 2F	62719	442	AA	0	0.58	GA	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006S	10/19/2005	9.2	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.29	GA	10	15S	03E	GOMES FA	A	9.2	A	CELERY
27S023A	ROYAL PA	05006S	10/19/2005	9.2	A	TRIGARD	100	654	AA	0	1.54	LB	10	15S	03E	GOMES FA	A	9.2	A	CELERY

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050000	3/31/2006	12.5	A	FIRST CHOICE EXCI	11656	50097	AA	0	3.13	GA	10	15S	03E	G	WESTERN	12.5	A	UNCULTIVATED AG
27S192A	BOSS FAR	050000	3/31/2006	12.5	A	GRAMOXONE INTEC	100	1217	AA	0	4.22	GA	10	15S	03E	G	WESTERN	12.5	A	UNCULTIVATED AG
27S192A	BOSS FAR	050000	3/31/2006	12.5	A	ROUNDUP ORIGINA	524	539	AA	0	4.69	GA	10	15S	03E	G	WESTERN	12.5	A	UNCULTIVATED AG
27S192A	BOSS FAR	050000	4/29/2006	3	A	FIRST CHOICE EXCI	11656	50097	AA	0	0.75	GA	10	15S	03E	G	WESTERN	3	A	UNCULTIVATED AG
27S192A	BOSS FAR	050000	4/29/2006	3	A	GRAMOXONE MAX	100	1074	AA	0	1.01	GA	10	15S	03E	G	WESTERN	3	A	UNCULTIVATED AG
27S192A	BOSS FAR	050000	4/29/2006	3	A	ROUNDUP ORIGINA	524	539	AA	0	1.13	GA	10	15S	03E	G	WESTERN	3	A	UNCULTIVATED AG
27S192A	BOSS FAR	050000	12/26/2006	5	A	FIRST CHOICE EXCI	11656	50097	AA	0	1.25	GA	10	15S	03E	G	WESTERN	5	A	UNCULTIVATED AG
27S192A	BOSS FAR	050000	12/26/2006	5	A	GRAMOXONE MAX	100	1074	AA	0	1.69	GA	10	15S	03E	G	WESTERN	5	A	UNCULTIVATED AG
27S192A	BOSS FAR	050000	12/26/2006	5	A	ROUNDUP ORIGINA	524	539	AA	0	1.88	GA	10	15S	03E	G	WESTERN	5	A	UNCULTIVATED AG
27S192A	BOSS FAR	050001	5/4/2006	17.6	A	ACEPHATE 75SP AG	51036	236	AA	0	23.41	LB	10	15S	03E	G	WESTERN	17.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/4/2006	17.6	A	DIAZINON 50W	66222	10	ZA	0	17.6	LB	10	15S	03E	G	WESTERN	17.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/4/2006	17.6	A	DUPONT MANEX FU	352	655	AA	0	7.04	GA	10	15S	03E	G	WESTERN	17.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/4/2006	17.6	A	ENDURA FUNGICIDE	7969	197	AA	0	176	OZ	10	15S	03E	G	WESTERN	17.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/4/2006	17.6	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.65	GA	10	15S	03E	G	WESTERN	17.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/18/2006	17.1	A	ACEPHATE 75SP AG	51036	236	AA	0	22.74	LB	10	15S	03E	G	WESTERN	17.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/18/2006	17.1	A	ACROBAT 50 WP FU	241	410	AA	0	6.84	LB	10	15S	03E	G	WESTERN	17.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/18/2006	17.1	A	DIAZINON 50W	66222	10	ZA	0	17.1	LB	10	15S	03E	G	WESTERN	17.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/18/2006	17.1	A	DUPONT MANEX FU	352	655	AA	0	6.84	GA	10	15S	03E	G	WESTERN	17.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/18/2006	17.1	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.6	GA	10	15S	03E	G	WESTERN	17.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/30/2006	17.6	A	ACROBAT 50 WP FU	241	410	AA	0	7.04	LB	10	15S	03E	G	WESTERN	17.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/30/2006	17.6	A	DU PONT ASANA XL	352	515	AA	0	1.32	GA	10	15S	03E	G	WESTERN	17.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/30/2006	17.6	A	FIRST CHOICE BRE/	11656	50095	AA	0	1.1	QT	10	15S	03E	G	WESTERN	17.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/30/2006	17.6	A	RIDOMIL GOLD EC	100	801	ZA	0	0.55	GA	10	15S	03E	G	WESTERN	17.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	7/27/2006	17.1	A	DIAZINON 50W	66222	10	ZA	0	17.1	LB	10	15S	03E	G	WESTERN	17.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050001	7/27/2006	17.1	A	DUPONT MANEX FU	352	655	AA	0	6.84	GA	10	15S	03E	G	WESTERN	17.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050001	7/27/2006	17.1	A	ENDURA FUNGICIDE	7969	197	AA	0	136.8	OZ	10	15S	03E	G	WESTERN	17.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050001	7/27/2006	17.1	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.6	GA	10	15S	03E	G	WESTERN	17.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050001	7/27/2006	17.1	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.57	GA	10	15S	03E	G	WESTERN	17.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050001	8/9/2006	17.1	A	BLOCKADE 50WG P	100	922	ZB	0	17.1	OZ	10	15S	03E	G	WESTERN	17.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050001	8/9/2006	17.1	A	DIAZINON 50W	66222	10	ZA	0	17.1	LB	10	15S	03E	G	WESTERN	17.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050001	8/9/2006	17.1	A	DU PONT LANNATE	352	342	ZB	0	17.1	LB	10	15S	03E	G	WESTERN	17.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050001	8/9/2006	17.1	A	DUPONT MANEX FU	352	655	AA	0	6.84	GA	10	15S	03E	G	WESTERN	17.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050001	8/9/2006	17.1	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.6	GA	10	15S	03E	G	WESTERN	17.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050001	8/21/2006	10	A	ASSAIL 70WP INSEC	8033	23	AA	4581	17	OZ	10	15S	03E	G	WESTERN	10	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050001	8/21/2006	10	A	BLOCKADE 50WG P	100	922	ZB	0	10	OZ	10	15S	03E	G	WESTERN	10	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050001	8/21/2006	10	A	FIRST CHOICE BRE/	11656	50095	AA	0	0.63	QT	10	15S	03E	G	WESTERN	10	A	LETTUCE ROMAINE

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050001	8/21/2006	7.1	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.67	GA	10	15S	03E	G	WESTERN	7.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050001	8/21/2006	10	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.34	GA	10	15S	03E	G	WESTERN	10	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050001	8/21/2006	7.1	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.24	GA	10	15S	03E	G	WESTERN	7.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	2/24/2006	19.8	A	DIAZINON 50W	66222	10	ZA	0	19.8	LB	10	15S	03E	G	WESTERN	19.8	A	LETTUCE LEAF
27S192A	BOSS FAR	050002	2/24/2006	19.8	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.86	GA	10	15S	03E	G	WESTERN	19.8	A	LETTUCE LEAF
27S192A	BOSS FAR	050002	2/24/2006	19.8	A	MANEX	1812	251	ZA	0	7.92	GA	10	15S	03E	G	WESTERN	19.8	A	LETTUCE LEAF
27S192A	BOSS FAR	050002	3/24/2006	19.8	A	ALIETTE WDG FUNG	264	516	ZB	0	59.4	LB	10	15S	03E	G	WESTERN	19.8	A	LETTUCE LEAF
27S192A	BOSS FAR	050002	3/24/2006	19.8	A	DIAZINON 50W	66222	10	ZA	0	19.8	LB	10	15S	03E	G	WESTERN	19.8	A	LETTUCE LEAF
27S192A	BOSS FAR	050002	3/24/2006	19.8	A	DUPONT MANEX FU	352	655	AA	0	7.92	GA	10	15S	03E	G	WESTERN	19.8	A	LETTUCE LEAF
27S192A	BOSS FAR	050002	3/24/2006	19.8	A	PROVADO 1.6 FLOW	264	763	AA	0	0.58	GA	10	15S	03E	G	WESTERN	19.8	A	LETTUCE LEAF
27S192A	BOSS FAR	050002	4/13/2006	19.8	A	ALIETTE WDG FUNG	264	516	AA	0	79.2	LB	10	15S	03E	A	R & B HEL	20	A	LETTUCE LEAF
27S192A	BOSS FAR	050002	4/13/2006	19.8	A	PROAXIS INSECTICI	74921	3	AA	55467	0.59	GA	10	15S	03E	A	R & B HEL	20	A	LETTUCE LEAF
27S192A	BOSS FAR	050002	4/13/2006	19.8	A	PROVADO 1.6 FLOW	264	763	AA	0	0.58	GA	10	15S	03E	A	R & B HEL	20	A	LETTUCE LEAF
27S192A	BOSS FAR	050002	6/30/2006	9	A	ACEPHATE 75SP AG	51036	236	AA	0	11.97	LB	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	6/30/2006	9	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	36	OZ	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	6/30/2006	10.85	A	DIAZINON 50W	66222	10	ZA	0	10.85	LB	10	15S	03E	G	WESTERN	10.85	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	6/30/2006	9	A	DIAZINON 50W	66222	10	ZA	0	9	LB	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	6/30/2006	10.85	A	DUPONT MANEX FU	352	655	AA	0	4.34	GA	10	15S	03E	G	WESTERN	10.85	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	6/30/2006	9	A	DUPONT MANEX FU	352	655	AA	0	3.6	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	6/30/2006	10.85	A	ENDURA FUNGICIDE	7969	197	AA	0	86.8	OZ	10	15S	03E	G	WESTERN	10.85	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	6/30/2006	9	A	ENDURA FUNGICIDE	7969	197	AA	0	72	OZ	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	6/30/2006	10.85	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.02	GA	10	15S	03E	G	WESTERN	10.85	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	6/30/2006	9	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.84	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	6/30/2006	10.85	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.36	GA	10	15S	03E	G	WESTERN	10.85	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	7/10/2006	9	A	ACROBAT 50 WP FU	241	410	AA	0	3.6	LB	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	7/10/2006	9	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	45	OZ	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	7/10/2006	10.85	A	BLOCKADE 50WG P	100	922	ZB	0	10.85	OZ	10	15S	03E	G	WESTERN	10.85	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	7/10/2006	10.85	A	DU PONT LANNATE	352	342	ZB	0	10.85	LB	10	15S	03E	G	WESTERN	10.85	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	7/10/2006	9	A	DU PONT LANNATE	352	342	ZB	0	9	LB	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	7/10/2006	10.85	A	DUPONT MANEX FU	352	655	AA	0	4.34	GA	10	15S	03E	G	WESTERN	10.85	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	7/10/2006	9	A	DUPONT MANEX FU	352	655	AA	0	3.6	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	7/10/2006	10.85	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.02	GA	10	15S	03E	G	WESTERN	10.85	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	7/10/2006	9	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.84	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	7/10/2006	9	A	MSR SPRAY CONCE	10163	220	ZC	0	2.25	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	7/10/2006	10.85	A	PROVADO 1.6 FLOW	264	763	AA	0	0.32	GA	10	15S	03E	G	WESTERN	10.85	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	7/25/2006	10.85	A	BLOCKADE 50WG P	100	922	ZB	0	10.85	OZ	10	15S	03E	G	WESTERN	10.85	A	LETTUCE LEAF

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050002	7/25/2006	9	A	DREXEL DIMETHOA	19713	231	AA	0	0.56	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	7/25/2006	10.85	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.02	GA	10	15S	03E	G	WESTERN	10.85	A	LETTUCE LEAF
27S192A	BOSS FAR	050002	7/25/2006	9	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.84	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	7/25/2006	10.85	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.36	GA	10	15S	03E	G	WESTERN	10.85	A	LETTUCE LEAF
27S192A	BOSS FAR	050002	7/25/2006	10.85	A	PROVADO 1.6 FLOW	264	763	AA	0	0.32	GA	10	15S	03E	G	WESTERN	10.85	A	LETTUCE LEAF
27S192A	BOSS FAR	050002	7/25/2006	9	A	PROVADO 1.6 FLOW	264	763	AA	0	0.26	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	7/25/2006	9	A	SUCCESS	62719	292	AA	0	1.27	QT	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050003	2/24/2006	16	A	ACEPHATE 75SP AG	51036	236	AA	0	16	LB	10	15S	03E	G	WESTERN	16	A	LETTUCE HEAD
27S192A	BOSS FAR	050003	2/24/2006	6.1	A	DIAZINON 50W	66222	10	ZA	0	6.1	LB	10	15S	03E	G	WESTERN	6.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050003	2/24/2006	6.1	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.57	GA	10	15S	03E	G	WESTERN	6.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050003	2/24/2006	16	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.5	GA	10	15S	03E	G	WESTERN	16	A	LETTUCE HEAD
27S192A	BOSS FAR	050003	2/24/2006	6.1	A	MANEX	1812	251	ZA	0	2.44	GA	10	15S	03E	G	WESTERN	6.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050003	2/24/2006	16	A	MANEX	1812	251	ZA	0	6.4	GA	10	15S	03E	G	WESTERN	16	A	LETTUCE HEAD
27S192A	BOSS FAR	050003	2/24/2006	6.1	A	ROVRAL BRAND 4 F	264	482	ZA	0	1.53	GA	10	15S	03E	G	WESTERN	6.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050003	2/24/2006	16	A	ROVRAL BRAND 4 F	264	482	ZA	0	4	GA	10	15S	03E	G	WESTERN	16	A	LETTUCE HEAD
27S192A	BOSS FAR	050003	3/24/2006	16	A	ACEPHATE 75SP AG	51036	236	AA	0	21.28	LB	10	15S	03E	G	WESTERN	16	A	LETTUCE HEAD
27S192A	BOSS FAR	050003	3/24/2006	16	A	ACROBAT 50 WP FU	241	410	AA	0	6.4	LB	10	15S	03E	G	WESTERN	16	A	LETTUCE HEAD
27S192A	BOSS FAR	050003	3/24/2006	6.1	A	ALIETTE WDG FUNG	264	516	ZB	0	18.3	LB	10	15S	03E	G	WESTERN	6.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050003	3/24/2006	6.1	A	DIAZINON 50W	66222	10	ZA	0	6.1	LB	10	15S	03E	G	WESTERN	6.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050003	3/24/2006	6.1	A	DUPONT MANEX FU	352	655	AA	0	2.44	GA	10	15S	03E	G	WESTERN	6.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050003	3/24/2006	16	A	DUPONT MANEX FU	352	655	AA	0	6.4	GA	10	15S	03E	G	WESTERN	16	A	LETTUCE HEAD
27S192A	BOSS FAR	050003	3/24/2006	16	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.5	GA	10	15S	03E	G	WESTERN	16	A	LETTUCE HEAD
27S192A	BOSS FAR	050003	3/24/2006	16	A	MSR SPRAY CONCE	10163	220	ZC	0	4	GA	10	15S	03E	G	WESTERN	16	A	LETTUCE HEAD
27S192A	BOSS FAR	050003	3/24/2006	6.1	A	PROVADO 1.6 FLOW	264	763	AA	0	0.18	GA	10	15S	03E	G	WESTERN	6.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050003	7/2/2006	21.92	A	DIAZINON 50W	66222	10	ZA	0	21.92	LB	10	15S	03E	G	WESTERN	21.92	A	LETTUCE LEAF
27S192A	BOSS FAR	050003	7/2/2006	21.92	A	DUPONT MANEX FU	352	655	AA	0	8.77	GA	10	15S	03E	G	WESTERN	21.92	A	LETTUCE LEAF
27S192A	BOSS FAR	050003	7/2/2006	21.92	A	FIRST CHOICE NO F	11656	50009	ZB	0	2.06	GA	10	15S	03E	G	WESTERN	21.92	A	LETTUCE LEAF
27S192A	BOSS FAR	050003	7/2/2006	21.92	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.74	GA	10	15S	03E	G	WESTERN	21.92	A	LETTUCE LEAF
27S192A	BOSS FAR	050003	7/14/2006	21.92	A	BLOCKADE 50WG P	100	922	ZB	0	21.92	OZ	10	15S	03E	G	WESTERN	21.92	A	LETTUCE LEAF
27S192A	BOSS FAR	050003	7/14/2006	21.92	A	DU PONT LANNATE	352	342	ZB	0	21.92	LB	10	15S	03E	G	WESTERN	21.92	A	LETTUCE LEAF
27S192A	BOSS FAR	050003	7/14/2006	21.92	A	FIRST CHOICE NO F	11656	50009	ZB	0	2.06	GA	10	15S	03E	G	WESTERN	21.92	A	LETTUCE LEAF
27S192A	BOSS FAR	050003	7/14/2006	21.92	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.74	GA	10	15S	03E	G	WESTERN	21.92	A	LETTUCE LEAF
27S192A	BOSS FAR	050003	7/14/2006	21.92	A	PROVADO 1.6 FLOW	264	763	AA	0	0.64	GA	10	15S	03E	G	WESTERN	21.92	A	LETTUCE LEAF
27S192A	BOSS FAR	050003	7/25/2006	21.92	A	BLOCKADE 50WG P	100	922	ZB	0	21.92	OZ	10	15S	03E	G	WESTERN	21.92	A	LETTUCE LEAF
27S192A	BOSS FAR	050003	7/25/2006	21.92	A	FIRST CHOICE NO F	11656	50009	ZB	0	2.06	GA	10	15S	03E	G	WESTERN	21.92	A	LETTUCE LEAF
27S192A	BOSS FAR	050003	7/25/2006	21.92	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.74	GA	10	15S	03E	G	WESTERN	21.92	A	LETTUCE LEAF

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050003	7/25/2006	21.92	A	PROVADO 1.6 FLOW	264	763	AA	0	0.64	GA	10	15S	03E	G	WESTERN	21.92	A	LETTUCE LEAF
27S192A	BOSS FAR	050003	12/21/2006	11	A	PREFAR 4-E	10163	200	AA	0	4.13	GA	10	15S	03E	G	WESTERN	11	A	LETTUCE HEAD
27S192A	BOSS FAR	050004	4/13/2006	10	A	ALIETTE WDG FUNG	264	516	AA	0	40	LB	10	15S	03E	A	R & B HEL	20	A	LETTUCE HEAD
27S192A	BOSS FAR	050004	4/13/2006	10	A	DIAZINON 50W	66222	10	ZA	0	10	LB	10	15S	03E	A	R & B HEL	20	A	LETTUCE HEAD
27S192A	BOSS FAR	050004	4/13/2006	10	A	MANEX	1812	251	ZA	0	4	GA	10	15S	03E	A	R & B HEL	20	A	LETTUCE HEAD
27S192A	BOSS FAR	050004	4/13/2006	10	A	PROAXIS INSECTICI	74921	3	AA	55467	0.3	GA	10	15S	03E	A	R & B HEL	20	A	LETTUCE HEAD
27S192A	BOSS FAR	050004	4/13/2006	10	A	PROVADO 1.6 FLOW	264	763	AA	0	0.29	GA	10	15S	03E	A	R & B HEL	20	A	LETTUCE HEAD
27S192A	BOSS FAR	050004	4/26/2006	10	A	ALIETTE WDG FUNG	264	516	AA	0	40	LB	10	15S	03E	A	R & B HEL	20	A	LETTUCE HEAD
27S192A	BOSS FAR	050004	4/26/2006	10	A	WARRIOR INSECTIC	100	1112	AA	0	0.3	GA	10	15S	03E	A	R & B HEL	20	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	5/25/2006	17.9	A	ACEPHATE 75SP AG	51036	236	AA	0	23.81	LB	10	15S	03E	G	WESTERN	17.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	5/25/2006	17.9	A	DUPONT MANEX FU	352	655	AA	0	7.16	GA	10	15S	03E	G	WESTERN	17.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	5/25/2006	17.9	A	ENDURA FUNGICIDE	7969	197	AA	0	143.2	OZ	10	15S	03E	G	WESTERN	17.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	5/25/2006	17.9	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.68	GA	10	15S	03E	G	WESTERN	17.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	6/5/2006	17.9	A	ACEPHATE 75SP AG	51036	236	AA	0	23.81	LB	10	15S	03E	G	WESTERN	17.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	6/5/2006	17.9	A	ACROBAT 50 WP FU	241	410	AA	0	7.16	LB	10	15S	03E	G	WESTERN	17.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	6/5/2006	17.9	A	DUPONT MANEX FU	352	655	AA	0	7.16	GA	10	15S	03E	G	WESTERN	17.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	6/5/2006	17.9	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.68	GA	10	15S	03E	G	WESTERN	17.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	6/5/2006	17.9	A	MSR SPRAY CONCE	10163	220	ZC	0	4.48	GA	10	15S	03E	G	WESTERN	17.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	6/17/2006	17.9	A	DU PONT ASANA XL	352	515	AA	0	1.34	GA	10	15S	03E	G	WESTERN	17.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	6/17/2006	17.9	A	FIRST CHOICE BRE/	11656	50095	AA	0	1.12	QT	10	15S	03E	G	WESTERN	17.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	6/17/2006	17.9	A	PROVADO 1.6 FLOW	264	763	AA	0	0.52	GA	10	15S	03E	G	WESTERN	17.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	8/24/2006	17.6	A	DIMETHOATE 4E	51036	110	AA	0	1.1	GA	10	15S	03E	G	WESTERN	17.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	8/24/2006	17.6	A	DUPONT MANEX FU	352	655	AA	0	7.04	GA	10	15S	03E	G	WESTERN	17.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	8/24/2006	17.6	A	ENDURA FUNGICIDE	7969	197	AA	0	140.8	OZ	10	15S	03E	G	WESTERN	17.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	8/24/2006	17.6	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.65	GA	10	15S	03E	G	WESTERN	17.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	9/8/2006	17.6	A	ASSAIL 70 WP INSE	8033	23	AA	82695	29.92	OZ	10	15S	03E	G	WESTERN	17.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	9/8/2006	17.6	A	BLOCKADE 50WG P	100	922	ZB	0	17.6	OZ	10	15S	03E	G	WESTERN	17.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	9/8/2006	17.6	A	DIAZINON 50W	66222	10	ZA	0	17.6	LB	10	15S	03E	G	WESTERN	17.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	9/8/2006	17.6	A	DIMETHOATE 4E	51036	110	AA	0	1.1	GA	10	15S	03E	G	WESTERN	17.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	9/8/2006	17.6	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.65	GA	10	15S	03E	G	WESTERN	17.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	9/8/2006	17.6	A	INTREPID 2F	62719	442	AA	0	1.1	GA	10	15S	03E	G	WESTERN	17.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	9/19/2006	17.6	A	ASSAIL 70 WP INSE	8033	23	AA	82695	29.92	OZ	10	15S	03E	G	WESTERN	17.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	9/19/2006	17.6	A	BLOCKADE 50WG P	100	922	ZB	0	17.6	OZ	10	15S	03E	G	WESTERN	17.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	9/19/2006	17.6	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.65	GA	10	15S	03E	G	WESTERN	17.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	9/19/2006	17.6	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.59	GA	10	15S	03E	G	WESTERN	17.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	9/19/2006	17.6	A	SUCCESS	62719	292	AA	0	2.48	QT	10	15S	03E	G	WESTERN	17.6	A	LETTUCE ROMAINE

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050005	9/23/2006	5.9	A	DU PONT LANNATE	352	342	ZB	0	2.95	LB	10	15S	03E	G	WESTERN	5.9	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	9/23/2006	5.9	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.77	GA	10	15S	03E	G	WESTERN	5.9	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	9/23/2006	5.9	A	PROVADO 1.6 FLOW	264	763	AA	0	0.17	GA	10	15S	03E	G	WESTERN	5.9	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050006	5/18/2006	18.5	A	ACEPHATE 75SP AG	51036	236	AA	0	24.61	LB	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	5/18/2006	18.5	A	DUPONT MANEX FU	352	655	AA	0	7.4	GA	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	5/18/2006	18.5	A	ENDURA FUNGICIDE	7969	197	AA	0	148	OZ	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	5/18/2006	18.5	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.73	GA	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	5/31/2006	18.5	A	ACEPHATE 75SP AG	51036	236	AA	0	24.61	LB	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	5/31/2006	18.5	A	ACROBAT 50 WP FU	241	410	AA	0	7.4	LB	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	5/31/2006	18.5	A	DIAZINON 50W	66222	10	ZA	0	18.5	LB	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	5/31/2006	18.5	A	DUPONT MANEX FU	352	655	AA	0	7.4	GA	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	5/31/2006	18.5	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.73	GA	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	6/5/2006	18.5	A	DREXEL DIMETHOA	19713	231	AA	0	1.16	GA	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	6/5/2006	18.5	A	DUPONT TANOS FU	352	604	AA	0	9.25	LB	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	6/5/2006	18.5	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.73	GA	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	6/5/2006	18.5	A	MSR SPRAY CONCE	10163	220	ZC	0	4.63	GA	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	6/5/2006	18.5	A	PROAXIS INSECTICI	74921	3	AA	55467	0.55	GA	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	6/5/2006	18.5	A	RIDOMIL GOLD EC	100	801	ZA	0	0.58	GA	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	8/17/2006	18.35	A	ACEPHATE 75SP AG	51036	236	AA	0	24.41	LB	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	8/17/2006	18.35	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	110.1	OZ	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	8/17/2006	18.35	A	DIAZINON 50W	66222	10	ZA	0	18.35	LB	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	8/17/2006	18.35	A	DUPONT MANEX FU	352	655	AA	0	7.34	GA	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	8/17/2006	18.35	A	ENDURA FUNGICIDE	7969	197	AA	0	146.8	OZ	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	8/17/2006	18.35	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.72	GA	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	8/31/2006	18.35	A	ACROBAT 50 WP FU	241	410	AA	0	7.34	LB	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	8/31/2006	18.35	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	91.75	OZ	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	8/31/2006	18.35	A	DU PONT LANNATE	352	342	ZB	0	18.35	LB	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	8/31/2006	18.35	A	DUPONT MANEX FU	352	655	AA	0	7.34	GA	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	8/31/2006	18.35	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.72	GA	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	8/31/2006	18.35	A	MSR SPRAY CONCE	10163	220	ZC	0	4.59	GA	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	9/13/2006	18.35	A	DREXEL DIMETHOA	19713	231	AA	0	1.15	GA	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	9/13/2006	18.35	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.72	GA	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	9/13/2006	18.35	A	SUCCESS	62719	292	AA	0	2.87	QT	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	9/21/2006	18.35	A	ASSAIL 70 WP INSE	8033	23	AA	82695	31.2	OZ	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	9/21/2006	18.35	A	DREXEL DIMETHOA	19713	231	AA	0	1.15	GA	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	9/21/2006	18.35	A	FIRST CHOICE NO F	11656	50009	ZB	0	3.44	GA	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050006	9/21/2006	18.35	A	FULFILL	100	912	ZA	0	50.46	OZ	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	9/21/2006	18.35	A	INTREPID 2F	62719	442	AA	0	1.15	GA	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	4/7/2006	13.2	A	PREFAR 4-E	10163	200	AA	0	6.6	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	5/10/2006	13.2	A	ACEPHATE 75SP AG	51036	236	AA	0	17.56	LB	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	5/10/2006	13.2	A	DIAZINON 50W	66222	10	ZA	0	13.2	LB	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	5/10/2006	13.2	A	DUPONT MANEX FU	352	655	AA	0	5.28	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	5/10/2006	13.2	A	ENDURA FUNGICIDE	7969	197	AA	0	132	OZ	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	5/10/2006	13.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.24	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	5/28/2006	13.2	A	ACEPHATE 75SP AG	51036	236	AA	0	17.56	LB	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	5/28/2006	13.2	A	ACROBAT 50 WP FU	241	410	AA	0	5.28	LB	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	5/28/2006	13.2	A	DU PONT ASANA XL	352	515	AA	0	0.99	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	5/28/2006	13.2	A	DUPONT MANEX FU	352	655	AA	0	5.28	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	5/28/2006	13.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.24	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	6/5/2006	13.2	A	DREXEL DIMETHOA	19713	231	AA	0	0.83	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	6/5/2006	13.2	A	DUPONT TANOS FU	352	604	AA	0	6.6	LB	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	6/5/2006	13.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.24	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	6/5/2006	13.2	A	MSR SPRAY CONCE	10163	220	ZC	0	3.3	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	6/5/2006	13.2	A	PROAXIS INSECTICI	74921	3	AA	55467	0.39	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	6/5/2006	13.2	A	RIDOMIL GOLD EC	100	801	ZA	0	0.41	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	7/1/2006	13.2	A	ACEPHATE 75SP AG	51036	236	AA	0	17.56	LB	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	7/1/2006	13.2	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	79.2	OZ	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	7/1/2006	13.2	A	DUPONT MANEX FU	352	655	AA	0	5.28	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	7/1/2006	13.2	A	ENDURA FUNGICIDE	7969	197	AA	0	105.6	OZ	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	7/1/2006	13.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.24	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/18/2006	13.2	A	ACROBAT 50 WP FU	241	410	AA	0	5.28	LB	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/18/2006	13.2	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	66	OZ	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/18/2006	13.2	A	DU PONT LANNATE	352	342	ZB	0	13.2	LB	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/18/2006	13.2	A	DUPONT MANEX FU	352	655	AA	0	5.28	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/18/2006	13.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.24	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/18/2006	13.2	A	MSR SPRAY CONCE	10163	220	ZC	0	3.3	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/29/2006	13.2	A	DREXEL DIMETHOA	19713	231	AA	0	0.83	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/29/2006	13.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.24	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/29/2006	13.2	A	SUCCESS	62719	292	AA	0	2.07	QT	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	9/29/2006	13	A	ASSAIL 70 WP INSE	8033	23	AA	82695	22.1	OZ	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050007	9/29/2006	13	A	DUPONT MANEX FU	352	655	AA	0	5.2	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050007	9/29/2006	13	A	ENDURA FUNGICIDE	7969	197	AA	0	104	OZ	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050007	9/29/2006	13	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.59	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050007	9/29/2006	13	A	GOWAN MALATHION	10163	21	ZB	0	3.25	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050007	9/29/2006	13	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.44	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	5/4/2006	14	A	ACEPHATE 75SP AG	51036	236	AA	0	18.62	LB	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/4/2006	14	A	DIAZINON 50W	66222	10	ZA	0	14	LB	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/4/2006	14	A	DUPONT MANEX FU	352	655	AA	0	5.6	GA	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/4/2006	14	A	ENDURA FUNGICIDE	7969	197	AA	0	140	OZ	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/4/2006	14	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.31	GA	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/18/2006	14	A	ACEPHATE 75SP AG	51036	236	AA	0	18.62	LB	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/18/2006	14	A	ACROBAT 50 WP FU	241	410	AA	0	5.6	LB	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/18/2006	14	A	DIAZINON 50W	66222	10	ZA	0	14	LB	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/18/2006	14	A	DUPONT MANEX FU	352	655	AA	0	5.6	GA	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/18/2006	14	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.31	GA	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/30/2006	14	A	ACROBAT 50 WP FU	241	410	AA	0	5.6	LB	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/30/2006	14	A	DU PONT ASANA XL	352	515	AA	0	1.05	GA	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/30/2006	14	A	FIRST CHOICE BRE/	11656	50095	AA	0	0.88	QT	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/30/2006	14	A	RIDOMIL GOLD EC	100	801	ZA	0	0.44	GA	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	7/20/2006	13.95	A	DIAZINON 50W	66222	10	ZA	0	13.95	LB	10	15S	03E	G	WESTERN	13.95	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	7/20/2006	13.95	A	DUPONT MANEX FU	352	655	AA	0	5.58	GA	10	15S	03E	G	WESTERN	13.95	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	7/20/2006	13.95	A	ENDURA FUNGICIDE	7969	197	AA	0	111.6	OZ	10	15S	03E	G	WESTERN	13.95	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	7/20/2006	13.95	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.31	GA	10	15S	03E	G	WESTERN	13.95	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	7/20/2006	13.95	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.47	GA	10	15S	03E	G	WESTERN	13.95	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	8/6/2006	13.95	A	ACROBAT 50 WP FU	241	410	AA	0	5.58	LB	10	15S	03E	G	WESTERN	13.95	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	8/6/2006	13.95	A	BLOCKADE 50WG P	100	922	ZB	0	13.95	OZ	10	15S	03E	G	WESTERN	13.95	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	8/6/2006	13.95	A	DU PONT LANNATE	352	342	ZB	0	13.95	LB	10	15S	03E	G	WESTERN	13.95	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	8/6/2006	13.95	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.31	GA	10	15S	03E	G	WESTERN	13.95	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	8/6/2006	13.95	A	PROVADO 1.6 FLOW	264	763	AA	0	0.41	GA	10	15S	03E	G	WESTERN	13.95	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	8/18/2006	4	A	ASSAIL 70WP INSEC	8033	23	AA	4581	6.8	OZ	10	15S	03E	G	WESTERN	4	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	8/18/2006	4	A	BLOCKADE 50WG P	100	922	ZB	0	4	OZ	10	15S	03E	G	WESTERN	4	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	8/18/2006	9.95	A	FIRST CHOICE BRE/	11656	50095	AA	0	0.62	QT	10	15S	03E	G	WESTERN	9.95	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	8/18/2006	4	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.38	GA	10	15S	03E	G	WESTERN	4	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	8/18/2006	9.95	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.33	GA	10	15S	03E	G	WESTERN	9.95	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	8/18/2006	4	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.13	GA	10	15S	03E	G	WESTERN	4	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050009	5/26/2006	20.2	A	ACEPHATE 75SP AG	51036	236	AA	0	26.87	LB	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	5/26/2006	20.2	A	DUPONT MANEX FU	352	655	AA	0	8.08	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	5/26/2006	20.2	A	ENDURA FUNGICIDE	7969	197	AA	0	161.6	OZ	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050009	5/26/2006	20.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.89	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/11/2006	20.2	A	ACROBAT 50 WP FU	241	410	AA	0	8.08	LB	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/11/2006	20.2	A	DU PONT LANNATE	352	342	ZB	0	20.2	LB	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/11/2006	20.2	A	DUPONT MANEX FU	352	655	AA	0	8.08	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/11/2006	20.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.89	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/11/2006	20.2	A	MSR SPRAY CONCE	10163	220	ZC	0	5.05	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/21/2006	20.2	A	ACROBAT 50 WP FU	241	410	AA	0	8.08	LB	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/21/2006	20.2	A	DU PONT ASANA XL	352	515	AA	0	1.51	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/21/2006	20.2	A	FIRST CHOICE BRE/	11656	50095	AA	0	1.26	QT	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/21/2006	20.2	A	RIDOMIL GOLD EC	100	801	ZA	0	0.63	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	8/29/2006	20.2	A	ACEPHATE 75SP AG	51036	236	AA	0	26.87	LB	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	8/29/2006	20.2	A	DIAZINON 50W	66222	10	ZA	0	20.2	LB	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	8/29/2006	20.2	A	DUPONT MANEX FU	352	655	AA	0	8.08	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	8/29/2006	20.2	A	ENDURA FUNGICIDE	7969	197	AA	0	161.6	OZ	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	8/29/2006	20.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.89	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	9/14/2006	20.2	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	101	OZ	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	9/14/2006	20.2	A	DU PONT LANNATE	352	342	ZB	0	20.2	LB	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	9/14/2006	20.2	A	DUPONT MANEX FU	352	655	AA	0	8.08	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	9/14/2006	20.2	A	DUPONT TANOS FU	352	604	AA	0	10.1	LB	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	9/14/2006	20.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.89	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	9/14/2006	20.2	A	MSR SPRAY CONCE	10163	220	ZC	0	5.05	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	9/23/2006	20.2	A	ASSAIL 70 WP INSE(	8033	23	AA	82695	34.34	OZ	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	9/23/2006	20.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.89	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	9/23/2006	20.2	A	GOWAN MALATHIOI	10163	21	ZB	0	5.05	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	9/23/2006	20.2	A	INTREPID 2F	62719	442	AA	0	1.26	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	10/6/2006	20.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.89	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	10/6/2006	20.2	A	SUCCESS	62719	292	AA	0	3.16	QT	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/2/2006	17	A	ACEPHATE 75SP AG	51036	236	AA	0	22.61	LB	10	15S	03E	G	WESTERN	17	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/2/2006	17	A	DIAZINON 50W	66222	10	ZA	0	17	LB	10	15S	03E	G	WESTERN	17	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/2/2006	17	A	DUPONT MANEX FU	352	655	AA	0	6.8	GA	10	15S	03E	G	WESTERN	17	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/2/2006	17	A	ENDURA FUNGICIDE	7969	197	AA	0	136	OZ	10	15S	03E	G	WESTERN	17	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/2/2006	17	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.59	GA	10	15S	03E	G	WESTERN	17	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/18/2006	17	A	ACROBAT 50 WP FU	241	410	AA	0	6.8	LB	10	15S	03E	G	WESTERN	17	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/18/2006	17	A	DIAZINON 50W	66222	10	ZA	0	17	LB	10	15S	03E	G	WESTERN	17	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/18/2006	17	A	DU PONT ASANA XL	352	515	AA	0	1.27	GA	10	15S	03E	G	WESTERN	17	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/18/2006	17	A	DUPONT MANEX FU	352	655	AA	0	6.8	GA	10	15S	03E	G	WESTERN	17	A	LETTUCE HEAD

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050010	6/18/2006	17	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.59	GA	10	15S	03E	G	WESTERN	17	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/18/2006	17	A	MSR SPRAY CONCE	10163	220	ZC	0	4.25	GA	10	15S	03E	G	WESTERN	17	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/27/2006	17	A	ACROBAT 50 WP FU	241	410	AA	0	6.8	LB	10	15S	03E	G	WESTERN	17	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/27/2006	17	A	DREXEL DIMETHOA	19713	231	AA	0	1.06	GA	10	15S	03E	G	WESTERN	17	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/27/2006	17	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.59	GA	10	15S	03E	G	WESTERN	17	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/27/2006	17	A	INTREPID 2F	62719	442	AA	0	1.06	GA	10	15S	03E	G	WESTERN	17	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/27/2006	17	A	PROVADO 1.6 FLOW	264	763	AA	0	0.5	GA	10	15S	03E	G	WESTERN	17	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/27/2006	17	A	RIDOMIL GOLD EC	100	801	ZA	0	0.53	GA	10	15S	03E	G	WESTERN	17	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/4/2006	9.5	A	ACEPHATE 75SP AG	51036	236	AA	0	12.64	LB	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/4/2006	9.5	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	57	OZ	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/4/2006	7	A	DIMETHOATE 4E	51036	110	AA	0	0.44	GA	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	9/4/2006	9.5	A	DREXEL DIMETHOA	19713	231	AA	0	0.59	GA	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/4/2006	7	A	DUPONT MANEX FU	352	655	AA	0	2.8	GA	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	9/4/2006	9.5	A	DUPONT MANEX FU	352	655	AA	0	3.8	GA	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/4/2006	7	A	ENDURA FUNGICIDE	7969	197	AA	0	56	OZ	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	9/4/2006	9.5	A	ENDURA FUNGICIDE	7969	197	AA	0	76	OZ	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/4/2006	7	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.66	GA	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	9/4/2006	9.5	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.89	GA	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/4/2006	7	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.23	GA	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	9/18/2006	7	A	ASSAIL 70 WP INSE	8033	23	AA	82695	10.5	OZ	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	9/18/2006	7	A	BLOCKADE 50WG P	100	922	ZB	0	7	OZ	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	9/18/2006	7	A	DU PONT LANNATE	352	342	ZB	0	7	LB	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	9/18/2006	7	A	DUPONT MANEX FU	352	655	AA	0	2.8	GA	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	9/18/2006	7	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.66	GA	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	9/19/2006	9.5	A	DU PONT LANNATE	352	342	ZB	0	9.5	LB	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/19/2006	9.5	A	DUPONT MANEX FU	352	655	AA	0	3.8	GA	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/19/2006	9.5	A	DUPONT TANOS FU	352	604	AA	0	4.75	LB	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/19/2006	9.5	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.89	GA	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/19/2006	9.5	A	MSR SPRAY CONCE	10163	220	ZC	0	2.38	GA	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/25/2006	7	A	ACROBAT 50 WP FU	241	410	AA	0	2.8	LB	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	9/25/2006	7	A	ASSAIL 70 WP INSE	8033	23	AA	82695	10.5	OZ	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	9/25/2006	9.5	A	ASSAIL 70 WP INSE	8033	23	AA	82695	14.25	OZ	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/25/2006	7	A	DUPONT MANEX FU	352	655	AA	0	2.8	GA	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	9/25/2006	9.5	A	DUPONT MANEX FU	352	655	AA	0	3.8	GA	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/25/2006	9.5	A	DUPONT TANOS FU	352	604	AA	0	4.75	LB	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/25/2006	7	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.66	GA	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050010	9/25/2006	9.5	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.89	GA	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/25/2006	7	A	GOWAN MALATHIOI	10163	21	ZB	0	1.75	GA	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	9/25/2006	9.5	A	GOWAN MALATHIOI	10163	21	ZB	0	2.38	GA	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/25/2006	7	A	SUCCESS	62719	292	AA	0	0.99	QT	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	9/25/2006	9.5	A	SUCCESS	62719	292	AA	0	1.34	QT	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	10/2/2006	7	A	FIRST CHOICE BRE/	11656	50095	AA	0	0.44	QT	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	10/2/2006	9.5	A	FIRST CHOICE BRE/	11656	50095	AA	0	0.59	QT	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	10/2/2006	7	A	PROCLAIM INSECTI(	100	904	ZA	0	24.5	OZ	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	10/2/2006	9.5	A	PROCLAIM INSECTI(	100	904	ZA	0	33.25	OZ	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	10/2/2006	7	A	PROVADO 1.6 FLOW	264	763	AA	0	0.2	GA	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	10/2/2006	9.5	A	PROVADO 1.6 FLOW	264	763	AA	0	0.28	GA	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	10/11/2006	7	A	ASSAIL 70 WP INSE(	8033	23	AA	82695	11.9	OZ	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	10/11/2006	7	A	FIRST CHOICE BRE/	11656	50095	AA	0	0.61	QT	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050011	7/3/2006	13.42	A	DIAZINON 50W	66222	10	ZA	0	13.42	LB	10	15S	03E	G	WESTERN	13.42	A	LETTUCE LEAF
27S192A	BOSS FAR	050011	7/3/2006	13.42	A	DUPONT MANEX FU	352	655	AA	0	5.37	GA	10	15S	03E	G	WESTERN	13.42	A	LETTUCE LEAF
27S192A	BOSS FAR	050011	7/3/2006	13.42	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.26	GA	10	15S	03E	G	WESTERN	13.42	A	LETTUCE LEAF
27S192A	BOSS FAR	050011	7/3/2006	13.42	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.45	GA	10	15S	03E	G	WESTERN	13.42	A	LETTUCE LEAF
27S192A	BOSS FAR	050011	7/13/2006	13.42	A	ACROBAT 50 WP FU	241	410	AA	0	5.37	LB	10	15S	03E	G	WESTERN	13.42	A	LETTUCE LEAF
27S192A	BOSS FAR	050011	7/13/2006	13.42	A	BLOCKADE 50WG P	100	922	ZB	0	13.42	OZ	10	15S	03E	G	WESTERN	13.42	A	LETTUCE LEAF
27S192A	BOSS FAR	050011	7/13/2006	13.42	A	DU PONT LANNATE	352	342	ZB	0	6.71	LB	10	15S	03E	G	WESTERN	13.42	A	LETTUCE LEAF
27S192A	BOSS FAR	050011	7/13/2006	13.42	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.26	GA	10	15S	03E	G	WESTERN	13.42	A	LETTUCE LEAF
27S192A	BOSS FAR	050011	7/13/2006	13.42	A	PROVADO 1.6 FLOW	264	763	AA	0	0.39	GA	10	15S	03E	G	WESTERN	13.42	A	LETTUCE LEAF
27S192A	BOSS FAR	050012	5/24/2006	13.8	A	ACEPHATE 75SP AG	51036	236	AA	0	18.35	LB	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	5/24/2006	13.8	A	DUPONT MANEX FU	352	655	AA	0	5.52	GA	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	5/24/2006	13.8	A	ENDURA FUNGICIDE	7969	197	AA	0	110.4	OZ	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	5/24/2006	13.8	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.29	GA	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	6/2/2006	14.8	A	ACEPHATE 75SP AG	51036	236	AA	0	19.68	LB	10	15S	03E	G	WESTERN	14.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	6/2/2006	14.8	A	ACROBAT 50 WP FU	241	410	AA	0	5.92	LB	10	15S	03E	G	WESTERN	14.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	6/2/2006	14.8	A	DUPONT MANEX FU	352	655	AA	0	5.92	GA	10	15S	03E	G	WESTERN	14.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	6/2/2006	14.8	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.39	GA	10	15S	03E	G	WESTERN	14.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	6/2/2006	14.8	A	MSR SPRAY CONCE	10163	220	ZC	0	3.7	GA	10	15S	03E	G	WESTERN	14.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	6/17/2006	13.8	A	DU PONT ASANA XL	352	515	AA	0	1.03	GA	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	6/17/2006	13.8	A	FIRST CHOICE BRE/	11656	50095	AA	0	0.86	QT	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	6/17/2006	13.8	A	PROVADO 1.6 FLOW	264	763	AA	0	0.4	GA	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	8/9/2006	13.8	A	ACEPHATE 75SP AG	51036	236	AA	0	18.35	LB	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	8/9/2006	13.8	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	82.8	OZ	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050012	8/9/2006	13.8	A	DIAZINON 50W	66222	10	ZA	0	13.8	LB	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	8/9/2006	13.8	A	DUPONT MANEX FU	352	655	AA	0	5.52	GA	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	8/9/2006	13.8	A	ENDURA FUNGICIDE	7969	197	AA	0	110.4	OZ	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	8/9/2006	13.8	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.29	GA	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	8/23/2006	13.8	A	ACROBAT 50 WP FU	241	410	AA	0	5.52	LB	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	8/23/2006	13.8	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	69	OZ	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	8/23/2006	13.8	A	DU PONT LANNATE	352	342	ZB	0	13.8	LB	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	8/23/2006	13.8	A	DUPONT MANEX FU	352	655	AA	0	5.52	GA	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	8/23/2006	13.8	A	MSR SPRAY CONCE	10163	220	ZC	0	3.45	GA	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	9/4/2006	13.8	A	DREXEL DIMETHOA	19713	231	AA	0	0.86	GA	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	9/4/2006	13.8	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.29	GA	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	9/4/2006	13.8	A	SUCCESS	62719	292	AA	0	2.16	QT	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050013	7/12/2006	7.2	A	DIAZINON 50W	66222	10	ZA	0	7.2	LB	10	15S	03E	G	WESTERN	7.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	7/12/2006	7.2	A	DUPONT MANEX FU	352	655	AA	0	2.88	GA	10	15S	03E	G	WESTERN	7.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	7/12/2006	7.2	A	ENDURA FUNGICIDE	7969	197	AA	0	57.6	OZ	10	15S	03E	G	WESTERN	7.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	7/12/2006	7.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.68	GA	10	15S	03E	G	WESTERN	7.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	7/12/2006	7.2	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.24	GA	10	15S	03E	G	WESTERN	7.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	7/21/2006	7.2	A	BLOCKADE 50WG P	100	922	ZB	0	7.2	OZ	10	15S	03E	G	WESTERN	7.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	7/21/2006	7.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.68	GA	10	15S	03E	G	WESTERN	7.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	7/21/2006	7.2	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.24	GA	10	15S	03E	G	WESTERN	7.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	7/21/2006	7.2	A	SUCCESS	62719	292	AA	0	1.13	QT	10	15S	03E	G	WESTERN	7.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	7/27/2006	7.2	A	ASSAIL 70WP INSEC	8033	23	AA	4581	12.24	OZ	10	15S	03E	G	WESTERN	7.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	7/27/2006	7.2	A	FIRST CHOICE BRE/	11656	50095	AA	0	0.45	QT	10	15S	03E	G	WESTERN	7.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	7/27/2006	7.2	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.24	GA	10	15S	03E	G	WESTERN	7.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	10/6/2006	7.06	A	DUPONT MANEX FU	352	655	AA	0	2.82	GA	10	15S	03E	G	WESTERN	7.06	A	LETTUCE LEAF
27S192A	BOSS FAR	050013	10/6/2006	7.06	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.66	GA	10	15S	03E	G	WESTERN	7.06	A	LETTUCE LEAF
27S192A	BOSS FAR	050013	10/6/2006	7.06	A	GOWAN MALATHION	10163	21	ZB	0	1.77	GA	10	15S	03E	G	WESTERN	7.06	A	LETTUCE LEAF
27S192A	BOSS FAR	050013	10/6/2006	7.06	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.24	GA	10	15S	03E	G	WESTERN	7.06	A	LETTUCE LEAF
27S192A	BOSS FAR	050013	10/6/2006	7.06	A	PROVADO 1.6 FLOW	264	763	AA	0	0.21	GA	10	15S	03E	G	WESTERN	7.06	A	LETTUCE LEAF
27S192A	BOSS FAR	050013	10/20/2006	7.6	A	ASSAIL 70 WP INSE(	8033	23	AA	82695	11.4	OZ	10	15S	03E	G	WESTERN	7.6	A	LETTUCE LEAF
27S192A	BOSS FAR	050013	10/20/2006	7.6	A	BLOCKADE 50WG P	100	922	ZB	0	7.6	OZ	10	15S	03E	G	WESTERN	7.6	A	LETTUCE LEAF
27S192A	BOSS FAR	050013	10/20/2006	7.6	A	DUPONT MANEX FU	352	655	AA	0	3.04	GA	10	15S	03E	G	WESTERN	7.6	A	LETTUCE LEAF
27S192A	BOSS FAR	050013	10/20/2006	7.6	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.71	GA	10	15S	03E	G	WESTERN	7.6	A	LETTUCE LEAF
27S192A	BOSS FAR	050013	10/20/2006	7.6	A	GOWAN MALATHION	10163	21	ZB	0	1.9	GA	10	15S	03E	G	WESTERN	7.6	A	LETTUCE LEAF
27S192A	BOSS FAR	050013	10/20/2006	7.6	A	INTREPID 2F	62719	442	AA	0	0.47	GA	10	15S	03E	G	WESTERN	7.6	A	LETTUCE LEAF
27S192A	BOSS FAR	050013	11/1/2006	7.6	A	ACROBAT 50 WP FU	241	410	AA	0	3.04	LB	10	15S	03E	G	WESTERN	7.6	A	LETTUCE LEAF

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050013	11/1/2006	7.6	A	ASSAIL 70 WP INSE	8033	23	AA	82695	12.92	OZ	10	15S	03E	G	WESTERN	7.6	A	LETTUCE LEAF
27S192A	BOSS FAR	050013	11/1/2006	7.6	A	BLOCKADE 50WG P	100	922	ZB	0	7.6	OZ	10	15S	03E	G	WESTERN	7.6	A	LETTUCE LEAF
27S192A	BOSS FAR	050013	11/1/2006	7.6	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.71	GA	10	15S	03E	G	WESTERN	7.6	A	LETTUCE LEAF
27S192A	BOSS FAR	050013	11/1/2006	7.6	A	SUCCESS	62719	292	AA	0	1.19	QT	10	15S	03E	G	WESTERN	7.6	A	LETTUCE LEAF
27S192A	BOSS FAR	050014	6/6/2006	9	A	ACEPHATE 75SP AG	51036	236	AA	0	11.97	LB	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050014	6/6/2006	9	A	DIAZINON 50W	66222	10	ZA	0	9	LB	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050014	6/6/2006	9	A	DUPONT MANEX FU	352	655	AA	0	3.6	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050014	6/6/2006	9	A	ENDURA FUNGICIDE	7969	197	AA	0	72	OZ	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050014	6/6/2006	9	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.84	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050014	6/18/2006	9	A	ACROBAT 50 WP FU	241	410	AA	0	3.6	LB	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050014	6/18/2006	9	A	DIAZINON 50W	66222	10	ZA	0	9	LB	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050014	6/18/2006	9	A	DU PONT ASANA XL	352	515	AA	0	0.67	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050014	6/18/2006	9	A	DUPONT MANEX FU	352	655	AA	0	3.6	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050014	6/18/2006	9	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.84	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050014	6/18/2006	9	A	MSR SPRAY CONCE	10163	220	ZC	0	2.25	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050014	6/27/2006	9	A	ACROBAT 50 WP FU	241	410	AA	0	3.6	LB	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050014	6/27/2006	9	A	DREXEL DIMETHOA	19713	231	AA	0	0.56	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050014	6/27/2006	9	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.84	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050014	6/27/2006	9	A	INTREPID 2F	62719	442	AA	0	0.56	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050014	6/27/2006	9	A	PROVADO 1.6 FLOW	264	763	AA	0	0.26	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050014	6/27/2006	9	A	RIDOMIL GOLD EC	100	801	ZA	0	0.28	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050014	7/12/2006	2.75	A	DIAZINON 50W	66222	10	ZA	0	2.75	LB	10	15S	03E	G	WESTERN	2.75	A	LETTUCE LEAF
27S192A	BOSS FAR	050014	7/12/2006	2.75	A	DUPONT MANEX FU	352	655	AA	0	1.1	GA	10	15S	03E	G	WESTERN	2.75	A	LETTUCE LEAF
27S192A	BOSS FAR	050014	7/12/2006	2.75	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.26	GA	10	15S	03E	G	WESTERN	2.75	A	LETTUCE LEAF
27S192A	BOSS FAR	050014	7/12/2006	2.75	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.09	GA	10	15S	03E	G	WESTERN	2.75	A	LETTUCE LEAF
27S192A	BOSS FAR	050014	7/21/2006	2.75	A	BLOCKADE 50WG P	100	922	ZB	0	2.75	OZ	10	15S	03E	G	WESTERN	2.75	A	LETTUCE LEAF
27S192A	BOSS FAR	050014	7/21/2006	2.75	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.26	GA	10	15S	03E	G	WESTERN	2.75	A	LETTUCE LEAF
27S192A	BOSS FAR	050014	7/21/2006	2.75	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.09	GA	10	15S	03E	G	WESTERN	2.75	A	LETTUCE LEAF
27S192A	BOSS FAR	050014	7/21/2006	2.75	A	SUCCESS	62719	292	AA	0	0.43	QT	10	15S	03E	G	WESTERN	2.75	A	LETTUCE LEAF
27S192A	BOSS FAR	050014	7/27/2006	2.75	A	ASSAIL 70WP INSEC	8033	23	AA	4581	4.68	OZ	10	15S	03E	G	WESTERN	2.75	A	LETTUCE LEAF
27S192A	BOSS FAR	050014	7/27/2006	2.75	A	FIRST CHOICE BRE	11656	50095	AA	0	0.17	QT	10	15S	03E	G	WESTERN	2.75	A	LETTUCE LEAF
27S192A	BOSS FAR	050014	7/27/2006	2.75	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.09	GA	10	15S	03E	G	WESTERN	2.75	A	LETTUCE LEAF
27S192A	BOSS FAR	050014	9/27/2006	11.6	A	ASSAIL 70 WP INSE	8033	23	AA	82695	17.4	OZ	10	15S	03E	G	WESTERN	11.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	9/27/2006	11.6	A	DUPONT MANEX FU	352	655	AA	0	4.64	GA	10	15S	03E	G	WESTERN	11.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	9/27/2006	11.6	A	ENDURA FUNGICIDE	7969	197	AA	0	92.8	OZ	10	15S	03E	G	WESTERN	11.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	9/27/2006	11.6	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.09	GA	10	15S	03E	G	WESTERN	11.6	A	LETTUCE ROMAINE

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050014	9/27/2006	11.6	A	GOWAN MALATHIOI	10163	21	ZB	0	2.9	GA	10	15S	03E	G	WESTERN	11.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	9/27/2006	11.6	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.39	GA	10	15S	03E	G	WESTERN	11.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	10/11/2006	11.6	A	ASSAIL 70 WP INSE	8033	23	AA	82695	17.4	OZ	10	15S	03E	G	WESTERN	11.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	10/11/2006	11.6	A	DUPONT MANEX FU	352	655	AA	0	4.64	GA	10	15S	03E	G	WESTERN	11.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	10/11/2006	11.6	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.09	GA	10	15S	03E	G	WESTERN	11.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	10/11/2006	11.6	A	GOWAN MALATHIOI	10163	21	ZB	0	2.9	GA	10	15S	03E	G	WESTERN	11.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	10/11/2006	11.6	A	INTREPID 2F	62719	442	AA	0	0.72	GA	10	15S	03E	G	WESTERN	11.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	10/24/2006	11.6	A	ASSAIL 70 WP INSE	8033	23	AA	82695	17.4	OZ	10	15S	03E	G	WESTERN	11.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	10/24/2006	11.6	A	BLOCKADE 50WG P	100	922	ZB	0	11.6	OZ	10	15S	03E	G	WESTERN	11.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	10/24/2006	11.6	A	DU PONT LANNATE	352	342	ZB	0	11.6	LB	10	15S	03E	G	WESTERN	11.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	10/24/2006	11.6	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.09	GA	10	15S	03E	G	WESTERN	11.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	10/24/2006	11.6	A	SUCCESS	62719	292	AA	0	1.45	QT	10	15S	03E	G	WESTERN	11.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050015	6/14/2006	12.6	A	ACEPHATE 75SP AG	51036	236	AA	0	16.76	LB	10	15S	03E	G	WESTERN	12.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	6/14/2006	12.6	A	DIAZINON 50W	66222	10	ZA	0	12.6	LB	10	15S	03E	G	WESTERN	12.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	6/14/2006	12.6	A	DUPONT MANEX FU	352	655	AA	0	5.04	GA	10	15S	03E	G	WESTERN	12.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	6/14/2006	12.6	A	ENDURA FUNGICIDE	7969	197	AA	0	100.8	OZ	10	15S	03E	G	WESTERN	12.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	6/14/2006	12.6	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.18	GA	10	15S	03E	G	WESTERN	12.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	6/27/2006	12.6	A	ACEPHATE 75SP AG	51036	236	AA	0	16.76	LB	10	15S	03E	G	WESTERN	12.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	6/27/2006	12.6	A	ACROBAT 50 WP FU	241	410	AA	0	5.04	LB	10	15S	03E	G	WESTERN	12.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	6/27/2006	12.6	A	DUPONT MANEX FU	352	655	AA	0	5.04	GA	10	15S	03E	G	WESTERN	12.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	6/27/2006	12.6	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.18	GA	10	15S	03E	G	WESTERN	12.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	6/27/2006	12.6	A	MSR SPRAY CONCE	10163	220	ZC	0	3.15	GA	10	15S	03E	G	WESTERN	12.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	7/13/2006	12.6	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.18	GA	10	15S	03E	G	WESTERN	12.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	7/13/2006	12.6	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.42	GA	10	15S	03E	G	WESTERN	12.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	7/13/2006	12.6	A	SUCCESS	62719	292	AA	0	1.58	QT	10	15S	03E	G	WESTERN	12.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	9/27/2006	12.7	A	ASSAIL 70 WP INSE	8033	23	AA	82695	19.05	OZ	10	15S	03E	G	WESTERN	12.7	A	LETTUCE LEAF
27S192A	BOSS FAR	050015	9/27/2006	12.7	A	DUPONT MANEX FU	352	655	AA	0	5.08	GA	10	15S	03E	G	WESTERN	12.7	A	LETTUCE LEAF
27S192A	BOSS FAR	050015	9/27/2006	12.7	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.19	GA	10	15S	03E	G	WESTERN	12.7	A	LETTUCE LEAF
27S192A	BOSS FAR	050015	9/27/2006	12.7	A	GOWAN MALATHIOI	10163	21	ZB	0	3.18	GA	10	15S	03E	G	WESTERN	12.7	A	LETTUCE LEAF
27S192A	BOSS FAR	050015	9/27/2006	12.7	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.43	GA	10	15S	03E	G	WESTERN	12.7	A	LETTUCE LEAF
27S192A	BOSS FAR	050015	10/12/2006	12.7	A	ASSAIL 70 WP INSE	8033	23	AA	82695	19.05	OZ	10	15S	03E	G	WESTERN	12.7	A	LETTUCE LEAF
27S192A	BOSS FAR	050015	10/12/2006	12.7	A	DUPONT MANEX FU	352	655	AA	0	5.08	GA	10	15S	03E	G	WESTERN	12.7	A	LETTUCE LEAF
27S192A	BOSS FAR	050015	10/12/2006	12.7	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.19	GA	10	15S	03E	G	WESTERN	12.7	A	LETTUCE LEAF
27S192A	BOSS FAR	050015	10/12/2006	12.7	A	GOWAN MALATHIOI	10163	21	ZB	0	3.18	GA	10	15S	03E	G	WESTERN	12.7	A	LETTUCE LEAF
27S192A	BOSS FAR	050015	10/12/2006	12.7	A	INTREPID 2F	62719	442	AA	0	0.79	GA	10	15S	03E	G	WESTERN	12.7	A	LETTUCE LEAF
27S192A	BOSS FAR	050015	10/21/2006	12.7	A	ASSAIL 70 WP INSE	8033	23	AA	82695	21.59	OZ	10	15S	03E	G	WESTERN	12.7	A	LETTUCE LEAF

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050015	10/21/2006	12.7	A	BLOCKADE 50WG P	100	922	ZB	0	12.7	OZ	10	15S	03E	G	WESTERN	12.7	A	LETTUCE LEAF
27S192A	BOSS FAR	050015	10/21/2006	12.7	A	DU PONT LANNATE	352	342	ZB	0	12.7	LB	10	15S	03E	G	WESTERN	12.7	A	LETTUCE LEAF
27S192A	BOSS FAR	050015	10/21/2006	12.7	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.19	GA	10	15S	03E	G	WESTERN	12.7	A	LETTUCE LEAF
27S192A	BOSS FAR	050016	6/22/2006	12.2	A	ACEPHATE 75SP AG	51036	236	AA	0	16.23	LB	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	6/22/2006	12.2	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	48.8	OZ	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	6/22/2006	12.2	A	DUPONT MANEX FU	352	655	AA	0	4.88	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	6/22/2006	12.2	A	ENDURA FUNGICIDE	7969	197	AA	0	97.6	OZ	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	6/22/2006	12.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.14	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	7/5/2006	12.2	A	ACROBAT 50 WP FU	241	410	AA	0	4.88	LB	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	7/5/2006	12.2	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	61	OZ	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	7/5/2006	12.2	A	DU PONT LANNATE	352	342	ZB	0	12.2	LB	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	7/5/2006	12.2	A	DUPONT MANEX FU	352	655	AA	0	4.88	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	7/5/2006	12.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.14	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	7/5/2006	12.2	A	MSR SPRAY CONCE	10163	220	ZC	0	3.05	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	9/28/2006	12.2	A	ASSAIL 70 WP INSE	8033	23	AA	82695	20.74	OZ	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	9/28/2006	12.2	A	DUPONT MANEX FU	352	655	AA	0	4.88	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	9/28/2006	12.2	A	ENDURA FUNGICIDE	7969	197	AA	0	97.6	OZ	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	9/28/2006	12.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.14	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	9/28/2006	12.2	A	GOWAN MALATHIOI	10163	21	ZB	0	3.05	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	9/28/2006	12.2	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.41	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	10/12/2006	12.2	A	ASSAIL 70 WP INSE	8033	23	AA	82695	18.3	OZ	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	10/12/2006	12.2	A	BLOCKADE 50WG P	100	922	ZB	0	12.2	OZ	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	10/12/2006	12.2	A	DUPONT MANEX FU	352	655	AA	0	4.88	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	10/12/2006	12.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.14	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	10/12/2006	12.2	A	GOWAN MALATHIOI	10163	21	ZB	0	3.05	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	10/12/2006	12.2	A	INTREPID 2F	62719	442	AA	0	0.76	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	10/24/2006	12.2	A	ASSAIL 70 WP INSE	8033	23	AA	82695	18.3	OZ	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	10/24/2006	12.2	A	BLOCKADE 50WG P	100	922	ZB	0	12.2	OZ	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	10/24/2006	12.2	A	DU PONT LANNATE	352	342	ZB	0	12.2	LB	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	10/24/2006	12.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.14	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	10/24/2006	12.2	A	SUCCESS	62719	292	AA	0	1.53	QT	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	11/4/2006	12.2	A	ASSAIL 70 WP INSE	8033	23	AA	82695	20.74	OZ	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	11/4/2006	12.2	A	FIRST CHOICE BRE	11656	50095	AA	0	1.07	QT	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	11/4/2006	12.2	A	FULFILL	100	912	ZA	0	33.55	OZ	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	7/5/2006	13	A	DIAZINON 50W	66222	10	ZA	0	13	LB	10	15S	03E	G	WESTERN	13	A	LETTUCE LEAF
27S192A	BOSS FAR	050017	7/5/2006	13	A	DUPONT MANEX FU	352	655	AA	0	5.2	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE LEAF

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050017	7/5/2006	13	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.22	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE LEAF
27S192A	BOSS FAR	050017	7/5/2006	13	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.44	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE LEAF
27S192A	BOSS FAR	050017	7/15/2006	13	A	BLOCKADE 50WG P	100	922	ZB	0	13	OZ	10	15S	03E	G	WESTERN	13	A	LETTUCE LEAF
27S192A	BOSS FAR	050017	7/15/2006	13	A	DU PONT LANNATE	352	342	ZB	0	13	LB	10	15S	03E	G	WESTERN	13	A	LETTUCE LEAF
27S192A	BOSS FAR	050017	7/15/2006	13	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.22	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE LEAF
27S192A	BOSS FAR	050017	7/15/2006	13	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.44	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE LEAF
27S192A	BOSS FAR	050017	7/20/2006	13	A	ASSAIL 70WP INSEC	8033	23	AA	4581	22.1	OZ	10	15S	03E	G	WESTERN	13	A	LETTUCE LEAF
27S192A	BOSS FAR	050017	7/20/2006	13	A	FIRST CHOICE BRE/	11656	50095	AA	0	0.81	QT	10	15S	03E	G	WESTERN	13	A	LETTUCE LEAF
27S192A	BOSS FAR	050017	7/20/2006	13	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.44	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE LEAF
27S192A	BOSS FAR	050017	7/24/2006	13	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.22	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE LEAF
27S192A	BOSS FAR	050017	7/24/2006	13	A	FULFILL	100	912	ZA	0	35.75	OZ	10	15S	03E	G	WESTERN	13	A	LETTUCE LEAF
27S192A	BOSS FAR	050017	7/24/2006	13	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.44	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE LEAF
27S192A	BOSS FAR	050017	7/24/2006	13	A	PROVADO 1.6 FLOW	264	763	AA	0	0.38	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE LEAF
27S192A	BOSS FAR	050017	10/12/2006	13	A	DUPONT MANEX FU	352	655	AA	0	5.2	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	10/12/2006	13	A	ENDURA FUNGICIDE	7969	197	AA	0	104	OZ	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	10/12/2006	13	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.22	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	10/12/2006	13	A	GOWAN MALATHIOI	10163	21	ZB	0	3.25	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	10/12/2006	13	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.44	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	10/12/2006	13	A	PROVADO 1.6 FLOW	264	763	AA	0	0.38	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	10/24/2006	13	A	ASSAIL 70 WP INSE(	8033	23	AA	82695	19.5	OZ	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	10/24/2006	13	A	BLOCKADE 50WG P	100	922	ZB	0	13	OZ	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	10/24/2006	13	A	DU PONT LANNATE	352	342	ZB	0	13	LB	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	10/24/2006	13	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.22	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	10/24/2006	13	A	SUCCESS	62719	292	AA	0	1.63	QT	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	11/1/2006	13	A	ACROBAT 50 WP FU	241	410	AA	0	5.2	LB	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	11/1/2006	13	A	ASSAIL 70 WP INSE(	8033	23	AA	82695	22.1	OZ	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	11/1/2006	13	A	BLOCKADE 50WG P	100	922	ZB	0	13	OZ	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	11/1/2006	13	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.22	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	11/1/2006	13	A	SUCCESS	62719	292	AA	0	2.03	QT	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	11/10/2006	13	A	ALIETTE WDG FUNC	264	516	ZB	0	39	LB	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	11/10/2006	13	A	PROVADO 1.6 FLOW	264	763	AA	0	0.38	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	05003E	4/13/2006	6.1	A	ALIETTE WDG FUNC	264	516	AA	0	24.4	LB	10	15S	03E	A	R & B HEL	20	A	LETTUCE ROMAINE
27S192A	BOSS FAR	05003E	4/13/2006	6.1	A	PROAXIS INSECTICI	74921	3	AA	55467	0.18	GA	10	15S	03E	A	R & B HEL	20	A	LETTUCE ROMAINE
27S192A	BOSS FAR	05003E	4/13/2006	6.1	A	PROVADO 1.6 FLOW	264	763	AA	0	0.18	GA	10	15S	03E	A	R & B HEL	20	A	LETTUCE ROMAINE
27S192A	BOSS FAR	05003W	4/13/2006	6	A	ALIETTE WDG FUNC	264	516	AA	0	24	LB	10	15S	03E	A	R & B HEL	20	A	LETTUCE HEAD
27S192A	BOSS FAR	05003W	4/13/2006	6	A	DIAZINON 50W	66222	10	ZA	0	6	LB	10	15S	03E	A	R & B HEL	20	A	LETTUCE HEAD

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	05003W	4/13/2006	6	A	MANEX	1812	251	ZA	0	2.4	GA	10	15S	03E	A	R & B HEL	20	A	LETTUCE HEAD
27S192A	BOSS FAR	05003W	4/13/2006	6	A	PROAXIS INSECTICI	74921	3	AA	55467	0.18	GA	10	15S	03E	A	R & B HEL	20	A	LETTUCE HEAD
27S192A	BOSS FAR	05003W	4/13/2006	6	A	PROVADO 1.6 FLOW	264	763	AA	0	0.18	GA	10	15S	03E	A	R & B HEL	20	A	LETTUCE HEAD
27S192A	BOSS FAR	05003W	4/26/2006	6	A	ALIETTE WDG FUNG	264	516	AA	0	24	LB	10	15S	03E	A	R & B HEL	20	A	LETTUCE HEAD
27S192A	BOSS FAR	05003W	4/26/2006	6	A	WARRIOR INSECTIC	100	1112	AA	0	0.18	GA	10	15S	03E	A	R & B HEL	20	A	LETTUCE HEAD

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050000	3/31/2006	12.5	A	FIRST CHOICE EXCI	11656	50097	AA	0	3.13	GA	10	15S	03E	G	WESTERN	12.5	A	UNCULTIVATED AG
27S192A	BOSS FAR	050000	3/31/2006	12.5	A	GRAMOXONE INTEC	100	1217	AA	0	4.22	GA	10	15S	03E	G	WESTERN	12.5	A	UNCULTIVATED AG
27S192A	BOSS FAR	050000	3/31/2006	12.5	A	ROUNDUP ORIGINA	524	539	AA	0	4.69	GA	10	15S	03E	G	WESTERN	12.5	A	UNCULTIVATED AG
27S192A	BOSS FAR	050000	4/29/2006	3	A	FIRST CHOICE EXCI	11656	50097	AA	0	0.75	GA	10	15S	03E	G	WESTERN	3	A	UNCULTIVATED AG
27S192A	BOSS FAR	050000	4/29/2006	3	A	GRAMOXONE MAX	100	1074	AA	0	1.01	GA	10	15S	03E	G	WESTERN	3	A	UNCULTIVATED AG
27S192A	BOSS FAR	050000	4/29/2006	3	A	ROUNDUP ORIGINA	524	539	AA	0	1.13	GA	10	15S	03E	G	WESTERN	3	A	UNCULTIVATED AG
27S192A	BOSS FAR	050000	12/26/2006	5	A	FIRST CHOICE EXCI	11656	50097	AA	0	1.25	GA	10	15S	03E	G	WESTERN	5	A	UNCULTIVATED AG
27S192A	BOSS FAR	050000	12/26/2006	5	A	GRAMOXONE MAX	100	1074	AA	0	1.69	GA	10	15S	03E	G	WESTERN	5	A	UNCULTIVATED AG
27S192A	BOSS FAR	050000	12/26/2006	5	A	ROUNDUP ORIGINA	524	539	AA	0	1.88	GA	10	15S	03E	G	WESTERN	5	A	UNCULTIVATED AG
27S192A	BOSS FAR	050001	5/4/2006	17.6	A	ACEPHATE 75SP AG	51036	236	AA	0	23.41	LB	10	15S	03E	G	WESTERN	17.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/4/2006	17.6	A	DIAZINON 50W	66222	10	ZA	0	17.6	LB	10	15S	03E	G	WESTERN	17.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/4/2006	17.6	A	DUPONT MANEX FU	352	655	AA	0	7.04	GA	10	15S	03E	G	WESTERN	17.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/4/2006	17.6	A	ENDURA FUNGICIDE	7969	197	AA	0	176	OZ	10	15S	03E	G	WESTERN	17.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/4/2006	17.6	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.65	GA	10	15S	03E	G	WESTERN	17.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/18/2006	17.1	A	ACEPHATE 75SP AG	51036	236	AA	0	22.74	LB	10	15S	03E	G	WESTERN	17.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/18/2006	17.1	A	ACROBAT 50 WP FU	241	410	AA	0	6.84	LB	10	15S	03E	G	WESTERN	17.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/18/2006	17.1	A	DIAZINON 50W	66222	10	ZA	0	17.1	LB	10	15S	03E	G	WESTERN	17.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/18/2006	17.1	A	DUPONT MANEX FU	352	655	AA	0	6.84	GA	10	15S	03E	G	WESTERN	17.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/18/2006	17.1	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.6	GA	10	15S	03E	G	WESTERN	17.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/30/2006	17.6	A	ACROBAT 50 WP FU	241	410	AA	0	7.04	LB	10	15S	03E	G	WESTERN	17.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/30/2006	17.6	A	DU PONT ASANA XL	352	515	AA	0	1.32	GA	10	15S	03E	G	WESTERN	17.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/30/2006	17.6	A	FIRST CHOICE BRE/	11656	50095	AA	0	1.1	QT	10	15S	03E	G	WESTERN	17.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/30/2006	17.6	A	RIDOMIL GOLD EC	100	801	ZA	0	0.55	GA	10	15S	03E	G	WESTERN	17.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	7/27/2006	17.1	A	DIAZINON 50W	66222	10	ZA	0	17.1	LB	10	15S	03E	G	WESTERN	17.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050001	7/27/2006	17.1	A	DUPONT MANEX FU	352	655	AA	0	6.84	GA	10	15S	03E	G	WESTERN	17.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050001	7/27/2006	17.1	A	ENDURA FUNGICIDE	7969	197	AA	0	136.8	OZ	10	15S	03E	G	WESTERN	17.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050001	7/27/2006	17.1	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.6	GA	10	15S	03E	G	WESTERN	17.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050001	7/27/2006	17.1	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.57	GA	10	15S	03E	G	WESTERN	17.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050001	8/9/2006	17.1	A	BLOCKADE 50WG P	100	922	ZB	0	17.1	OZ	10	15S	03E	G	WESTERN	17.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050001	8/9/2006	17.1	A	DIAZINON 50W	66222	10	ZA	0	17.1	LB	10	15S	03E	G	WESTERN	17.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050001	8/9/2006	17.1	A	DU PONT LANNATE	352	342	ZB	0	17.1	LB	10	15S	03E	G	WESTERN	17.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050001	8/9/2006	17.1	A	DUPONT MANEX FU	352	655	AA	0	6.84	GA	10	15S	03E	G	WESTERN	17.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050001	8/9/2006	17.1	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.6	GA	10	15S	03E	G	WESTERN	17.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050001	8/21/2006	10	A	ASSAIL 70WP INSEC	8033	23	AA	4581	17	OZ	10	15S	03E	G	WESTERN	10	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050001	8/21/2006	10	A	BLOCKADE 50WG P	100	922	ZB	0	10	OZ	10	15S	03E	G	WESTERN	10	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050001	8/21/2006	10	A	FIRST CHOICE BRE/	11656	50095	AA	0	0.63	QT	10	15S	03E	G	WESTERN	10	A	LETTUCE ROMAINE

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050001	8/21/2006	7.1	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.67	GA	10	15S	03E	G	WESTERN	7.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050001	8/21/2006	10	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.34	GA	10	15S	03E	G	WESTERN	10	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050001	8/21/2006	7.1	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.24	GA	10	15S	03E	G	WESTERN	7.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	2/24/2006	19.8	A	DIAZINON 50W	66222	10	ZA	0	19.8	LB	10	15S	03E	G	WESTERN	19.8	A	LETTUCE LEAF
27S192A	BOSS FAR	050002	2/24/2006	19.8	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.86	GA	10	15S	03E	G	WESTERN	19.8	A	LETTUCE LEAF
27S192A	BOSS FAR	050002	2/24/2006	19.8	A	MANEX	1812	251	ZA	0	7.92	GA	10	15S	03E	G	WESTERN	19.8	A	LETTUCE LEAF
27S192A	BOSS FAR	050002	3/24/2006	19.8	A	ALIETTE WDG FUNG	264	516	ZB	0	59.4	LB	10	15S	03E	G	WESTERN	19.8	A	LETTUCE LEAF
27S192A	BOSS FAR	050002	3/24/2006	19.8	A	DIAZINON 50W	66222	10	ZA	0	19.8	LB	10	15S	03E	G	WESTERN	19.8	A	LETTUCE LEAF
27S192A	BOSS FAR	050002	3/24/2006	19.8	A	DUPONT MANEX FU	352	655	AA	0	7.92	GA	10	15S	03E	G	WESTERN	19.8	A	LETTUCE LEAF
27S192A	BOSS FAR	050002	3/24/2006	19.8	A	PROVADO 1.6 FLOW	264	763	AA	0	0.58	GA	10	15S	03E	G	WESTERN	19.8	A	LETTUCE LEAF
27S192A	BOSS FAR	050002	4/13/2006	19.8	A	ALIETTE WDG FUNG	264	516	AA	0	79.2	LB	10	15S	03E	A	R & B HEL	20	A	LETTUCE LEAF
27S192A	BOSS FAR	050002	4/13/2006	19.8	A	PROAXIS INSECTICI	74921	3	AA	55467	0.59	GA	10	15S	03E	A	R & B HEL	20	A	LETTUCE LEAF
27S192A	BOSS FAR	050002	4/13/2006	19.8	A	PROVADO 1.6 FLOW	264	763	AA	0	0.58	GA	10	15S	03E	A	R & B HEL	20	A	LETTUCE LEAF
27S192A	BOSS FAR	050002	6/30/2006	9	A	ACEPHATE 75SP AG	51036	236	AA	0	11.97	LB	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	6/30/2006	9	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	36	OZ	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	6/30/2006	10.85	A	DIAZINON 50W	66222	10	ZA	0	10.85	LB	10	15S	03E	G	WESTERN	10.85	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	6/30/2006	9	A	DIAZINON 50W	66222	10	ZA	0	9	LB	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	6/30/2006	10.85	A	DUPONT MANEX FU	352	655	AA	0	4.34	GA	10	15S	03E	G	WESTERN	10.85	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	6/30/2006	9	A	DUPONT MANEX FU	352	655	AA	0	3.6	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	6/30/2006	10.85	A	ENDURA FUNGICIDE	7969	197	AA	0	86.8	OZ	10	15S	03E	G	WESTERN	10.85	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	6/30/2006	9	A	ENDURA FUNGICIDE	7969	197	AA	0	72	OZ	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	6/30/2006	10.85	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.02	GA	10	15S	03E	G	WESTERN	10.85	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	6/30/2006	9	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.84	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	6/30/2006	10.85	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.36	GA	10	15S	03E	G	WESTERN	10.85	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	7/10/2006	9	A	ACROBAT 50 WP FU	241	410	AA	0	3.6	LB	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	7/10/2006	9	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	45	OZ	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	7/10/2006	10.85	A	BLOCKADE 50WG P	100	922	ZB	0	10.85	OZ	10	15S	03E	G	WESTERN	10.85	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	7/10/2006	10.85	A	DU PONT LANNATE	352	342	ZB	0	10.85	LB	10	15S	03E	G	WESTERN	10.85	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	7/10/2006	9	A	DU PONT LANNATE	352	342	ZB	0	9	LB	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	7/10/2006	10.85	A	DUPONT MANEX FU	352	655	AA	0	4.34	GA	10	15S	03E	G	WESTERN	10.85	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	7/10/2006	9	A	DUPONT MANEX FU	352	655	AA	0	3.6	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	7/10/2006	10.85	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.02	GA	10	15S	03E	G	WESTERN	10.85	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	7/10/2006	9	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.84	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	7/10/2006	9	A	MSR SPRAY CONCE	10163	220	ZC	0	2.25	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	7/10/2006	10.85	A	PROVADO 1.6 FLOW	264	763	AA	0	0.32	GA	10	15S	03E	G	WESTERN	10.85	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	7/25/2006	10.85	A	BLOCKADE 50WG P	100	922	ZB	0	10.85	OZ	10	15S	03E	G	WESTERN	10.85	A	LETTUCE LEAF

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050002	7/25/2006	9	A	DREXEL DIMETHOA	19713	231	AA	0	0.56	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	7/25/2006	10.85	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.02	GA	10	15S	03E	G	WESTERN	10.85	A	LETTUCE LEAF
27S192A	BOSS FAR	050002	7/25/2006	9	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.84	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	7/25/2006	10.85	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.36	GA	10	15S	03E	G	WESTERN	10.85	A	LETTUCE LEAF
27S192A	BOSS FAR	050002	7/25/2006	10.85	A	PROVADO 1.6 FLOW	264	763	AA	0	0.32	GA	10	15S	03E	G	WESTERN	10.85	A	LETTUCE LEAF
27S192A	BOSS FAR	050002	7/25/2006	9	A	PROVADO 1.6 FLOW	264	763	AA	0	0.26	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	7/25/2006	9	A	SUCCESS	62719	292	AA	0	1.27	QT	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050003	2/24/2006	16	A	ACEPHATE 75SP AG	51036	236	AA	0	16	LB	10	15S	03E	G	WESTERN	16	A	LETTUCE HEAD
27S192A	BOSS FAR	050003	2/24/2006	6.1	A	DIAZINON 50W	66222	10	ZA	0	6.1	LB	10	15S	03E	G	WESTERN	6.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050003	2/24/2006	6.1	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.57	GA	10	15S	03E	G	WESTERN	6.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050003	2/24/2006	16	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.5	GA	10	15S	03E	G	WESTERN	16	A	LETTUCE HEAD
27S192A	BOSS FAR	050003	2/24/2006	6.1	A	MANEX	1812	251	ZA	0	2.44	GA	10	15S	03E	G	WESTERN	6.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050003	2/24/2006	16	A	MANEX	1812	251	ZA	0	6.4	GA	10	15S	03E	G	WESTERN	16	A	LETTUCE HEAD
27S192A	BOSS FAR	050003	2/24/2006	6.1	A	ROVRAL BRAND 4 F	264	482	ZA	0	1.53	GA	10	15S	03E	G	WESTERN	6.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050003	2/24/2006	16	A	ROVRAL BRAND 4 F	264	482	ZA	0	4	GA	10	15S	03E	G	WESTERN	16	A	LETTUCE HEAD
27S192A	BOSS FAR	050003	3/24/2006	16	A	ACEPHATE 75SP AG	51036	236	AA	0	21.28	LB	10	15S	03E	G	WESTERN	16	A	LETTUCE HEAD
27S192A	BOSS FAR	050003	3/24/2006	16	A	ACROBAT 50 WP FU	241	410	AA	0	6.4	LB	10	15S	03E	G	WESTERN	16	A	LETTUCE HEAD
27S192A	BOSS FAR	050003	3/24/2006	6.1	A	ALIETTE WDG FUNG	264	516	ZB	0	18.3	LB	10	15S	03E	G	WESTERN	6.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050003	3/24/2006	6.1	A	DIAZINON 50W	66222	10	ZA	0	6.1	LB	10	15S	03E	G	WESTERN	6.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050003	3/24/2006	6.1	A	DUPONT MANEX FU	352	655	AA	0	2.44	GA	10	15S	03E	G	WESTERN	6.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050003	3/24/2006	16	A	DUPONT MANEX FU	352	655	AA	0	6.4	GA	10	15S	03E	G	WESTERN	16	A	LETTUCE HEAD
27S192A	BOSS FAR	050003	3/24/2006	16	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.5	GA	10	15S	03E	G	WESTERN	16	A	LETTUCE HEAD
27S192A	BOSS FAR	050003	3/24/2006	16	A	MSR SPRAY CONCE	10163	220	ZC	0	4	GA	10	15S	03E	G	WESTERN	16	A	LETTUCE HEAD
27S192A	BOSS FAR	050003	3/24/2006	6.1	A	PROVADO 1.6 FLOW	264	763	AA	0	0.18	GA	10	15S	03E	G	WESTERN	6.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050003	7/2/2006	21.92	A	DIAZINON 50W	66222	10	ZA	0	21.92	LB	10	15S	03E	G	WESTERN	21.92	A	LETTUCE LEAF
27S192A	BOSS FAR	050003	7/2/2006	21.92	A	DUPONT MANEX FU	352	655	AA	0	8.77	GA	10	15S	03E	G	WESTERN	21.92	A	LETTUCE LEAF
27S192A	BOSS FAR	050003	7/2/2006	21.92	A	FIRST CHOICE NO F	11656	50009	ZB	0	2.06	GA	10	15S	03E	G	WESTERN	21.92	A	LETTUCE LEAF
27S192A	BOSS FAR	050003	7/2/2006	21.92	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.74	GA	10	15S	03E	G	WESTERN	21.92	A	LETTUCE LEAF
27S192A	BOSS FAR	050003	7/14/2006	21.92	A	BLOCKADE 50WG P	100	922	ZB	0	21.92	OZ	10	15S	03E	G	WESTERN	21.92	A	LETTUCE LEAF
27S192A	BOSS FAR	050003	7/14/2006	21.92	A	DU PONT LANNATE	352	342	ZB	0	21.92	LB	10	15S	03E	G	WESTERN	21.92	A	LETTUCE LEAF
27S192A	BOSS FAR	050003	7/14/2006	21.92	A	FIRST CHOICE NO F	11656	50009	ZB	0	2.06	GA	10	15S	03E	G	WESTERN	21.92	A	LETTUCE LEAF
27S192A	BOSS FAR	050003	7/14/2006	21.92	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.74	GA	10	15S	03E	G	WESTERN	21.92	A	LETTUCE LEAF
27S192A	BOSS FAR	050003	7/14/2006	21.92	A	PROVADO 1.6 FLOW	264	763	AA	0	0.64	GA	10	15S	03E	G	WESTERN	21.92	A	LETTUCE LEAF
27S192A	BOSS FAR	050003	7/25/2006	21.92	A	BLOCKADE 50WG P	100	922	ZB	0	21.92	OZ	10	15S	03E	G	WESTERN	21.92	A	LETTUCE LEAF
27S192A	BOSS FAR	050003	7/25/2006	21.92	A	FIRST CHOICE NO F	11656	50009	ZB	0	2.06	GA	10	15S	03E	G	WESTERN	21.92	A	LETTUCE LEAF
27S192A	BOSS FAR	050003	7/25/2006	21.92	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.74	GA	10	15S	03E	G	WESTERN	21.92	A	LETTUCE LEAF

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050003	7/25/2006	21.92	A	PROVADO 1.6 FLOW	264	763	AA	0	0.64	GA	10	15S	03E	G	WESTERN	21.92	A	LETTUCE LEAF
27S192A	BOSS FAR	050003	12/21/2006	11	A	PREFAR 4-E	10163	200	AA	0	4.13	GA	10	15S	03E	G	WESTERN	11	A	LETTUCE HEAD
27S192A	BOSS FAR	050004	4/13/2006	10	A	ALIETTE WDG FUNG	264	516	AA	0	40	LB	10	15S	03E	A	R & B HEL	20	A	LETTUCE HEAD
27S192A	BOSS FAR	050004	4/13/2006	10	A	DIAZINON 50W	66222	10	ZA	0	10	LB	10	15S	03E	A	R & B HEL	20	A	LETTUCE HEAD
27S192A	BOSS FAR	050004	4/13/2006	10	A	MANEX	1812	251	ZA	0	4	GA	10	15S	03E	A	R & B HEL	20	A	LETTUCE HEAD
27S192A	BOSS FAR	050004	4/13/2006	10	A	PROAXIS INSECTICI	74921	3	AA	55467	0.3	GA	10	15S	03E	A	R & B HEL	20	A	LETTUCE HEAD
27S192A	BOSS FAR	050004	4/13/2006	10	A	PROVADO 1.6 FLOW	264	763	AA	0	0.29	GA	10	15S	03E	A	R & B HEL	20	A	LETTUCE HEAD
27S192A	BOSS FAR	050004	4/26/2006	10	A	ALIETTE WDG FUNG	264	516	AA	0	40	LB	10	15S	03E	A	R & B HEL	20	A	LETTUCE HEAD
27S192A	BOSS FAR	050004	4/26/2006	10	A	WARRIOR INSECTIC	100	1112	AA	0	0.3	GA	10	15S	03E	A	R & B HEL	20	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	5/25/2006	17.9	A	ACEPHATE 75SP AG	51036	236	AA	0	23.81	LB	10	15S	03E	G	WESTERN	17.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	5/25/2006	17.9	A	DUPONT MANEX FU	352	655	AA	0	7.16	GA	10	15S	03E	G	WESTERN	17.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	5/25/2006	17.9	A	ENDURA FUNGICIDE	7969	197	AA	0	143.2	OZ	10	15S	03E	G	WESTERN	17.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	5/25/2006	17.9	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.68	GA	10	15S	03E	G	WESTERN	17.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	6/5/2006	17.9	A	ACEPHATE 75SP AG	51036	236	AA	0	23.81	LB	10	15S	03E	G	WESTERN	17.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	6/5/2006	17.9	A	ACROBAT 50 WP FU	241	410	AA	0	7.16	LB	10	15S	03E	G	WESTERN	17.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	6/5/2006	17.9	A	DUPONT MANEX FU	352	655	AA	0	7.16	GA	10	15S	03E	G	WESTERN	17.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	6/5/2006	17.9	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.68	GA	10	15S	03E	G	WESTERN	17.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	6/5/2006	17.9	A	MSR SPRAY CONCE	10163	220	ZC	0	4.48	GA	10	15S	03E	G	WESTERN	17.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	6/17/2006	17.9	A	DU PONT ASANA XL	352	515	AA	0	1.34	GA	10	15S	03E	G	WESTERN	17.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	6/17/2006	17.9	A	FIRST CHOICE BRE/	11656	50095	AA	0	1.12	QT	10	15S	03E	G	WESTERN	17.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	6/17/2006	17.9	A	PROVADO 1.6 FLOW	264	763	AA	0	0.52	GA	10	15S	03E	G	WESTERN	17.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	8/24/2006	17.6	A	DIMETHOATE 4E	51036	110	AA	0	1.1	GA	10	15S	03E	G	WESTERN	17.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	8/24/2006	17.6	A	DUPONT MANEX FU	352	655	AA	0	7.04	GA	10	15S	03E	G	WESTERN	17.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	8/24/2006	17.6	A	ENDURA FUNGICIDE	7969	197	AA	0	140.8	OZ	10	15S	03E	G	WESTERN	17.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	8/24/2006	17.6	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.65	GA	10	15S	03E	G	WESTERN	17.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	9/8/2006	17.6	A	ASSAIL 70 WP INSE	8033	23	AA	82695	29.92	OZ	10	15S	03E	G	WESTERN	17.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	9/8/2006	17.6	A	BLOCKADE 50WG P	100	922	ZB	0	17.6	OZ	10	15S	03E	G	WESTERN	17.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	9/8/2006	17.6	A	DIAZINON 50W	66222	10	ZA	0	17.6	LB	10	15S	03E	G	WESTERN	17.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	9/8/2006	17.6	A	DIMETHOATE 4E	51036	110	AA	0	1.1	GA	10	15S	03E	G	WESTERN	17.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	9/8/2006	17.6	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.65	GA	10	15S	03E	G	WESTERN	17.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	9/8/2006	17.6	A	INTREPID 2F	62719	442	AA	0	1.1	GA	10	15S	03E	G	WESTERN	17.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	9/19/2006	17.6	A	ASSAIL 70 WP INSE	8033	23	AA	82695	29.92	OZ	10	15S	03E	G	WESTERN	17.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	9/19/2006	17.6	A	BLOCKADE 50WG P	100	922	ZB	0	17.6	OZ	10	15S	03E	G	WESTERN	17.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	9/19/2006	17.6	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.65	GA	10	15S	03E	G	WESTERN	17.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	9/19/2006	17.6	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.59	GA	10	15S	03E	G	WESTERN	17.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	9/19/2006	17.6	A	SUCCESS	62719	292	AA	0	2.48	QT	10	15S	03E	G	WESTERN	17.6	A	LETTUCE ROMAINE

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050005	9/23/2006	5.9	A	DU PONT LANNATE	352	342	ZB	0	2.95	LB	10	15S	03E	G	WESTERN	5.9	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	9/23/2006	5.9	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.77	GA	10	15S	03E	G	WESTERN	5.9	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	9/23/2006	5.9	A	PROVADO 1.6 FLOW	264	763	AA	0	0.17	GA	10	15S	03E	G	WESTERN	5.9	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050006	5/18/2006	18.5	A	ACEPHATE 75SP AG	51036	236	AA	0	24.61	LB	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	5/18/2006	18.5	A	DUPONT MANEX FU	352	655	AA	0	7.4	GA	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	5/18/2006	18.5	A	ENDURA FUNGICIDE	7969	197	AA	0	148	OZ	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	5/18/2006	18.5	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.73	GA	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	5/31/2006	18.5	A	ACEPHATE 75SP AG	51036	236	AA	0	24.61	LB	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	5/31/2006	18.5	A	ACROBAT 50 WP FU	241	410	AA	0	7.4	LB	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	5/31/2006	18.5	A	DIAZINON 50W	66222	10	ZA	0	18.5	LB	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	5/31/2006	18.5	A	DUPONT MANEX FU	352	655	AA	0	7.4	GA	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	5/31/2006	18.5	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.73	GA	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	6/5/2006	18.5	A	DREXEL DIMETHOA	19713	231	AA	0	1.16	GA	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	6/5/2006	18.5	A	DUPONT TANOS FU	352	604	AA	0	9.25	LB	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	6/5/2006	18.5	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.73	GA	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	6/5/2006	18.5	A	MSR SPRAY CONCE	10163	220	ZC	0	4.63	GA	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	6/5/2006	18.5	A	PROAXIS INSECTICI	74921	3	AA	55467	0.55	GA	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	6/5/2006	18.5	A	RIDOMIL GOLD EC	100	801	ZA	0	0.58	GA	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	8/17/2006	18.35	A	ACEPHATE 75SP AG	51036	236	AA	0	24.41	LB	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	8/17/2006	18.35	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	110.1	OZ	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	8/17/2006	18.35	A	DIAZINON 50W	66222	10	ZA	0	18.35	LB	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	8/17/2006	18.35	A	DUPONT MANEX FU	352	655	AA	0	7.34	GA	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	8/17/2006	18.35	A	ENDURA FUNGICIDE	7969	197	AA	0	146.8	OZ	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	8/17/2006	18.35	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.72	GA	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	8/31/2006	18.35	A	ACROBAT 50 WP FU	241	410	AA	0	7.34	LB	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	8/31/2006	18.35	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	91.75	OZ	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	8/31/2006	18.35	A	DU PONT LANNATE	352	342	ZB	0	18.35	LB	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	8/31/2006	18.35	A	DUPONT MANEX FU	352	655	AA	0	7.34	GA	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	8/31/2006	18.35	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.72	GA	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	8/31/2006	18.35	A	MSR SPRAY CONCE	10163	220	ZC	0	4.59	GA	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	9/13/2006	18.35	A	DREXEL DIMETHOA	19713	231	AA	0	1.15	GA	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	9/13/2006	18.35	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.72	GA	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	9/13/2006	18.35	A	SUCCESS	62719	292	AA	0	2.87	QT	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	9/21/2006	18.35	A	ASSAIL 70 WP INSE	8033	23	AA	82695	31.2	OZ	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	9/21/2006	18.35	A	DREXEL DIMETHOA	19713	231	AA	0	1.15	GA	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	9/21/2006	18.35	A	FIRST CHOICE NO F	11656	50009	ZB	0	3.44	GA	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050006	9/21/2006	18.35	A	FULFILL	100	912	ZA	0	50.46	OZ	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	9/21/2006	18.35	A	INTREPID 2F	62719	442	AA	0	1.15	GA	10	15S	03E	G	WESTERN	18.35	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	4/7/2006	13.2	A	PREFAR 4-E	10163	200	AA	0	6.6	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	5/10/2006	13.2	A	ACEPHATE 75SP AG	51036	236	AA	0	17.56	LB	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	5/10/2006	13.2	A	DIAZINON 50W	66222	10	ZA	0	13.2	LB	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	5/10/2006	13.2	A	DUPONT MANEX FU	352	655	AA	0	5.28	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	5/10/2006	13.2	A	ENDURA FUNGICIDE	7969	197	AA	0	132	OZ	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	5/10/2006	13.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.24	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	5/28/2006	13.2	A	ACEPHATE 75SP AG	51036	236	AA	0	17.56	LB	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	5/28/2006	13.2	A	ACROBAT 50 WP FU	241	410	AA	0	5.28	LB	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	5/28/2006	13.2	A	DU PONT ASANA XL	352	515	AA	0	0.99	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	5/28/2006	13.2	A	DUPONT MANEX FU	352	655	AA	0	5.28	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	5/28/2006	13.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.24	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	6/5/2006	13.2	A	DREXEL DIMETHOA	19713	231	AA	0	0.83	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	6/5/2006	13.2	A	DUPONT TANOS FU	352	604	AA	0	6.6	LB	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	6/5/2006	13.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.24	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	6/5/2006	13.2	A	MSR SPRAY CONCE	10163	220	ZC	0	3.3	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	6/5/2006	13.2	A	PROAXIS INSECTICI	74921	3	AA	55467	0.39	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	6/5/2006	13.2	A	RIDOMIL GOLD EC	100	801	ZA	0	0.41	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	7/1/2006	13.2	A	ACEPHATE 75SP AG	51036	236	AA	0	17.56	LB	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	7/1/2006	13.2	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	79.2	OZ	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	7/1/2006	13.2	A	DUPONT MANEX FU	352	655	AA	0	5.28	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	7/1/2006	13.2	A	ENDURA FUNGICIDE	7969	197	AA	0	105.6	OZ	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	7/1/2006	13.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.24	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/18/2006	13.2	A	ACROBAT 50 WP FU	241	410	AA	0	5.28	LB	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/18/2006	13.2	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	66	OZ	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/18/2006	13.2	A	DU PONT LANNATE	352	342	ZB	0	13.2	LB	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/18/2006	13.2	A	DUPONT MANEX FU	352	655	AA	0	5.28	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/18/2006	13.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.24	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/18/2006	13.2	A	MSR SPRAY CONCE	10163	220	ZC	0	3.3	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/29/2006	13.2	A	DREXEL DIMETHOA	19713	231	AA	0	0.83	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/29/2006	13.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.24	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/29/2006	13.2	A	SUCCESS	62719	292	AA	0	2.07	QT	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	9/29/2006	13	A	ASSAIL 70 WP INSE	8033	23	AA	82695	22.1	OZ	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050007	9/29/2006	13	A	DUPONT MANEX FU	352	655	AA	0	5.2	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050007	9/29/2006	13	A	ENDURA FUNGICIDE	7969	197	AA	0	104	OZ	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050007	9/29/2006	13	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.59	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050007	9/29/2006	13	A	GOWAN MALATHION	10163	21	ZB	0	3.25	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050007	9/29/2006	13	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.44	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	5/4/2006	14	A	ACEPHATE 75SP AG	51036	236	AA	0	18.62	LB	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/4/2006	14	A	DIAZINON 50W	66222	10	ZA	0	14	LB	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/4/2006	14	A	DUPONT MANEX FU	352	655	AA	0	5.6	GA	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/4/2006	14	A	ENDURA FUNGICIDE	7969	197	AA	0	140	OZ	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/4/2006	14	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.31	GA	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/18/2006	14	A	ACEPHATE 75SP AG	51036	236	AA	0	18.62	LB	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/18/2006	14	A	ACROBAT 50 WP FU	241	410	AA	0	5.6	LB	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/18/2006	14	A	DIAZINON 50W	66222	10	ZA	0	14	LB	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/18/2006	14	A	DUPONT MANEX FU	352	655	AA	0	5.6	GA	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/18/2006	14	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.31	GA	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/30/2006	14	A	ACROBAT 50 WP FU	241	410	AA	0	5.6	LB	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/30/2006	14	A	DU PONT ASANA XL	352	515	AA	0	1.05	GA	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/30/2006	14	A	FIRST CHOICE BRE/	11656	50095	AA	0	0.88	QT	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/30/2006	14	A	RIDOMIL GOLD EC	100	801	ZA	0	0.44	GA	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	7/20/2006	13.95	A	DIAZINON 50W	66222	10	ZA	0	13.95	LB	10	15S	03E	G	WESTERN	13.95	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	7/20/2006	13.95	A	DUPONT MANEX FU	352	655	AA	0	5.58	GA	10	15S	03E	G	WESTERN	13.95	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	7/20/2006	13.95	A	ENDURA FUNGICIDE	7969	197	AA	0	111.6	OZ	10	15S	03E	G	WESTERN	13.95	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	7/20/2006	13.95	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.31	GA	10	15S	03E	G	WESTERN	13.95	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	7/20/2006	13.95	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.47	GA	10	15S	03E	G	WESTERN	13.95	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	8/6/2006	13.95	A	ACROBAT 50 WP FU	241	410	AA	0	5.58	LB	10	15S	03E	G	WESTERN	13.95	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	8/6/2006	13.95	A	BLOCKADE 50WG P	100	922	ZB	0	13.95	OZ	10	15S	03E	G	WESTERN	13.95	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	8/6/2006	13.95	A	DU PONT LANNATE	352	342	ZB	0	13.95	LB	10	15S	03E	G	WESTERN	13.95	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	8/6/2006	13.95	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.31	GA	10	15S	03E	G	WESTERN	13.95	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	8/6/2006	13.95	A	PROVADO 1.6 FLOW	264	763	AA	0	0.41	GA	10	15S	03E	G	WESTERN	13.95	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	8/18/2006	4	A	ASSAIL 70WP INSEC	8033	23	AA	4581	6.8	OZ	10	15S	03E	G	WESTERN	4	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	8/18/2006	4	A	BLOCKADE 50WG P	100	922	ZB	0	4	OZ	10	15S	03E	G	WESTERN	4	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	8/18/2006	9.95	A	FIRST CHOICE BRE/	11656	50095	AA	0	0.62	QT	10	15S	03E	G	WESTERN	9.95	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	8/18/2006	4	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.38	GA	10	15S	03E	G	WESTERN	4	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	8/18/2006	9.95	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.33	GA	10	15S	03E	G	WESTERN	9.95	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	8/18/2006	4	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.13	GA	10	15S	03E	G	WESTERN	4	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050009	5/26/2006	20.2	A	ACEPHATE 75SP AG	51036	236	AA	0	26.87	LB	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	5/26/2006	20.2	A	DUPONT MANEX FU	352	655	AA	0	8.08	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	5/26/2006	20.2	A	ENDURA FUNGICIDE	7969	197	AA	0	161.6	OZ	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050009	5/26/2006	20.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.89	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/11/2006	20.2	A	ACROBAT 50 WP FU	241	410	AA	0	8.08	LB	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/11/2006	20.2	A	DU PONT LANNATE	352	342	ZB	0	20.2	LB	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/11/2006	20.2	A	DUPONT MANEX FU	352	655	AA	0	8.08	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/11/2006	20.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.89	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/11/2006	20.2	A	MSR SPRAY CONCE	10163	220	ZC	0	5.05	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/21/2006	20.2	A	ACROBAT 50 WP FU	241	410	AA	0	8.08	LB	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/21/2006	20.2	A	DU PONT ASANA XL	352	515	AA	0	1.51	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/21/2006	20.2	A	FIRST CHOICE BRE/	11656	50095	AA	0	1.26	QT	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/21/2006	20.2	A	RIDOMIL GOLD EC	100	801	ZA	0	0.63	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	8/29/2006	20.2	A	ACEPHATE 75SP AG	51036	236	AA	0	26.87	LB	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	8/29/2006	20.2	A	DIAZINON 50W	66222	10	ZA	0	20.2	LB	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	8/29/2006	20.2	A	DUPONT MANEX FU	352	655	AA	0	8.08	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	8/29/2006	20.2	A	ENDURA FUNGICIDE	7969	197	AA	0	161.6	OZ	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	8/29/2006	20.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.89	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	9/14/2006	20.2	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	101	OZ	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	9/14/2006	20.2	A	DU PONT LANNATE	352	342	ZB	0	20.2	LB	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	9/14/2006	20.2	A	DUPONT MANEX FU	352	655	AA	0	8.08	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	9/14/2006	20.2	A	DUPONT TANOS FU	352	604	AA	0	10.1	LB	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	9/14/2006	20.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.89	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	9/14/2006	20.2	A	MSR SPRAY CONCE	10163	220	ZC	0	5.05	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	9/23/2006	20.2	A	ASSAIL 70 WP INSE(	8033	23	AA	82695	34.34	OZ	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	9/23/2006	20.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.89	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	9/23/2006	20.2	A	GOWAN MALATHIOI	10163	21	ZB	0	5.05	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	9/23/2006	20.2	A	INTREPID 2F	62719	442	AA	0	1.26	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	10/6/2006	20.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.89	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	10/6/2006	20.2	A	SUCCESS	62719	292	AA	0	3.16	QT	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/2/2006	17	A	ACEPHATE 75SP AG	51036	236	AA	0	22.61	LB	10	15S	03E	G	WESTERN	17	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/2/2006	17	A	DIAZINON 50W	66222	10	ZA	0	17	LB	10	15S	03E	G	WESTERN	17	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/2/2006	17	A	DUPONT MANEX FU	352	655	AA	0	6.8	GA	10	15S	03E	G	WESTERN	17	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/2/2006	17	A	ENDURA FUNGICIDE	7969	197	AA	0	136	OZ	10	15S	03E	G	WESTERN	17	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/2/2006	17	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.59	GA	10	15S	03E	G	WESTERN	17	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/18/2006	17	A	ACROBAT 50 WP FU	241	410	AA	0	6.8	LB	10	15S	03E	G	WESTERN	17	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/18/2006	17	A	DIAZINON 50W	66222	10	ZA	0	17	LB	10	15S	03E	G	WESTERN	17	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/18/2006	17	A	DU PONT ASANA XL	352	515	AA	0	1.27	GA	10	15S	03E	G	WESTERN	17	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/18/2006	17	A	DUPONT MANEX FU	352	655	AA	0	6.8	GA	10	15S	03E	G	WESTERN	17	A	LETTUCE HEAD

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050010	6/18/2006	17	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.59	GA	10	15S	03E	G	WESTERN	17	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/18/2006	17	A	MSR SPRAY CONCE	10163	220	ZC	0	4.25	GA	10	15S	03E	G	WESTERN	17	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/27/2006	17	A	ACROBAT 50 WP FU	241	410	AA	0	6.8	LB	10	15S	03E	G	WESTERN	17	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/27/2006	17	A	DREXEL DIMETHOA	19713	231	AA	0	1.06	GA	10	15S	03E	G	WESTERN	17	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/27/2006	17	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.59	GA	10	15S	03E	G	WESTERN	17	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/27/2006	17	A	INTREPID 2F	62719	442	AA	0	1.06	GA	10	15S	03E	G	WESTERN	17	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/27/2006	17	A	PROVADO 1.6 FLOW	264	763	AA	0	0.5	GA	10	15S	03E	G	WESTERN	17	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/27/2006	17	A	RIDOMIL GOLD EC	100	801	ZA	0	0.53	GA	10	15S	03E	G	WESTERN	17	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/4/2006	9.5	A	ACEPHATE 75SP AG	51036	236	AA	0	12.64	LB	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/4/2006	9.5	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	57	OZ	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/4/2006	7	A	DIMETHOATE 4E	51036	110	AA	0	0.44	GA	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	9/4/2006	9.5	A	DREXEL DIMETHOA	19713	231	AA	0	0.59	GA	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/4/2006	7	A	DUPONT MANEX FU	352	655	AA	0	2.8	GA	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	9/4/2006	9.5	A	DUPONT MANEX FU	352	655	AA	0	3.8	GA	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/4/2006	7	A	ENDURA FUNGICIDE	7969	197	AA	0	56	OZ	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	9/4/2006	9.5	A	ENDURA FUNGICIDE	7969	197	AA	0	76	OZ	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/4/2006	7	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.66	GA	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	9/4/2006	9.5	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.89	GA	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/4/2006	7	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.23	GA	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	9/18/2006	7	A	ASSAIL 70 WP INSE	8033	23	AA	82695	10.5	OZ	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	9/18/2006	7	A	BLOCKADE 50WG P	100	922	ZB	0	7	OZ	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	9/18/2006	7	A	DU PONT LANNATE	352	342	ZB	0	7	LB	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	9/18/2006	7	A	DUPONT MANEX FU	352	655	AA	0	2.8	GA	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	9/18/2006	7	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.66	GA	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	9/19/2006	9.5	A	DU PONT LANNATE	352	342	ZB	0	9.5	LB	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/19/2006	9.5	A	DUPONT MANEX FU	352	655	AA	0	3.8	GA	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/19/2006	9.5	A	DUPONT TANOS FU	352	604	AA	0	4.75	LB	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/19/2006	9.5	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.89	GA	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/19/2006	9.5	A	MSR SPRAY CONCE	10163	220	ZC	0	2.38	GA	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/25/2006	7	A	ACROBAT 50 WP FU	241	410	AA	0	2.8	LB	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	9/25/2006	7	A	ASSAIL 70 WP INSE	8033	23	AA	82695	10.5	OZ	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	9/25/2006	9.5	A	ASSAIL 70 WP INSE	8033	23	AA	82695	14.25	OZ	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/25/2006	7	A	DUPONT MANEX FU	352	655	AA	0	2.8	GA	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	9/25/2006	9.5	A	DUPONT MANEX FU	352	655	AA	0	3.8	GA	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/25/2006	9.5	A	DUPONT TANOS FU	352	604	AA	0	4.75	LB	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/25/2006	7	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.66	GA	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050010	9/25/2006	9.5	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.89	GA	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/25/2006	7	A	GOWAN MALATHIOI	10163	21	ZB	0	1.75	GA	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	9/25/2006	9.5	A	GOWAN MALATHIOI	10163	21	ZB	0	2.38	GA	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/25/2006	7	A	SUCCESS	62719	292	AA	0	0.99	QT	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	9/25/2006	9.5	A	SUCCESS	62719	292	AA	0	1.34	QT	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	10/2/2006	7	A	FIRST CHOICE BRE/	11656	50095	AA	0	0.44	QT	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	10/2/2006	9.5	A	FIRST CHOICE BRE/	11656	50095	AA	0	0.59	QT	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	10/2/2006	7	A	PROCLAIM INSECTI(	100	904	ZA	0	24.5	OZ	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	10/2/2006	9.5	A	PROCLAIM INSECTI(	100	904	ZA	0	33.25	OZ	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	10/2/2006	7	A	PROVADO 1.6 FLOW	264	763	AA	0	0.2	GA	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	10/2/2006	9.5	A	PROVADO 1.6 FLOW	264	763	AA	0	0.28	GA	10	15S	03E	G	WESTERN	9.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	10/11/2006	7	A	ASSAIL 70 WP INSE(	8033	23	AA	82695	11.9	OZ	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050010	10/11/2006	7	A	FIRST CHOICE BRE/	11656	50095	AA	0	0.61	QT	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050011	7/3/2006	13.42	A	DIAZINON 50W	66222	10	ZA	0	13.42	LB	10	15S	03E	G	WESTERN	13.42	A	LETTUCE LEAF
27S192A	BOSS FAR	050011	7/3/2006	13.42	A	DUPONT MANEX FU	352	655	AA	0	5.37	GA	10	15S	03E	G	WESTERN	13.42	A	LETTUCE LEAF
27S192A	BOSS FAR	050011	7/3/2006	13.42	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.26	GA	10	15S	03E	G	WESTERN	13.42	A	LETTUCE LEAF
27S192A	BOSS FAR	050011	7/3/2006	13.42	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.45	GA	10	15S	03E	G	WESTERN	13.42	A	LETTUCE LEAF
27S192A	BOSS FAR	050011	7/13/2006	13.42	A	ACROBAT 50 WP FU	241	410	AA	0	5.37	LB	10	15S	03E	G	WESTERN	13.42	A	LETTUCE LEAF
27S192A	BOSS FAR	050011	7/13/2006	13.42	A	BLOCKADE 50WG P	100	922	ZB	0	13.42	OZ	10	15S	03E	G	WESTERN	13.42	A	LETTUCE LEAF
27S192A	BOSS FAR	050011	7/13/2006	13.42	A	DU PONT LANNATE	352	342	ZB	0	6.71	LB	10	15S	03E	G	WESTERN	13.42	A	LETTUCE LEAF
27S192A	BOSS FAR	050011	7/13/2006	13.42	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.26	GA	10	15S	03E	G	WESTERN	13.42	A	LETTUCE LEAF
27S192A	BOSS FAR	050011	7/13/2006	13.42	A	PROVADO 1.6 FLOW	264	763	AA	0	0.39	GA	10	15S	03E	G	WESTERN	13.42	A	LETTUCE LEAF
27S192A	BOSS FAR	050012	5/24/2006	13.8	A	ACEPHATE 75SP AG	51036	236	AA	0	18.35	LB	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	5/24/2006	13.8	A	DUPONT MANEX FU	352	655	AA	0	5.52	GA	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	5/24/2006	13.8	A	ENDURA FUNGICIDE	7969	197	AA	0	110.4	OZ	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	5/24/2006	13.8	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.29	GA	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	6/2/2006	14.8	A	ACEPHATE 75SP AG	51036	236	AA	0	19.68	LB	10	15S	03E	G	WESTERN	14.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	6/2/2006	14.8	A	ACROBAT 50 WP FU	241	410	AA	0	5.92	LB	10	15S	03E	G	WESTERN	14.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	6/2/2006	14.8	A	DUPONT MANEX FU	352	655	AA	0	5.92	GA	10	15S	03E	G	WESTERN	14.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	6/2/2006	14.8	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.39	GA	10	15S	03E	G	WESTERN	14.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	6/2/2006	14.8	A	MSR SPRAY CONCE	10163	220	ZC	0	3.7	GA	10	15S	03E	G	WESTERN	14.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	6/17/2006	13.8	A	DU PONT ASANA XL	352	515	AA	0	1.03	GA	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	6/17/2006	13.8	A	FIRST CHOICE BRE/	11656	50095	AA	0	0.86	QT	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	6/17/2006	13.8	A	PROVADO 1.6 FLOW	264	763	AA	0	0.4	GA	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	8/9/2006	13.8	A	ACEPHATE 75SP AG	51036	236	AA	0	18.35	LB	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	8/9/2006	13.8	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	82.8	OZ	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050012	8/9/2006	13.8	A	DIAZINON 50W	66222	10	ZA	0	13.8	LB	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	8/9/2006	13.8	A	DUPONT MANEX FU	352	655	AA	0	5.52	GA	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	8/9/2006	13.8	A	ENDURA FUNGICIDE	7969	197	AA	0	110.4	OZ	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	8/9/2006	13.8	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.29	GA	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	8/23/2006	13.8	A	ACROBAT 50 WP FU	241	410	AA	0	5.52	LB	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	8/23/2006	13.8	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	69	OZ	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	8/23/2006	13.8	A	DU PONT LANNATE	352	342	ZB	0	13.8	LB	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	8/23/2006	13.8	A	DUPONT MANEX FU	352	655	AA	0	5.52	GA	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	8/23/2006	13.8	A	MSR SPRAY CONCE	10163	220	ZC	0	3.45	GA	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	9/4/2006	13.8	A	DREXEL DIMETHOA	19713	231	AA	0	0.86	GA	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	9/4/2006	13.8	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.29	GA	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	9/4/2006	13.8	A	SUCCESS	62719	292	AA	0	2.16	QT	10	15S	03E	G	WESTERN	13.8	A	LETTUCE HEAD
27S192A	BOSS FAR	050013	7/12/2006	7.2	A	DIAZINON 50W	66222	10	ZA	0	7.2	LB	10	15S	03E	G	WESTERN	7.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	7/12/2006	7.2	A	DUPONT MANEX FU	352	655	AA	0	2.88	GA	10	15S	03E	G	WESTERN	7.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	7/12/2006	7.2	A	ENDURA FUNGICIDE	7969	197	AA	0	57.6	OZ	10	15S	03E	G	WESTERN	7.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	7/12/2006	7.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.68	GA	10	15S	03E	G	WESTERN	7.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	7/12/2006	7.2	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.24	GA	10	15S	03E	G	WESTERN	7.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	7/21/2006	7.2	A	BLOCKADE 50WG P	100	922	ZB	0	7.2	OZ	10	15S	03E	G	WESTERN	7.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	7/21/2006	7.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.68	GA	10	15S	03E	G	WESTERN	7.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	7/21/2006	7.2	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.24	GA	10	15S	03E	G	WESTERN	7.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	7/21/2006	7.2	A	SUCCESS	62719	292	AA	0	1.13	QT	10	15S	03E	G	WESTERN	7.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	7/27/2006	7.2	A	ASSAIL 70WP INSEC	8033	23	AA	4581	12.24	OZ	10	15S	03E	G	WESTERN	7.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	7/27/2006	7.2	A	FIRST CHOICE BRE/	11656	50095	AA	0	0.45	QT	10	15S	03E	G	WESTERN	7.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	7/27/2006	7.2	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.24	GA	10	15S	03E	G	WESTERN	7.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	10/6/2006	7.06	A	DUPONT MANEX FU	352	655	AA	0	2.82	GA	10	15S	03E	G	WESTERN	7.06	A	LETTUCE LEAF
27S192A	BOSS FAR	050013	10/6/2006	7.06	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.66	GA	10	15S	03E	G	WESTERN	7.06	A	LETTUCE LEAF
27S192A	BOSS FAR	050013	10/6/2006	7.06	A	GOWAN MALATHION	10163	21	ZB	0	1.77	GA	10	15S	03E	G	WESTERN	7.06	A	LETTUCE LEAF
27S192A	BOSS FAR	050013	10/6/2006	7.06	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.24	GA	10	15S	03E	G	WESTERN	7.06	A	LETTUCE LEAF
27S192A	BOSS FAR	050013	10/6/2006	7.06	A	PROVADO 1.6 FLOW	264	763	AA	0	0.21	GA	10	15S	03E	G	WESTERN	7.06	A	LETTUCE LEAF
27S192A	BOSS FAR	050013	10/20/2006	7.6	A	ASSAIL 70 WP INSE(	8033	23	AA	82695	11.4	OZ	10	15S	03E	G	WESTERN	7.6	A	LETTUCE LEAF
27S192A	BOSS FAR	050013	10/20/2006	7.6	A	BLOCKADE 50WG P	100	922	ZB	0	7.6	OZ	10	15S	03E	G	WESTERN	7.6	A	LETTUCE LEAF
27S192A	BOSS FAR	050013	10/20/2006	7.6	A	DUPONT MANEX FU	352	655	AA	0	3.04	GA	10	15S	03E	G	WESTERN	7.6	A	LETTUCE LEAF
27S192A	BOSS FAR	050013	10/20/2006	7.6	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.71	GA	10	15S	03E	G	WESTERN	7.6	A	LETTUCE LEAF
27S192A	BOSS FAR	050013	10/20/2006	7.6	A	GOWAN MALATHION	10163	21	ZB	0	1.9	GA	10	15S	03E	G	WESTERN	7.6	A	LETTUCE LEAF
27S192A	BOSS FAR	050013	10/20/2006	7.6	A	INTREPID 2F	62719	442	AA	0	0.47	GA	10	15S	03E	G	WESTERN	7.6	A	LETTUCE LEAF
27S192A	BOSS FAR	050013	11/1/2006	7.6	A	ACROBAT 50 WP FU	241	410	AA	0	3.04	LB	10	15S	03E	G	WESTERN	7.6	A	LETTUCE LEAF

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050013	11/1/2006	7.6	A	ASSAIL 70 WP INSE	8033	23	AA	82695	12.92	OZ	10	15S	03E	G	WESTERN	7.6	A	LETTUCE LEAF
27S192A	BOSS FAR	050013	11/1/2006	7.6	A	BLOCKADE 50WG P	100	922	ZB	0	7.6	OZ	10	15S	03E	G	WESTERN	7.6	A	LETTUCE LEAF
27S192A	BOSS FAR	050013	11/1/2006	7.6	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.71	GA	10	15S	03E	G	WESTERN	7.6	A	LETTUCE LEAF
27S192A	BOSS FAR	050013	11/1/2006	7.6	A	SUCCESS	62719	292	AA	0	1.19	QT	10	15S	03E	G	WESTERN	7.6	A	LETTUCE LEAF
27S192A	BOSS FAR	050014	6/6/2006	9	A	ACEPHATE 75SP AG	51036	236	AA	0	11.97	LB	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050014	6/6/2006	9	A	DIAZINON 50W	66222	10	ZA	0	9	LB	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050014	6/6/2006	9	A	DUPONT MANEX FU	352	655	AA	0	3.6	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050014	6/6/2006	9	A	ENDURA FUNGICIDE	7969	197	AA	0	72	OZ	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050014	6/6/2006	9	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.84	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050014	6/18/2006	9	A	ACROBAT 50 WP FU	241	410	AA	0	3.6	LB	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050014	6/18/2006	9	A	DIAZINON 50W	66222	10	ZA	0	9	LB	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050014	6/18/2006	9	A	DU PONT ASANA XL	352	515	AA	0	0.67	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050014	6/18/2006	9	A	DUPONT MANEX FU	352	655	AA	0	3.6	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050014	6/18/2006	9	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.84	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050014	6/18/2006	9	A	MSR SPRAY CONCE	10163	220	ZC	0	2.25	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050014	6/27/2006	9	A	ACROBAT 50 WP FU	241	410	AA	0	3.6	LB	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050014	6/27/2006	9	A	DREXEL DIMETHOA	19713	231	AA	0	0.56	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050014	6/27/2006	9	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.84	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050014	6/27/2006	9	A	INTREPID 2F	62719	442	AA	0	0.56	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050014	6/27/2006	9	A	PROVADO 1.6 FLOW	264	763	AA	0	0.26	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050014	6/27/2006	9	A	RIDOMIL GOLD EC	100	801	ZA	0	0.28	GA	10	15S	03E	G	WESTERN	9	A	LETTUCE HEAD
27S192A	BOSS FAR	050014	7/12/2006	2.75	A	DIAZINON 50W	66222	10	ZA	0	2.75	LB	10	15S	03E	G	WESTERN	2.75	A	LETTUCE LEAF
27S192A	BOSS FAR	050014	7/12/2006	2.75	A	DUPONT MANEX FU	352	655	AA	0	1.1	GA	10	15S	03E	G	WESTERN	2.75	A	LETTUCE LEAF
27S192A	BOSS FAR	050014	7/12/2006	2.75	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.26	GA	10	15S	03E	G	WESTERN	2.75	A	LETTUCE LEAF
27S192A	BOSS FAR	050014	7/12/2006	2.75	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.09	GA	10	15S	03E	G	WESTERN	2.75	A	LETTUCE LEAF
27S192A	BOSS FAR	050014	7/21/2006	2.75	A	BLOCKADE 50WG P	100	922	ZB	0	2.75	OZ	10	15S	03E	G	WESTERN	2.75	A	LETTUCE LEAF
27S192A	BOSS FAR	050014	7/21/2006	2.75	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.26	GA	10	15S	03E	G	WESTERN	2.75	A	LETTUCE LEAF
27S192A	BOSS FAR	050014	7/21/2006	2.75	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.09	GA	10	15S	03E	G	WESTERN	2.75	A	LETTUCE LEAF
27S192A	BOSS FAR	050014	7/21/2006	2.75	A	SUCCESS	62719	292	AA	0	0.43	QT	10	15S	03E	G	WESTERN	2.75	A	LETTUCE LEAF
27S192A	BOSS FAR	050014	7/27/2006	2.75	A	ASSAIL 70WP INSEC	8033	23	AA	4581	4.68	OZ	10	15S	03E	G	WESTERN	2.75	A	LETTUCE LEAF
27S192A	BOSS FAR	050014	7/27/2006	2.75	A	FIRST CHOICE BRE	11656	50095	AA	0	0.17	QT	10	15S	03E	G	WESTERN	2.75	A	LETTUCE LEAF
27S192A	BOSS FAR	050014	7/27/2006	2.75	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.09	GA	10	15S	03E	G	WESTERN	2.75	A	LETTUCE LEAF
27S192A	BOSS FAR	050014	9/27/2006	11.6	A	ASSAIL 70 WP INSE	8033	23	AA	82695	17.4	OZ	10	15S	03E	G	WESTERN	11.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	9/27/2006	11.6	A	DUPONT MANEX FU	352	655	AA	0	4.64	GA	10	15S	03E	G	WESTERN	11.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	9/27/2006	11.6	A	ENDURA FUNGICIDE	7969	197	AA	0	92.8	OZ	10	15S	03E	G	WESTERN	11.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	9/27/2006	11.6	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.09	GA	10	15S	03E	G	WESTERN	11.6	A	LETTUCE ROMAINE

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050014	9/27/2006	11.6	A	GOWAN MALATHIOI	10163	21	ZB	0	2.9	GA	10	15S	03E	G	WESTERN	11.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	9/27/2006	11.6	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.39	GA	10	15S	03E	G	WESTERN	11.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	10/11/2006	11.6	A	ASSAIL 70 WP INSE	8033	23	AA	82695	17.4	OZ	10	15S	03E	G	WESTERN	11.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	10/11/2006	11.6	A	DUPONT MANEX FU	352	655	AA	0	4.64	GA	10	15S	03E	G	WESTERN	11.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	10/11/2006	11.6	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.09	GA	10	15S	03E	G	WESTERN	11.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	10/11/2006	11.6	A	GOWAN MALATHIOI	10163	21	ZB	0	2.9	GA	10	15S	03E	G	WESTERN	11.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	10/11/2006	11.6	A	INTREPID 2F	62719	442	AA	0	0.72	GA	10	15S	03E	G	WESTERN	11.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	10/24/2006	11.6	A	ASSAIL 70 WP INSE	8033	23	AA	82695	17.4	OZ	10	15S	03E	G	WESTERN	11.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	10/24/2006	11.6	A	BLOCKADE 50WG P	100	922	ZB	0	11.6	OZ	10	15S	03E	G	WESTERN	11.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	10/24/2006	11.6	A	DU PONT LANNATE	352	342	ZB	0	11.6	LB	10	15S	03E	G	WESTERN	11.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	10/24/2006	11.6	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.09	GA	10	15S	03E	G	WESTERN	11.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	10/24/2006	11.6	A	SUCCESS	62719	292	AA	0	1.45	QT	10	15S	03E	G	WESTERN	11.6	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050015	6/14/2006	12.6	A	ACEPHATE 75SP AG	51036	236	AA	0	16.76	LB	10	15S	03E	G	WESTERN	12.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	6/14/2006	12.6	A	DIAZINON 50W	66222	10	ZA	0	12.6	LB	10	15S	03E	G	WESTERN	12.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	6/14/2006	12.6	A	DUPONT MANEX FU	352	655	AA	0	5.04	GA	10	15S	03E	G	WESTERN	12.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	6/14/2006	12.6	A	ENDURA FUNGICIDE	7969	197	AA	0	100.8	OZ	10	15S	03E	G	WESTERN	12.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	6/14/2006	12.6	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.18	GA	10	15S	03E	G	WESTERN	12.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	6/27/2006	12.6	A	ACEPHATE 75SP AG	51036	236	AA	0	16.76	LB	10	15S	03E	G	WESTERN	12.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	6/27/2006	12.6	A	ACROBAT 50 WP FU	241	410	AA	0	5.04	LB	10	15S	03E	G	WESTERN	12.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	6/27/2006	12.6	A	DUPONT MANEX FU	352	655	AA	0	5.04	GA	10	15S	03E	G	WESTERN	12.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	6/27/2006	12.6	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.18	GA	10	15S	03E	G	WESTERN	12.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	6/27/2006	12.6	A	MSR SPRAY CONCE	10163	220	ZC	0	3.15	GA	10	15S	03E	G	WESTERN	12.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	7/13/2006	12.6	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.18	GA	10	15S	03E	G	WESTERN	12.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	7/13/2006	12.6	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.42	GA	10	15S	03E	G	WESTERN	12.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	7/13/2006	12.6	A	SUCCESS	62719	292	AA	0	1.58	QT	10	15S	03E	G	WESTERN	12.6	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	9/27/2006	12.7	A	ASSAIL 70 WP INSE	8033	23	AA	82695	19.05	OZ	10	15S	03E	G	WESTERN	12.7	A	LETTUCE LEAF
27S192A	BOSS FAR	050015	9/27/2006	12.7	A	DUPONT MANEX FU	352	655	AA	0	5.08	GA	10	15S	03E	G	WESTERN	12.7	A	LETTUCE LEAF
27S192A	BOSS FAR	050015	9/27/2006	12.7	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.19	GA	10	15S	03E	G	WESTERN	12.7	A	LETTUCE LEAF
27S192A	BOSS FAR	050015	9/27/2006	12.7	A	GOWAN MALATHIOI	10163	21	ZB	0	3.18	GA	10	15S	03E	G	WESTERN	12.7	A	LETTUCE LEAF
27S192A	BOSS FAR	050015	9/27/2006	12.7	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.43	GA	10	15S	03E	G	WESTERN	12.7	A	LETTUCE LEAF
27S192A	BOSS FAR	050015	10/12/2006	12.7	A	ASSAIL 70 WP INSE	8033	23	AA	82695	19.05	OZ	10	15S	03E	G	WESTERN	12.7	A	LETTUCE LEAF
27S192A	BOSS FAR	050015	10/12/2006	12.7	A	DUPONT MANEX FU	352	655	AA	0	5.08	GA	10	15S	03E	G	WESTERN	12.7	A	LETTUCE LEAF
27S192A	BOSS FAR	050015	10/12/2006	12.7	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.19	GA	10	15S	03E	G	WESTERN	12.7	A	LETTUCE LEAF
27S192A	BOSS FAR	050015	10/12/2006	12.7	A	GOWAN MALATHIOI	10163	21	ZB	0	3.18	GA	10	15S	03E	G	WESTERN	12.7	A	LETTUCE LEAF
27S192A	BOSS FAR	050015	10/12/2006	12.7	A	INTREPID 2F	62719	442	AA	0	0.79	GA	10	15S	03E	G	WESTERN	12.7	A	LETTUCE LEAF
27S192A	BOSS FAR	050015	10/21/2006	12.7	A	ASSAIL 70 WP INSE	8033	23	AA	82695	21.59	OZ	10	15S	03E	G	WESTERN	12.7	A	LETTUCE LEAF

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050015	10/21/2006	12.7	A	BLOCKADE 50WG P	100	922	ZB	0	12.7	OZ	10	15S	03E	G	WESTERN	12.7	A	LETTUCE LEAF
27S192A	BOSS FAR	050015	10/21/2006	12.7	A	DU PONT LANNATE	352	342	ZB	0	12.7	LB	10	15S	03E	G	WESTERN	12.7	A	LETTUCE LEAF
27S192A	BOSS FAR	050015	10/21/2006	12.7	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.19	GA	10	15S	03E	G	WESTERN	12.7	A	LETTUCE LEAF
27S192A	BOSS FAR	050016	6/22/2006	12.2	A	ACEPHATE 75SP AG	51036	236	AA	0	16.23	LB	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	6/22/2006	12.2	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	48.8	OZ	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	6/22/2006	12.2	A	DUPONT MANEX FU	352	655	AA	0	4.88	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	6/22/2006	12.2	A	ENDURA FUNGICIDE	7969	197	AA	0	97.6	OZ	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	6/22/2006	12.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.14	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	7/5/2006	12.2	A	ACROBAT 50 WP FU	241	410	AA	0	4.88	LB	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	7/5/2006	12.2	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	61	OZ	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	7/5/2006	12.2	A	DU PONT LANNATE	352	342	ZB	0	12.2	LB	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	7/5/2006	12.2	A	DUPONT MANEX FU	352	655	AA	0	4.88	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	7/5/2006	12.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.14	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	7/5/2006	12.2	A	MSR SPRAY CONCE	10163	220	ZC	0	3.05	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	9/28/2006	12.2	A	ASSAIL 70 WP INSE	8033	23	AA	82695	20.74	OZ	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	9/28/2006	12.2	A	DUPONT MANEX FU	352	655	AA	0	4.88	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	9/28/2006	12.2	A	ENDURA FUNGICIDE	7969	197	AA	0	97.6	OZ	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	9/28/2006	12.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.14	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	9/28/2006	12.2	A	GOWAN MALATHIOI	10163	21	ZB	0	3.05	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	9/28/2006	12.2	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.41	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	10/12/2006	12.2	A	ASSAIL 70 WP INSE	8033	23	AA	82695	18.3	OZ	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	10/12/2006	12.2	A	BLOCKADE 50WG P	100	922	ZB	0	12.2	OZ	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	10/12/2006	12.2	A	DUPONT MANEX FU	352	655	AA	0	4.88	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	10/12/2006	12.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.14	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	10/12/2006	12.2	A	GOWAN MALATHIOI	10163	21	ZB	0	3.05	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	10/12/2006	12.2	A	INTREPID 2F	62719	442	AA	0	0.76	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	10/24/2006	12.2	A	ASSAIL 70 WP INSE	8033	23	AA	82695	18.3	OZ	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	10/24/2006	12.2	A	BLOCKADE 50WG P	100	922	ZB	0	12.2	OZ	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	10/24/2006	12.2	A	DU PONT LANNATE	352	342	ZB	0	12.2	LB	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	10/24/2006	12.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.14	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	10/24/2006	12.2	A	SUCCESS	62719	292	AA	0	1.53	QT	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	11/4/2006	12.2	A	ASSAIL 70 WP INSE	8033	23	AA	82695	20.74	OZ	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	11/4/2006	12.2	A	FIRST CHOICE BRE	11656	50095	AA	0	1.07	QT	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	11/4/2006	12.2	A	FULFILL	100	912	ZA	0	33.55	OZ	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	7/5/2006	13	A	DIAZINON 50W	66222	10	ZA	0	13	LB	10	15S	03E	G	WESTERN	13	A	LETTUCE LEAF
27S192A	BOSS FAR	050017	7/5/2006	13	A	DUPONT MANEX FU	352	655	AA	0	5.2	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE LEAF

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050017	7/5/2006	13	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.22	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE LEAF
27S192A	BOSS FAR	050017	7/5/2006	13	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.44	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE LEAF
27S192A	BOSS FAR	050017	7/15/2006	13	A	BLOCKADE 50WG P	100	922	ZB	0	13	OZ	10	15S	03E	G	WESTERN	13	A	LETTUCE LEAF
27S192A	BOSS FAR	050017	7/15/2006	13	A	DU PONT LANNATE	352	342	ZB	0	13	LB	10	15S	03E	G	WESTERN	13	A	LETTUCE LEAF
27S192A	BOSS FAR	050017	7/15/2006	13	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.22	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE LEAF
27S192A	BOSS FAR	050017	7/15/2006	13	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.44	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE LEAF
27S192A	BOSS FAR	050017	7/20/2006	13	A	ASSAIL 70WP INSEC	8033	23	AA	4581	22.1	OZ	10	15S	03E	G	WESTERN	13	A	LETTUCE LEAF
27S192A	BOSS FAR	050017	7/20/2006	13	A	FIRST CHOICE BRE/	11656	50095	AA	0	0.81	QT	10	15S	03E	G	WESTERN	13	A	LETTUCE LEAF
27S192A	BOSS FAR	050017	7/20/2006	13	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.44	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE LEAF
27S192A	BOSS FAR	050017	7/24/2006	13	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.22	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE LEAF
27S192A	BOSS FAR	050017	7/24/2006	13	A	FULFILL	100	912	ZA	0	35.75	OZ	10	15S	03E	G	WESTERN	13	A	LETTUCE LEAF
27S192A	BOSS FAR	050017	7/24/2006	13	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.44	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE LEAF
27S192A	BOSS FAR	050017	7/24/2006	13	A	PROVADO 1.6 FLOW	264	763	AA	0	0.38	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE LEAF
27S192A	BOSS FAR	050017	10/12/2006	13	A	DUPONT MANEX FU	352	655	AA	0	5.2	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	10/12/2006	13	A	ENDURA FUNGICIDE	7969	197	AA	0	104	OZ	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	10/12/2006	13	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.22	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	10/12/2006	13	A	GOWAN MALATHIOI	10163	21	ZB	0	3.25	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	10/12/2006	13	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.44	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	10/12/2006	13	A	PROVADO 1.6 FLOW	264	763	AA	0	0.38	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	10/24/2006	13	A	ASSAIL 70 WP INSE(	8033	23	AA	82695	19.5	OZ	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	10/24/2006	13	A	BLOCKADE 50WG P	100	922	ZB	0	13	OZ	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	10/24/2006	13	A	DU PONT LANNATE	352	342	ZB	0	13	LB	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	10/24/2006	13	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.22	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	10/24/2006	13	A	SUCCESS	62719	292	AA	0	1.63	QT	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	11/1/2006	13	A	ACROBAT 50 WP FU	241	410	AA	0	5.2	LB	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	11/1/2006	13	A	ASSAIL 70 WP INSE(	8033	23	AA	82695	22.1	OZ	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	11/1/2006	13	A	BLOCKADE 50WG P	100	922	ZB	0	13	OZ	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	11/1/2006	13	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.22	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	11/1/2006	13	A	SUCCESS	62719	292	AA	0	2.03	QT	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	11/10/2006	13	A	ALIETTE WDG FUNC	264	516	ZB	0	39	LB	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	11/10/2006	13	A	PROVADO 1.6 FLOW	264	763	AA	0	0.38	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE ROMAINE
27S192A	BOSS FAR	05003E	4/13/2006	6.1	A	ALIETTE WDG FUNC	264	516	AA	0	24.4	LB	10	15S	03E	A	R & B HEL	20	A	LETTUCE ROMAINE
27S192A	BOSS FAR	05003E	4/13/2006	6.1	A	PROAXIS INSECTICI	74921	3	AA	55467	0.18	GA	10	15S	03E	A	R & B HEL	20	A	LETTUCE ROMAINE
27S192A	BOSS FAR	05003E	4/13/2006	6.1	A	PROVADO 1.6 FLOW	264	763	AA	0	0.18	GA	10	15S	03E	A	R & B HEL	20	A	LETTUCE ROMAINE
27S192A	BOSS FAR	05003W	4/13/2006	6	A	ALIETTE WDG FUNC	264	516	AA	0	24	LB	10	15S	03E	A	R & B HEL	20	A	LETTUCE HEAD
27S192A	BOSS FAR	05003W	4/13/2006	6	A	DIAZINON 50W	66222	10	ZA	0	6	LB	10	15S	03E	A	R & B HEL	20	A	LETTUCE HEAD

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	05003W	4/13/2006	6	A	MANEX	1812	251	ZA	0	2.4	GA	10	15S	03E	A	R & B HEL	20	A	LETTUCE HEAD
27S192A	BOSS FAR	05003W	4/13/2006	6	A	PROAXIS INSECTICI	74921	3	AA	55467	0.18	GA	10	15S	03E	A	R & B HEL	20	A	LETTUCE HEAD
27S192A	BOSS FAR	05003W	4/13/2006	6	A	PROVADO 1.6 FLOW	264	763	AA	0	0.18	GA	10	15S	03E	A	R & B HEL	20	A	LETTUCE HEAD
27S192A	BOSS FAR	05003W	4/26/2006	6	A	ALIETTE WDG FUNG	264	516	AA	0	24	LB	10	15S	03E	A	R & B HEL	20	A	LETTUCE HEAD
27S192A	BOSS FAR	05003W	4/26/2006	6	A	WARRIOR INSECTIC	100	1112	AA	0	0.18	GA	10	15S	03E	A	R & B HEL	20	A	LETTUCE HEAD

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050000	2/11/2007	5	A	FIRST CHOICE EXC	11656	50097	AA	0	1.88	GA	10	15S	03E	G	WESTERN	5	A	UNCULTIVATED AG
27S192A	BOSS FAR	050000	2/11/2007	5	A	ROUNDUP ORIGINA	524	539	AA	0	1.88	GA	10	15S	03E	G	WESTERN	5	A	UNCULTIVATED AG
27S192A	BOSS FAR	050000	5/1/2007	5	A	FIRST CHOICE EXC	11656	50097	AA	0	1.25	GA	10	15S	03E	G	WESTERN	5	A	UNCULTIVATED AG
27S192A	BOSS FAR	050000	5/1/2007	5	A	GRAMOXONE INTE	100	1217	AA	0	1.69	GA	10	15S	03E	G	WESTERN	5	A	UNCULTIVATED AG
27S192A	BOSS FAR	050000	5/1/2007	5	A	ROUNDUP ORIGINA	524	539	AA	0	1.88	GA	10	15S	03E	G	WESTERN	5	A	UNCULTIVATED AG
27S192A	BOSS FAR	050001	5/3/2007	16.78	A	ACEPHATE 75SP AG	51036	236	AA	0	22.32	LB	10	15S	03E	G	WESTERN	16.78	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/3/2007	16.78	A	DUPONT MANEX FU	352	655	AA	0	6.71	GA	10	15S	03E	G	WESTERN	16.78	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/3/2007	16.78	A	ENDURA FUNGICIDI	7969	197	AA	0	134.24	OZ	10	15S	03E	G	WESTERN	16.78	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/3/2007	16.78	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.57	GA	10	15S	03E	G	WESTERN	16.78	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/22/2007	16.78	A	ASSAIL 70 WP INSE	8033	23	AA	82695	25.17	OZ	10	15S	03E	G	WESTERN	16.78	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/22/2007	16.78	A	DU PONT LANNATE	352	342	ZB	0	16.78	LB	10	15S	03E	G	WESTERN	16.78	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/22/2007	16.78	A	DUPONT MANEX FU	352	655	AA	0	6.71	GA	10	15S	03E	G	WESTERN	16.78	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/22/2007	16.78	A	FIRST CHOICE NO F	11656	50009	ZB	0	2.2	GA	10	15S	03E	G	WESTERN	16.78	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/22/2007	16.78	A	MSR SPRAY CONCE	10163	220	ZC	0	4.2	GA	10	15S	03E	G	WESTERN	16.78	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/31/2007	16.78	A	ALIETTE WDG FUN	264	516	ZB	0	50.34	LB	10	15S	03E	G	WESTERN	16.78	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/31/2007	16.78	A	DUPONT TANOS FU	352	604	AA	0	8.39	LB	10	15S	03E	G	WESTERN	16.78	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/31/2007	16.78	A	GOWAN MALATHIO	10163	21	ZB	0	4.2	GA	10	15S	03E	G	WESTERN	16.78	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	5/31/2007	16.78	A	PROVADO 1.6 FLOW	264	763	AA	0	0.49	GA	10	15S	03E	G	WESTERN	16.78	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	7/31/2007	16.84	A	ACEPHATE 75SP AG	51036	236	AA	0	22.4	LB	10	15S	03E	G	WESTERN	16.84	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	7/31/2007	16.84	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	84.2	OZ	10	15S	03E	G	WESTERN	16.84	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	7/31/2007	16.84	A	DUPONT MANEX FU	352	655	AA	0	6.74	GA	10	15S	03E	G	WESTERN	16.84	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	7/31/2007	16.84	A	ENDURA FUNGICIDI	7969	197	AA	0	134.72	OZ	10	15S	03E	G	WESTERN	16.84	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	7/31/2007	16.84	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.58	GA	10	15S	03E	G	WESTERN	16.84	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	7/31/2007	16.84	A	MSR SPRAY CONCE	10163	220	ZC	0	4.21	GA	10	15S	03E	G	WESTERN	16.84	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	8/10/2007	16.84	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	84.2	OZ	10	15S	03E	G	WESTERN	16.84	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	8/10/2007	16.84	A	ASSAIL 70 WP INSE	8033	23	AA	82695	25.26	OZ	10	15S	03E	G	WESTERN	16.84	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	8/10/2007	16.84	A	FIRST CHOICE BRE	11656	50095	AA	0	1.05	QT	10	15S	03E	G	WESTERN	16.84	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	8/10/2007	16.84	A	POUNCE 25 WP	279	3051	AA	0	13.47	LB	10	15S	03E	G	WESTERN	16.84	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	8/22/2007	16.84	A	ALIETTE WDG FUN	264	516	ZB	0	50.52	LB	10	15S	03E	G	WESTERN	16.84	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	8/22/2007	16.84	A	GOWAN MALATHIO	10163	21	ZB	0	4.21	GA	10	15S	03E	G	WESTERN	16.84	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	8/22/2007	16.84	A	IMPULSE 1.6 FL	42750	109	AA	0	0.5	GA	10	15S	03E	G	WESTERN	16.84	A	LETTUCE HEAD
27S192A	BOSS FAR	050001	8/22/2007	16.84	A	SUCCESS	62719	292	AA	0	2.64	QT	10	15S	03E	G	WESTERN	16.84	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	3/10/2007	19.1	A	ACEPHATE 75SP AG	51036	236	AA	0	25.4	LB	10	15S	03E	G	WESTERN	19.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	3/10/2007	19.1	A	DUPONT MANEX FU	352	655	AA	0	7.64	GA	10	15S	03E	G	WESTERN	19.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	3/10/2007	19.1	A	ENDURA FUNGICIDI	7969	197	AA	0	152.8	OZ	10	15S	03E	G	WESTERN	19.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	3/10/2007	19.1	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.79	GA	10	15S	03E	G	WESTERN	19.1	A	LETTUCE HEAD

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050002	3/24/2007	19.1	A	ACEPHATE 75SP AG	51036	236	AA	0	25.4	LB	10	15S	03E	G	WESTERN	19.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	3/24/2007	19.1	A	ACROBAT 50 WP FU	241	410	AA	0	7.64	LB	10	15S	03E	G	WESTERN	19.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	3/24/2007	19.1	A	DUPONT MANEX FU	352	655	AA	0	7.64	GA	10	15S	03E	G	WESTERN	19.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	3/24/2007	19.1	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.79	GA	10	15S	03E	G	WESTERN	19.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	3/24/2007	19.1	A	MSR SPRAY CONCE	10163	220	ZC	0	4.78	GA	10	15S	03E	G	WESTERN	19.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	4/11/2007	19.1	A	ASSAIL 70 WP INSE	8033	23	AA	82695	28.65	OZ	10	15S	03E	G	WESTERN	19.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	4/11/2007	19.1	A	DU PONT ASANA XL	352	515	AA	0	1.43	GA	10	15S	03E	G	WESTERN	19.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	4/11/2007	19.1	A	FIRST CHOICE BRE	11656	50095	AA	0	1.2	QT	10	15S	03E	G	WESTERN	19.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	4/11/2007	19.1	A	FORUM FUNGICIDE	241	427	AA	0	0.89	GA	10	15S	03E	G	WESTERN	19.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	4/11/2007	19.1	A	RIDOMIL GOLD EC	100	801	ZA	0	0.6	GA	10	15S	03E	G	WESTERN	19.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050002	6/26/2007	19.8	A	ASSAIL 70 WP INSE	8033	23	AA	82695	29.7	OZ	10	15S	03E	G	WESTERN	19.8	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	6/26/2007	19.8	A	DIAZINON 50W	66222	10	ZA	0	19.8	LB	10	15S	03E	G	WESTERN	19.8	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	6/26/2007	19.8	A	DUPONT MANEX FU	352	655	AA	0	7.92	GA	10	15S	03E	G	WESTERN	19.8	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	6/26/2007	19.8	A	ENDURA FUNGICIDI	7969	197	AA	0	158.4	OZ	10	15S	03E	G	WESTERN	19.8	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	6/26/2007	19.8	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.86	GA	10	15S	03E	G	WESTERN	19.8	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	6/26/2007	19.8	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.66	GA	10	15S	03E	G	WESTERN	19.8	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	7/4/2007	13.29	A	BLOCKADE 50WG P	100	922	ZB	0	13.29	OZ	10	15S	03E	G	WESTERN	13.29	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	7/4/2007	6.03	A	BLOCKADE 50WG P	100	922	ZB	0	6.03	OZ	10	15S	03E	G	WESTERN	6.03	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	7/4/2007	13.29	A	DU PONT LANNATE	352	342	ZB	0	13.29	LB	10	15S	03E	G	WESTERN	13.29	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	7/4/2007	6.03	A	DU PONT LANNATE	352	342	ZB	0	6.03	LB	10	15S	03E	G	WESTERN	6.03	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	7/4/2007	6.03	A	DUPONT MANEX FU	352	655	AA	0	2.41	GA	10	15S	03E	G	WESTERN	6.03	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	7/4/2007	13.29	A	DUPONT MANEX FU	352	655	AA	0	5.32	GA	10	15S	03E	G	WESTERN	13.29	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	7/4/2007	13.29	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.25	GA	10	15S	03E	G	WESTERN	13.29	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	7/4/2007	6.03	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.57	GA	10	15S	03E	G	WESTERN	6.03	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	7/4/2007	6.03	A	IMPULSE 1.6 FL	42750	109	AA	0	0.18	GA	10	15S	03E	G	WESTERN	6.03	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	7/4/2007	13.29	A	IMPULSE 1.6 FL	42750	109	AA	0	0.39	GA	10	15S	03E	G	WESTERN	13.29	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	7/15/2007	6.03	A	ASSAIL 70 WP INSE	8033	23	AA	82695	10.25	OZ	10	15S	03E	G	WESTERN	6.03	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	7/15/2007	13.29	A	ASSAIL 70 WP INSE	8033	23	AA	82695	22.59	OZ	10	15S	03E	G	WESTERN	13.29	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	7/15/2007	6.03	A	BLOCKADE 50WG P	100	922	ZB	0	6.03	OZ	10	15S	03E	G	WESTERN	6.03	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	7/15/2007	13.29	A	BLOCKADE 50WG P	100	922	ZB	0	13.29	OZ	10	15S	03E	G	WESTERN	13.29	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	7/15/2007	6.03	A	FIRST CHOICE BRE	11656	50095	AA	0	0.75	QT	10	15S	03E	G	WESTERN	6.03	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	7/15/2007	13.29	A	FIRST CHOICE BRE	11656	50095	AA	0	1.66	QT	10	15S	03E	G	WESTERN	13.29	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	7/15/2007	6.03	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.2	GA	10	15S	03E	G	WESTERN	6.03	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050002	7/15/2007	13.29	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.45	GA	10	15S	03E	G	WESTERN	13.29	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050003	2/17/2007	11	A	ACEPHATE 75SP AG	51036	236	AA	0	14.63	LB	10	15S	03E	G	WESTERN	11	A	LETTUCE HEAD
27S192A	BOSS FAR	050003	2/17/2007	11	A	DUPONT MANEX FU	352	655	AA	0	4.4	GA	10	15S	03E	G	WESTERN	11	A	LETTUCE HEAD

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050003	2/17/2007	11	A	ENDURA FUNGICIDI	7969	197	AA	0	88	OZ	10	15S	03E	G	WESTERN	11	A	LETTUCE HEAD
27S192A	BOSS FAR	050003	2/17/2007	11	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.03	GA	10	15S	03E	G	WESTERN	11	A	LETTUCE HEAD
27S192A	BOSS FAR	050003	3/15/2007	10	A	ACEPHATE 75SP AG	51036	236	AA	0	13.3	LB	10	15S	03E	G	WESTERN	10	A	LETTUCE HEAD
27S192A	BOSS FAR	050003	3/15/2007	10	A	DUPONT MANEX FU	352	655	AA	0	4	GA	10	15S	03E	G	WESTERN	10	A	LETTUCE HEAD
27S192A	BOSS FAR	050003	3/15/2007	10	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.94	GA	10	15S	03E	G	WESTERN	10	A	LETTUCE HEAD
27S192A	BOSS FAR	050003	3/15/2007	10	A	MSR SPRAY CONCE	10163	220	ZC	0	2.5	GA	10	15S	03E	G	WESTERN	10	A	LETTUCE HEAD
27S192A	BOSS FAR	050003	4/7/2007	10	A	ACROBAT 50 WP FU	241	410	AA	0	4	LB	10	15S	03E	G	WESTERN	10	A	LETTUCE HEAD
27S192A	BOSS FAR	050003	4/7/2007	10	A	ASSAIL 70 WP INSE	8033	23	AA	82695	15	OZ	10	15S	03E	G	WESTERN	10	A	LETTUCE HEAD
27S192A	BOSS FAR	050003	4/7/2007	10	A	FIRST CHOICE BRE	11656	50095	AA	0	0.63	QT	10	15S	03E	G	WESTERN	10	A	LETTUCE HEAD
27S192A	BOSS FAR	050003	4/7/2007	10	A	PROAXIS INSECTIC	74921	3	AA	55467	0.3	GA	10	15S	03E	G	WESTERN	10	A	LETTUCE HEAD
27S192A	BOSS FAR	050003	4/7/2007	10	A	RIDOMIL GOLD EC	100	801	ZA	0	0.31	GA	10	15S	03E	G	WESTERN	10	A	LETTUCE HEAD
27S192A	BOSS FAR	050003	7/17/2007	11.45	A	ASSAIL 70 WP INSE	8033	23	AA	82695	19.47	OZ	10	15S	03E	G	WESTERN	11.45	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050003	7/17/2007	11.45	A	DIAZINON 50W	66222	10	ZA	0	11.45	LB	10	15S	03E	G	WESTERN	11.45	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050003	7/17/2007	11.45	A	DUPONT MANEX FU	352	655	AA	0	4.58	GA	10	15S	03E	G	WESTERN	11.45	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050003	7/17/2007	11.45	A	ENDURA FUNGICIDI	7969	197	AA	0	91.6	OZ	10	15S	03E	G	WESTERN	11.45	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050003	7/17/2007	11.45	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.07	GA	10	15S	03E	G	WESTERN	11.45	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050003	7/28/2007	11.45	A	ALIETTE WDG FUN	264	516	ZB	0	34.35	LB	10	15S	03E	G	WESTERN	11.45	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050003	7/28/2007	11.45	A	IMPULSE 1.6 FL	42750	109	AA	0	0.34	GA	10	15S	03E	G	WESTERN	11.45	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050003	7/28/2007	11.45	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.38	GA	10	15S	03E	G	WESTERN	11.45	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050003	7/28/2007	11.45	A	VENOM INSECTICID	59639	135	AA	0	2.15	LB	10	15S	03E	G	WESTERN	11.45	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050003	8/4/2007	11.45	A	ALIETTE WDG FUN	264	516	ZB	0	45.8	LB	10	15S	03E	G	WESTERN	11.45	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050003	8/4/2007	11.45	A	POUNCE 25 WP	279	3051	AA	0	8.59	LB	10	15S	03E	G	WESTERN	11.45	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050003	8/4/2007	11.45	A	SUCCESS	62719	292	AA	0	1.97	QT	10	15S	03E	G	WESTERN	11.45	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050004	3/10/2007	10.96	A	ACEPHATE 75SP AG	51036	236	AA	0	14.58	LB	10	15S	03E	G	WESTERN	10.96	A	LETTUCE HEAD
27S192A	BOSS FAR	050004	3/10/2007	10.96	A	DUPONT MANEX FU	352	655	AA	0	4.38	GA	10	15S	03E	G	WESTERN	10.96	A	LETTUCE HEAD
27S192A	BOSS FAR	050004	3/10/2007	10.96	A	ENDURA FUNGICIDI	7969	197	AA	0	87.68	OZ	10	15S	03E	G	WESTERN	10.96	A	LETTUCE HEAD
27S192A	BOSS FAR	050004	3/10/2007	10.96	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.03	GA	10	15S	03E	G	WESTERN	10.96	A	LETTUCE HEAD
27S192A	BOSS FAR	050004	3/24/2007	10.96	A	ACEPHATE 75SP AG	51036	236	AA	0	14.58	LB	10	15S	03E	G	WESTERN	10.96	A	LETTUCE HEAD
27S192A	BOSS FAR	050004	3/24/2007	10.96	A	ACROBAT 50 WP FU	241	410	AA	0	4.38	LB	10	15S	03E	G	WESTERN	10.96	A	LETTUCE HEAD
27S192A	BOSS FAR	050004	3/24/2007	10.96	A	DUPONT MANEX FU	352	655	AA	0	4.38	GA	10	15S	03E	G	WESTERN	10.96	A	LETTUCE HEAD
27S192A	BOSS FAR	050004	3/24/2007	10.96	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.03	GA	10	15S	03E	G	WESTERN	10.96	A	LETTUCE HEAD
27S192A	BOSS FAR	050004	3/24/2007	10.96	A	MSR SPRAY CONCE	10163	220	ZC	0	2.74	GA	10	15S	03E	G	WESTERN	10.96	A	LETTUCE HEAD
27S192A	BOSS FAR	050004	4/9/2007	10.96	A	ASSAIL 70 WP INSE	8033	23	AA	82695	16.44	OZ	10	15S	03E	G	WESTERN	10.96	A	LETTUCE HEAD
27S192A	BOSS FAR	050004	4/9/2007	10.96	A	DU PONT ASANA XL	352	515	AA	0	0.82	GA	10	15S	03E	G	WESTERN	10.96	A	LETTUCE HEAD
27S192A	BOSS FAR	050004	4/9/2007	10.96	A	FIRST CHOICE BRE	11656	50095	AA	0	0.69	QT	10	15S	03E	G	WESTERN	10.96	A	LETTUCE HEAD
27S192A	BOSS FAR	050004	4/9/2007	10.96	A	FORUM FUNGICIDE	241	427	AA	0	0.51	GA	10	15S	03E	G	WESTERN	10.96	A	LETTUCE HEAD

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050004	4/9/2007	10.96	A	RIDOMIL GOLD EC	100	801	ZA	0	0.34	GA	10	15S	03E	G	WESTERN	10.96	A	LETTUCE HEAD
27S192A	BOSS FAR	050004	7/5/2007	10	A	DIAZINON 50W	66222	10	ZA	0	10	LB	10	15S	03E	G	WESTERN	10	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050004	7/5/2007	10	A	DUPONT MANEX FU	352	655	AA	0	4	GA	10	15S	03E	G	WESTERN	10	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050004	7/5/2007	10	A	ENDURA FUNGICIDI	7969	197	AA	0	80	OZ	10	15S	03E	G	WESTERN	10	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050004	7/5/2007	10	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.94	GA	10	15S	03E	G	WESTERN	10	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050004	7/5/2007	10	A	IMPULSE 1.6 FL	42750	109	AA	0	0.3	GA	10	15S	03E	G	WESTERN	10	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050004	7/5/2007	10	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.34	GA	10	15S	03E	G	WESTERN	10	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050004	7/17/2007	10	A	ASSAIL 70 WP INSE	8033	23	AA	82695	17	OZ	10	15S	03E	G	WESTERN	10	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050004	7/17/2007	10	A	BLOCKADE 50WG P	100	922	ZB	0	10	OZ	10	15S	03E	G	WESTERN	10	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050004	7/17/2007	10	A	DU PONT LANNATE	352	342	ZB	0	10	LB	10	15S	03E	G	WESTERN	10	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050004	7/17/2007	10	A	DUPONT MANEX FU	352	655	AA	0	4	GA	10	15S	03E	G	WESTERN	10	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050004	7/17/2007	10	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.94	GA	10	15S	03E	G	WESTERN	10	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050004	7/28/2007	10	A	ALIETTE WDG FUN	264	516	ZB	0	30	LB	10	15S	03E	G	WESTERN	10	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050004	7/28/2007	10	A	IMPULSE 1.6 FL	42750	109	AA	0	0.3	GA	10	15S	03E	G	WESTERN	10	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050004	7/28/2007	10	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.34	GA	10	15S	03E	G	WESTERN	10	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050004	7/28/2007	10	A	VENOM INSECTICID	59639	135	AA	0	1.88	LB	10	15S	03E	G	WESTERN	10	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050004	8/4/2007	10	A	ALIETTE WDG FUN	264	516	ZB	0	40	LB	10	15S	03E	G	WESTERN	10	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050004	8/4/2007	10	A	POUNCE 25 WP	279	3051	AA	0	7.5	LB	10	15S	03E	G	WESTERN	10	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050004	8/4/2007	10	A	SUCCESS	62719	292	AA	0	1.72	QT	10	15S	03E	G	WESTERN	10	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	5/10/2007	18	A	ACEPHATE 75SP AG	51036	236	AA	0	23.94	LB	10	15S	03E	G	WESTERN	18	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	5/10/2007	18	A	DIAZINON 50W	66222	10	ZA	0	18	LB	10	15S	03E	G	WESTERN	18	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	5/10/2007	18	A	DUPONT MANEX FU	352	655	AA	0	7.2	GA	10	15S	03E	G	WESTERN	18	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	5/10/2007	18	A	ENDURA FUNGICIDI	7969	197	AA	0	144	OZ	10	15S	03E	G	WESTERN	18	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	5/10/2007	18	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.69	GA	10	15S	03E	G	WESTERN	18	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	5/22/2007	18	A	ASSAIL 70 WP INSE	8033	23	AA	82695	27	OZ	10	15S	03E	G	WESTERN	18	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	5/22/2007	18	A	DU PONT LANNATE	352	342	ZB	0	18	LB	10	15S	03E	G	WESTERN	18	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	5/22/2007	18	A	DUPONT MANEX FU	352	655	AA	0	7.2	GA	10	15S	03E	G	WESTERN	18	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	5/22/2007	18	A	FIRST CHOICE NO F	11656	50009	ZB	0	2.36	GA	10	15S	03E	G	WESTERN	18	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	5/22/2007	18	A	MSR SPRAY CONCE	10163	220	ZC	0	4.5	GA	10	15S	03E	G	WESTERN	18	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	5/31/2007	18	A	ALIETTE WDG FUN	264	516	ZB	0	54	LB	10	15S	03E	G	WESTERN	18	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	5/31/2007	18	A	DUPONT TANOS FU	352	604	AA	0	9	LB	10	15S	03E	G	WESTERN	18	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	5/31/2007	18	A	GOWAN MALATHIO	10163	21	ZB	0	4.5	GA	10	15S	03E	G	WESTERN	18	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	5/31/2007	18	A	PROVADO 1.6 FLOW	264	763	AA	0	0.53	GA	10	15S	03E	G	WESTERN	18	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	8/5/2007	10	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	50	OZ	10	15S	03E	G	WESTERN	10	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	8/5/2007	8.1	A	DIAZINON 50W	66222	10	ZA	0	8.1	LB	10	15S	03E	G	WESTERN	8.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	8/5/2007	10	A	DIAZINON 50W	66222	10	ZA	0	10	LB	10	15S	03E	G	WESTERN	10	A	LETTUCE HEAD

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050005	8/5/2007	8.1	A	DUPONT MANEX FU	352	655	AA	0	3.24	GA	10	15S	03E	G	WESTERN	8.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	8/5/2007	10	A	DUPONT MANEX FU	352	655	AA	0	4	GA	10	15S	03E	G	WESTERN	10	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	8/5/2007	8.1	A	ENDURA FUNGICIDI	7969	197	AA	0	64.8	OZ	10	15S	03E	G	WESTERN	8.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	8/5/2007	10	A	ENDURA FUNGICIDI	7969	197	AA	0	80	OZ	10	15S	03E	G	WESTERN	10	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	8/5/2007	8.1	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.76	GA	10	15S	03E	G	WESTERN	8.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	8/5/2007	10	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.94	GA	10	15S	03E	G	WESTERN	10	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	8/5/2007	8.1	A	IMPULSE 1.6 FL	42750	109	AA	0	0.24	GA	10	15S	03E	G	WESTERN	8.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	8/5/2007	10	A	MSR SPRAY CONCE	10163	220	ZC	0	2.5	GA	10	15S	03E	G	WESTERN	10	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	8/5/2007	8.1	A	TRIGARD	100	654	AA	0	1.35	LB	10	15S	03E	G	WESTERN	8.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	8/18/2007	8.1	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	40.5	OZ	10	15S	03E	G	WESTERN	8.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	8/18/2007	10	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	50	OZ	10	15S	03E	G	WESTERN	10	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	8/18/2007	8.1	A	BLOCKADE 50WG P	100	922	ZB	0	8.1	OZ	10	15S	03E	G	WESTERN	8.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	8/18/2007	8.1	A	DU PONT LANNATE	352	342	ZB	0	8.1	LB	10	15S	03E	G	WESTERN	8.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	8/18/2007	10	A	DU PONT LANNATE	352	342	ZB	0	10	LB	10	15S	03E	G	WESTERN	10	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	8/18/2007	8.1	A	DUPONT MANEX FU	352	655	AA	0	3.24	GA	10	15S	03E	G	WESTERN	8.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	8/18/2007	10	A	DUPONT MANEX FU	352	655	AA	0	4	GA	10	15S	03E	G	WESTERN	10	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	8/18/2007	10	A	DUPONT TANOS FU	352	604	AA	0	5	LB	10	15S	03E	G	WESTERN	10	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	8/18/2007	8.1	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.76	GA	10	15S	03E	G	WESTERN	8.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	8/18/2007	10	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.94	GA	10	15S	03E	G	WESTERN	10	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	8/18/2007	8.1	A	IMPULSE 1.6 FL	42750	109	AA	0	0.24	GA	10	15S	03E	G	WESTERN	8.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	8/18/2007	10	A	MSR SPRAY CONCE	10163	220	ZC	0	2.5	GA	10	15S	03E	G	WESTERN	10	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	8/28/2007	8.1	A	ALIETTE WDG FUN	264	516	ZB	0	24.3	LB	10	15S	03E	G	WESTERN	8.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	8/28/2007	10	A	ALIETTE WDG FUN	264	516	ZB	0	30	LB	10	15S	03E	G	WESTERN	10	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	8/28/2007	8.1	A	IMPULSE 1.6 FL	42750	109	AA	0	0.24	GA	10	15S	03E	G	WESTERN	8.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	8/28/2007	10	A	IMPULSE 1.6 FL	42750	109	AA	0	0.3	GA	10	15S	03E	G	WESTERN	10	A	LETTUCE HEAD
27S192A	BOSS FAR	050005	8/28/2007	8.1	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.27	GA	10	15S	03E	G	WESTERN	8.1	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050005	8/28/2007	10	A	SUCCESS	62719	292	AA	0	1.57	QT	10	15S	03E	G	WESTERN	10	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	5/23/2007	18.5	A	ACEPHATE 75SP AG	51036	236	AA	0	24.61	LB	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	5/23/2007	18.5	A	DUPONT MANEX FU	352	655	AA	0	7.4	GA	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	5/23/2007	18.5	A	ENDURA FUNGICIDI	7969	197	AA	0	148	OZ	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	5/23/2007	18.5	A	FIRST CHOICE NO F	11656	50009	ZB	0	2.08	GA	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	5/23/2007	18.5	A	MSR SPRAY CONCE	10163	220	ZC	0	4.63	GA	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	5/30/2007	18.5	A	DU PONT LANNATE	352	342	ZB	0	18.5	LB	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	5/30/2007	18.5	A	DUPONT MANEX FU	352	655	AA	0	7.4	GA	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	5/30/2007	18.5	A	DUPONT TANOS FU	352	604	AA	0	9.25	LB	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	5/30/2007	18.5	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.73	GA	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050006	5/30/2007	18.5	A	MSR SPRAY CONCE	10163	220	ZC	0	4.63	GA	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	6/12/2007	18.5	A	ALIETTE WDG FUN	264	516	ZB	0	55.5	LB	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	6/12/2007	18.5	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.73	GA	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	6/12/2007	18.5	A	GOWAN MALATHIOI	10163	21	ZB	0	4.63	GA	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	6/12/2007	18.5	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.62	GA	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	6/12/2007	18.5	A	PROVADO 1.6 FLOW	264	763	AA	0	0.54	GA	10	15S	03E	G	WESTERN	18.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	8/25/2007	18.9	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	94.5	OZ	10	15S	03E	G	WESTERN	18.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	8/25/2007	18.9	A	DUPONT MANEX FU	352	655	AA	0	7.56	GA	10	15S	03E	G	WESTERN	18.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	8/25/2007	18.9	A	ENDURA FUNGICIDI	7969	197	AA	0	151.2	OZ	10	15S	03E	G	WESTERN	18.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	8/25/2007	18.9	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.11	GA	10	15S	03E	G	WESTERN	18.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	8/25/2007	18.9	A	MSR SPRAY CONCE	10163	220	ZC	0	4.73	GA	10	15S	03E	G	WESTERN	18.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	8/25/2007	18.9	A	ORTHENE 75 S SOL	59639	26	ZC	0	25.14	LB	10	15S	03E	G	WESTERN	18.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	9/2/2007	18.9	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	94.5	OZ	10	15S	03E	G	WESTERN	18.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	9/2/2007	18.9	A	DU PONT LANNATE	352	342	ZB	0	18.9	LB	10	15S	03E	G	WESTERN	18.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	9/2/2007	18.9	A	DUPONT MANEX FU	352	655	AA	0	7.56	GA	10	15S	03E	G	WESTERN	18.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	9/2/2007	18.9	A	DUPONT TANOS FU	352	604	AA	0	9.45	LB	10	15S	03E	G	WESTERN	18.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	9/2/2007	18.9	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.77	GA	10	15S	03E	G	WESTERN	18.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	9/2/2007	18.9	A	MSR SPRAY CONCE	10163	220	ZC	0	4.73	GA	10	15S	03E	G	WESTERN	18.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	9/11/2007	18.9	A	FIRST CHOICE BRE	11656	50095	AA	0	1.77	QT	10	15S	03E	G	WESTERN	18.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	9/11/2007	18.9	A	IMPULSE 1.6 FL	42750	109	AA	0	0.56	GA	10	15S	03E	G	WESTERN	18.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	9/11/2007	18.9	A	INTREPID 2F	62719	442	AA	0	1.47	GA	10	15S	03E	G	WESTERN	18.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050006	9/11/2007	18.9	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.63	GA	10	15S	03E	G	WESTERN	18.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	5/14/2007	13.2	A	ACEPHATE 75SP AG	51036	236	AA	0	17.56	LB	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	5/14/2007	13.2	A	DIAZINON 50W	66222	10	ZA	0	13.2	LB	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	5/14/2007	13.2	A	DUPONT MANEX FU	352	655	AA	0	5.28	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	5/14/2007	13.2	A	ENDURA FUNGICIDI	7969	197	AA	0	105.6	OZ	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	5/14/2007	13.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.24	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	5/21/2007	13.2	A	ASSAIL 70 WP INSE	8033	23	AA	82695	19.8	OZ	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	5/21/2007	13.2	A	DU PONT LANNATE	352	342	ZB	0	13.2	LB	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	5/21/2007	13.2	A	DUPONT MANEX FU	352	655	AA	0	5.28	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	5/21/2007	13.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.73	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	5/21/2007	13.2	A	MSR SPRAY CONCE	10163	220	ZC	0	3.3	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	6/2/2007	13.2	A	DUPONT MANEX FU	352	655	AA	0	5.28	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	6/2/2007	13.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.24	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	6/2/2007	13.2	A	GOWAN MALATHIOI	10163	21	ZB	0	3.3	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	6/2/2007	13.2	A	PROVADO 1.6 FLOW	264	763	AA	0	0.39	GA	10	15S	03E	G	WESTERN	13.2	A	LETTUCE HEAD

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050007	8/17/2007	7	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	35	OZ	10	15S	03E	G	WESTERN	7	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/17/2007	7	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	35	OZ	10	15S	03E	G	WESTERN	7	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/17/2007	7	A	DUPONT MANEX FU	352	655	AA	0	2.8	GA	10	15S	03E	G	WESTERN	7	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/17/2007	7	A	DUPONT MANEX FU	352	655	AA	0	2.8	GA	10	15S	03E	G	WESTERN	7	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/17/2007	7	A	ENDURA FUNGICIDI	7969	197	AA	0	56	OZ	10	15S	03E	G	WESTERN	7	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/17/2007	7	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.66	GA	10	15S	03E	G	WESTERN	7	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/17/2007	7	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.66	GA	10	15S	03E	G	WESTERN	7	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/17/2007	7	A	MSR SPRAY CONCE	10163	220	ZC	0	1.75	GA	10	15S	03E	G	WESTERN	7	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/17/2007	7	A	MSR SPRAY CONCE	10163	220	ZC	0	1.75	GA	10	15S	03E	G	WESTERN	7	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/17/2007	7	A	ORTHENE 75 S SOL	59639	26	ZC	0	9.31	LB	10	15S	03E	G	WESTERN	7	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/17/2007	7	A	ORTHENE 75 S SOL	59639	26	ZC	0	9.31	LB	10	15S	03E	G	WESTERN	7	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/17/2007	7	A	SWITCH 62.5WG	100	953	AA	0	6.13	LB	10	15S	03E	G	WESTERN	7	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/28/2007	14	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	84	OZ	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/28/2007	14	A	DU PONT LANNATE	352	342	ZB	0	14	LB	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/28/2007	14	A	DUPONT MANEX FU	352	655	AA	0	5.6	GA	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/28/2007	14	A	DUPONT TANOS FU	352	604	AA	0	7	LB	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/28/2007	14	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.31	GA	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	8/28/2007	14	A	MSR SPRAY CONCE	10163	220	ZC	0	3.5	GA	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	9/11/2007	14	A	FIRST CHOICE BRE	11656	50095	AA	0	1.31	QT	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	9/11/2007	14	A	IMPULSE 1.6 FL	42750	109	AA	0	0.41	GA	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	9/11/2007	14	A	INTREPID 2F	62719	442	AA	0	1.09	GA	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050007	9/11/2007	14	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.47	GA	10	15S	03E	G	WESTERN	14	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/2/2007	14.1	A	ACEPHATE 75SP AG	51036	236	AA	0	18.75	LB	10	15S	03E	G	WESTERN	14.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/2/2007	14.1	A	DUPONT MANEX FU	352	655	AA	0	5.64	GA	10	15S	03E	G	WESTERN	14.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/2/2007	14.1	A	ENDURA FUNGICIDI	7969	197	AA	0	112.8	OZ	10	15S	03E	G	WESTERN	14.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/2/2007	14.1	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.32	GA	10	15S	03E	G	WESTERN	14.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/16/2007	14.1	A	ASSAIL 70 WP INSE	8033	23	AA	82695	15.51	OZ	10	15S	03E	G	WESTERN	14.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/16/2007	14.1	A	DUPONT MANEX FU	352	655	AA	0	5.64	GA	10	15S	03E	G	WESTERN	14.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/16/2007	14.1	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.32	GA	10	15S	03E	G	WESTERN	14.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/16/2007	14.1	A	INTREPID 2F	62719	442	AA	0	0.88	GA	10	15S	03E	G	WESTERN	14.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/16/2007	14.1	A	MSR SPRAY CONCE	10163	220	ZC	0	3.53	GA	10	15S	03E	G	WESTERN	14.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/21/2007	14.1	A	DIAZINON 50W	66222	10	ZA	0	14.1	LB	10	15S	03E	G	WESTERN	14.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/21/2007	14.1	A	DU PONT LANNATE	352	342	ZB	0	14.1	LB	10	15S	03E	G	WESTERN	14.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/21/2007	14.1	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.85	GA	10	15S	03E	G	WESTERN	14.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	5/21/2007	14.1	A	PROVADO 1.6 FLOW	264	763	AA	0	0.41	GA	10	15S	03E	G	WESTERN	14.1	A	LETTUCE HEAD
27S192A	BOSS FAR	050008	7/22/2007	14.11	A	ASSAIL 70 WP INSE	8033	23	AA	82695	23.99	OZ	10	15S	03E	G	WESTERN	14.11	A	LETTUCE ROMAINE

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050008	7/22/2007	14.11	A	DIAZINON 50W	66222	10	ZA	0	14.11	LB	10	15S	03E	G	WESTERN	14.11	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	7/22/2007	14.11	A	DUPONT MANEX FU	352	655	AA	0	5.64	GA	10	15S	03E	G	WESTERN	14.11	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	7/22/2007	14.11	A	ENDURA FUNGICIDI	7969	197	AA	0	112.88	OZ	10	15S	03E	G	WESTERN	14.11	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	7/22/2007	14.11	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.32	GA	10	15S	03E	G	WESTERN	14.11	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	7/22/2007	14.11	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.47	GA	10	15S	03E	G	WESTERN	14.11	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	7/30/2007	14.11	A	BLOCKADE 50WG P	100	922	ZB	0	14.11	OZ	10	15S	03E	G	WESTERN	14.11	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	7/30/2007	14.11	A	DU PONT LANNATE	352	342	ZB	0	14.11	LB	10	15S	03E	G	WESTERN	14.11	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	7/30/2007	14.11	A	DUPONT MANEX FU	352	655	AA	0	5.64	GA	10	15S	03E	G	WESTERN	14.11	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	7/30/2007	14.11	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.32	GA	10	15S	03E	G	WESTERN	14.11	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	7/30/2007	14.11	A	IMPULSE 1.6 FL	42750	109	AA	0	0.42	GA	10	15S	03E	G	WESTERN	14.11	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	8/9/2007	14.11	A	ALIETTE WDG FUN	264	516	ZB	0	42.33	LB	10	15S	03E	G	WESTERN	14.11	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	8/9/2007	14.11	A	ASSAIL 70 WP INSE	8033	23	AA	82695	23.99	OZ	10	15S	03E	G	WESTERN	14.11	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050008	8/9/2007	14.11	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.47	GA	10	15S	03E	G	WESTERN	14.11	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050009	6/22/2007	10.5	A	ACEPHATE 75SP AG	51036	236	AA	0	13.97	LB	10	15S	03E	G	WESTERN	10.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/22/2007	10.5	A	DUPONT MANEX FU	352	655	AA	0	4.2	GA	10	15S	03E	G	WESTERN	10.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/22/2007	10.5	A	ENDURA FUNGICIDI	7969	197	AA	0	84	OZ	10	15S	03E	G	WESTERN	10.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/22/2007	10.5	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.98	GA	10	15S	03E	G	WESTERN	10.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/22/2007	10.5	A	MSR SPRAY CONCE	10163	220	ZC	0	2.63	GA	10	15S	03E	G	WESTERN	10.5	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/23/2007	9.9	A	ACEPHATE 75SP AG	51036	236	AA	0	13.17	LB	10	15S	03E	G	WESTERN	9.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/23/2007	9.9	A	DUPONT MANEX FU	352	655	AA	0	3.96	GA	10	15S	03E	G	WESTERN	9.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/23/2007	9.9	A	ENDURA FUNGICIDI	7969	197	AA	0	79.2	OZ	10	15S	03E	G	WESTERN	9.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/23/2007	9.9	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.93	GA	10	15S	03E	G	WESTERN	9.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/23/2007	9.9	A	MSR SPRAY CONCE	10163	220	ZC	0	2.48	GA	10	15S	03E	G	WESTERN	9.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/28/2007	10.25	A	DU PONT LANNATE	352	342	ZB	0	10.25	LB	10	15S	03E	G	WESTERN	10.25	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/28/2007	10.25	A	DUPONT MANEX FU	352	655	AA	0	4.1	GA	10	15S	03E	G	WESTERN	10.25	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/28/2007	10.25	A	DUPONT TANOS FU	352	604	AA	0	5.13	LB	10	15S	03E	G	WESTERN	10.25	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/28/2007	10.25	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.96	GA	10	15S	03E	G	WESTERN	10.25	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/28/2007	10.25	A	MSR SPRAY CONCE	10163	220	ZC	0	2.56	GA	10	15S	03E	G	WESTERN	10.25	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/29/2007	9.9	A	DU PONT LANNATE	352	342	ZB	0	9.9	LB	10	15S	03E	G	WESTERN	9.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/29/2007	9.9	A	DUPONT MANEX FU	352	655	AA	0	3.96	GA	10	15S	03E	G	WESTERN	9.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/29/2007	9.9	A	DUPONT TANOS FU	352	604	AA	0	4.95	LB	10	15S	03E	G	WESTERN	9.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/29/2007	9.9	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.93	GA	10	15S	03E	G	WESTERN	9.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	6/29/2007	9.9	A	MSR SPRAY CONCE	10163	220	ZC	0	2.48	GA	10	15S	03E	G	WESTERN	9.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	7/11/2007	10.25	A	ALIETTE WDG FUN	264	516	ZB	0	30.75	LB	10	15S	03E	G	WESTERN	10.25	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	7/11/2007	9.9	A	ALIETTE WDG FUN	264	516	ZB	0	29.7	LB	10	15S	03E	G	WESTERN	9.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	7/11/2007	10.25	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.96	GA	10	15S	03E	G	WESTERN	10.25	A	LETTUCE HEAD

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050009	7/11/2007	9.9	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.93	GA	10	15S	03E	G	WESTERN	9.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	7/11/2007	10.25	A	GOWAN MALATHIOI	10163	21	ZB	0	2.56	GA	10	15S	03E	G	WESTERN	10.25	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	7/11/2007	9.9	A	GOWAN MALATHIOI	10163	21	ZB	0	2.48	GA	10	15S	03E	G	WESTERN	9.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	7/11/2007	9.9	A	IMPULSE 1.6 FL	42750	109	AA	0	0.29	GA	10	15S	03E	G	WESTERN	9.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	7/11/2007	10.25	A	IMPULSE 1.6 FL	42750	109	AA	0	0.3	GA	10	15S	03E	G	WESTERN	10.25	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	7/11/2007	9.9	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.33	GA	10	15S	03E	G	WESTERN	9.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	7/11/2007	10.25	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.34	GA	10	15S	03E	G	WESTERN	10.25	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	9/11/2007	20.2	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	121.2	OZ	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	9/11/2007	20.2	A	DU PONT LANNATE	352	342	ZB	0	20.2	LB	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	9/11/2007	20.2	A	DUPONT MANEX FU	352	655	AA	0	8.08	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	9/11/2007	20.2	A	ENDURA FUNGICIDI	7969	197	AA	0	161.6	OZ	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	9/11/2007	20.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.89	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	9/11/2007	20.2	A	MSR SPRAY CONCE	10163	220	ZC	0	5.05	GA	10	15S	03E	G	WESTERN	20.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	9/15/2007	20.15	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	100.75	OZ	10	15S	03E	G	WESTERN	20.15	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	9/15/2007	20.15	A	DU PONT LANNATE	352	342	ZB	0	20.15	LB	10	15S	03E	G	WESTERN	20.15	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	9/15/2007	20.15	A	DUPONT MANEX FU	352	655	AA	0	8.06	GA	10	15S	03E	G	WESTERN	20.15	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	9/15/2007	20.15	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.89	GA	10	15S	03E	G	WESTERN	20.15	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	9/15/2007	20.15	A	MSR SPRAY CONCE	10163	220	ZC	0	5.04	GA	10	15S	03E	G	WESTERN	20.15	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	10/1/2007	20.15	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.89	GA	10	15S	03E	G	WESTERN	20.15	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	10/1/2007	20.15	A	GOWAN MALATHIOI	10163	21	ZB	0	5.04	GA	10	15S	03E	G	WESTERN	20.15	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	10/1/2007	20.15	A	IMPULSE 1.6 FL	42750	109	AA	0	0.6	GA	10	15S	03E	G	WESTERN	20.15	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	10/1/2007	20.15	A	PROCLAIM INSECTI	100	904	ZA	0	60.45	OZ	10	15S	03E	G	WESTERN	20.15	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	10/9/2007	20.15	A	ALIETTE WDG FUN	264	516	ZB	0	60.45	LB	10	15S	03E	G	WESTERN	20.15	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	10/9/2007	20.15	A	DUPONT MANEX FU	352	655	AA	0	8.06	GA	10	15S	03E	G	WESTERN	20.15	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	10/9/2007	20.15	A	IMPULSE 1.6 FL	42750	109	AA	0	0.6	GA	10	15S	03E	G	WESTERN	20.15	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	10/9/2007	20.15	A	INTREPID 2F	62719	442	AA	0	1.57	GA	10	15S	03E	G	WESTERN	20.15	A	LETTUCE HEAD
27S192A	BOSS FAR	050009	10/9/2007	20.15	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.68	GA	10	15S	03E	G	WESTERN	20.15	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/12/2007	16.75	A	ACEPHATE 75SP AG	51036	236	AA	0	22.28	LB	10	15S	03E	G	WESTERN	16.75	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/12/2007	16.75	A	DUPONT MANEX FU	352	655	AA	0	6.7	GA	10	15S	03E	G	WESTERN	16.75	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/12/2007	16.75	A	ENDURA FUNGICIDI	7969	197	AA	0	134	OZ	10	15S	03E	G	WESTERN	16.75	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/12/2007	16.75	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.57	GA	10	15S	03E	G	WESTERN	16.75	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/12/2007	16.75	A	MSR SPRAY CONCE	10163	220	ZC	0	4.19	GA	10	15S	03E	G	WESTERN	16.75	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/21/2007	16.75	A	DU PONT LANNATE	352	342	ZB	0	16.75	LB	10	15S	03E	G	WESTERN	16.75	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/21/2007	16.75	A	DUPONT MANEX FU	352	655	AA	0	6.7	GA	10	15S	03E	G	WESTERN	16.75	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/21/2007	16.75	A	DUPONT TANOS FU	352	604	AA	0	8.38	LB	10	15S	03E	G	WESTERN	16.75	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	6/21/2007	16.75	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.57	GA	10	15S	03E	G	WESTERN	16.75	A	LETTUCE HEAD

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050010	6/21/2007	16.75	A	MSR SPRAY CONCE	10163	220	ZC	0	4.19	GA	10	15S	03E	G	WESTERN	16.75	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	7/1/2007	16.75	A	ALIETTE WDG FUN	264	516	ZB	0	50.25	LB	10	15S	03E	G	WESTERN	16.75	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	7/1/2007	16.75	A	GOWAN MALATHIO	10163	21	ZB	0	4.19	GA	10	15S	03E	G	WESTERN	16.75	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	7/1/2007	16.75	A	IMPULSE 1.6 FL	42750	109	AA	0	0.49	GA	10	15S	03E	G	WESTERN	16.75	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	7/1/2007	16.75	A	INTREPID 2F	62719	442	AA	0	1.05	GA	10	15S	03E	G	WESTERN	16.75	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/1/2007	17.13	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	94.22	OZ	10	15S	03E	G	WESTERN	17.13	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/1/2007	17.13	A	DUPONT MANEX FU	352	655	AA	0	6.85	GA	10	15S	03E	G	WESTERN	17.13	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/1/2007	17.13	A	ENDURA FUNGICIDI	7969	197	AA	0	137.04	OZ	10	15S	03E	G	WESTERN	17.13	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/1/2007	17.13	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.61	GA	10	15S	03E	G	WESTERN	17.13	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/1/2007	17.13	A	MSR SPRAY CONCE	10163	220	ZC	0	4.28	GA	10	15S	03E	G	WESTERN	17.13	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/1/2007	17.13	A	ORTHENE 75 S SOL	59639	26	ZC	0	22.78	LB	10	15S	03E	G	WESTERN	17.13	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/12/2007	17.13	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	85.65	OZ	10	15S	03E	G	WESTERN	17.13	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/12/2007	17.13	A	DU PONT LANNATE	352	342	ZB	0	17.13	LB	10	15S	03E	G	WESTERN	17.13	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/12/2007	17.13	A	DUPONT MANEX FU	352	655	AA	0	6.85	GA	10	15S	03E	G	WESTERN	17.13	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/12/2007	17.13	A	DUPONT TANOS FU	352	604	AA	0	8.57	LB	10	15S	03E	G	WESTERN	17.13	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/12/2007	17.13	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.61	GA	10	15S	03E	G	WESTERN	17.13	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/12/2007	17.13	A	MSR SPRAY CONCE	10163	220	ZC	0	4.28	GA	10	15S	03E	G	WESTERN	17.13	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/21/2007	17.3	A	FIRST CHOICE BRE	11656	50095	AA	0	1.62	QT	10	15S	03E	G	WESTERN	17.3	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/21/2007	17.3	A	IMPULSE 1.6 FL	42750	109	AA	0	0.51	GA	10	15S	03E	G	WESTERN	17.3	A	LETTUCE HEAD
27S192A	BOSS FAR	050010	9/21/2007	17.3	A	SUCCESS	62719	292	AA	0	1.62	QT	10	15S	03E	G	WESTERN	17.3	A	LETTUCE HEAD
27S192A	BOSS FAR	050011	5/16/2007	6.3	A	DIAZOL AG 500	66222	9	AA	0	3.15	GA	10	15S	03E	G		243	A	SPINACH
27S192A	BOSS FAR	050011	5/16/2007	6.3	A	RIDOMIL GOLD EC	100	801	AA	0	3.15	PT	10	15S	03E	G		243	A	SPINACH
27S192A	BOSS FAR	050011	5/16/2007	6.3	A	RO-NEET 6-E	73637	5	AA	74530	9.45	PT	10	15S	03E	G		243	A	SPINACH
27S192A	BOSS FAR	050011	5/17/2007	6.3	A	DIAZOL AG 500	66222	9	AA	0	3.15	GA	10	15S	03E	G		243	A	SPINACH
27S192A	BOSS FAR	050011	5/17/2007	6.3	A	RIDOMIL GOLD EC	100	801	AA	0	3.15	PT	10	15S	03E	G		243	A	SPINACH
27S192A	BOSS FAR	050011	5/17/2007	6.3	A	RO-NEET 6-E	73637	5	AA	74530	9.45	PT	10	15S	03E	G		243	A	SPINACH
27S192A	BOSS FAR	050011	6/2/2007	13.1	A	BLOCKADE 50WG P	100	922	ZB	0	9.83	OZ	10	15S	03E	G	WESTERN	13.1	A	SPINACH
27S192A	BOSS FAR	050011	6/2/2007	13.1	A	POUNCE 25 WP	279	3051	AA	0	10.48	LB	10	15S	03E	G	WESTERN	13.1	A	SPINACH
27S192A	BOSS FAR	050011	6/2/2007	13.1	A	TRIGARD	100	654	AA	0	2.18	LB	10	15S	03E	G	WESTERN	13.1	A	SPINACH
27S192A	BOSS FAR	050011	9/6/2007	13.22	A	DU PONT LANNATE	352	342	ZB	0	13.22	LB	10	15S	03E	G	WESTERN	13.22	A	LETTUCE LEAF
27S192A	BOSS FAR	050011	9/6/2007	13.22	A	DUPONT MANEX FU	352	655	AA	0	5.29	GA	10	15S	03E	G	WESTERN	13.22	A	LETTUCE LEAF
27S192A	BOSS FAR	050011	9/6/2007	13.22	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.24	GA	10	15S	03E	G	WESTERN	13.22	A	LETTUCE LEAF
27S192A	BOSS FAR	050011	9/6/2007	13.22	A	IMPULSE 1.6 FL	42750	109	AA	0	0.39	GA	10	15S	03E	G	WESTERN	13.22	A	LETTUCE LEAF
27S192A	BOSS FAR	050011	9/14/2007	13.22	A	BLOCKADE 50WG P	100	922	ZB	0	13.22	OZ	10	15S	03E	G	WESTERN	13.22	A	LETTUCE HEAD
27S192A	BOSS FAR	050011	9/14/2007	13.22	A	DIAZINON 50W	66222	10	ZA	0	13.22	LB	10	15S	03E	G	WESTERN	13.22	A	LETTUCE HEAD
27S192A	BOSS FAR	050011	9/14/2007	13.22	A	DU PONT LANNATE	352	342	ZB	0	13.22	LB	10	15S	03E	G	WESTERN	13.22	A	LETTUCE HEAD

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050011	9/14/2007	13.22	A	DUPONT MANEX FU	352	655	AA	0	5.29	GA	10	15S	03E	G	WESTERN	13.22	A	LETTUCE HEAD
27S192A	BOSS FAR	050011	9/14/2007	13.22	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.24	GA	10	15S	03E	G	WESTERN	13.22	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	5/24/2007	13.9	A	ACEPHATE 75SP AG	51036	236	AA	0	18.49	LB	10	15S	03E	G	WESTERN	13.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	5/24/2007	13.9	A	DUPONT MANEX FU	352	655	AA	0	5.56	GA	10	15S	03E	G	WESTERN	13.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	5/24/2007	13.9	A	ENDURA FUNGICIDI	7969	197	AA	0	111.2	OZ	10	15S	03E	G	WESTERN	13.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	5/24/2007	13.9	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.3	GA	10	15S	03E	G	WESTERN	13.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	5/24/2007	13.9	A	MSR SPRAY CONCE	10163	220	ZC	0	3.48	GA	10	15S	03E	G	WESTERN	13.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	5/30/2007	13.9	A	DU PONT LANNATE	352	342	ZB	0	13.9	LB	10	15S	03E	G	WESTERN	13.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	5/30/2007	13.9	A	DUPONT MANEX FU	352	655	AA	0	5.56	GA	10	15S	03E	G	WESTERN	13.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	5/30/2007	13.9	A	DUPONT TANOS FU	352	604	AA	0	6.95	LB	10	15S	03E	G	WESTERN	13.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	5/30/2007	13.9	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.3	GA	10	15S	03E	G	WESTERN	13.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	5/30/2007	13.9	A	MSR SPRAY CONCE	10163	220	ZC	0	3.48	GA	10	15S	03E	G	WESTERN	13.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	6/12/2007	13.9	A	ALIETTE WDG FUN	264	516	ZB	0	41.7	LB	10	15S	03E	G	WESTERN	13.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	6/12/2007	13.9	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.3	GA	10	15S	03E	G	WESTERN	13.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	6/12/2007	13.9	A	GOWAN MALATHIOI	10163	21	ZB	0	3.48	GA	10	15S	03E	G	WESTERN	13.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	6/12/2007	13.9	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.47	GA	10	15S	03E	G	WESTERN	13.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	6/12/2007	13.9	A	PROVADO 1.6 FLOW	264	763	AA	0	0.41	GA	10	15S	03E	G	WESTERN	13.9	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	8/15/2007	4.97	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	24.85	OZ	10	15S	03E	G	WESTERN	4.97	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	8/15/2007	5.08	A	DIAZINON 50W	66222	10	ZA	0	5.08	LB	10	15S	03E	G	WESTERN	5.08	A	LETTUCE LEAF
27S192A	BOSS FAR	050012	8/15/2007	3.93	A	DIAZINON 50W	66222	10	ZA	0	3.93	LB	10	15S	03E	G	WESTERN	3.93	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050012	8/15/2007	4.97	A	DIAZINON 50W	66222	10	ZA	0	4.97	LB	10	15S	03E	G	WESTERN	4.97	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	8/15/2007	5.08	A	DUPONT MANEX FU	352	655	AA	0	2.03	GA	10	15S	03E	G	WESTERN	5.08	A	LETTUCE LEAF
27S192A	BOSS FAR	050012	8/15/2007	3.93	A	DUPONT MANEX FU	352	655	AA	0	1.57	GA	10	15S	03E	G	WESTERN	3.93	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050012	8/15/2007	4.97	A	DUPONT MANEX FU	352	655	AA	0	1.99	GA	10	15S	03E	G	WESTERN	4.97	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	8/15/2007	3.93	A	ENDURA FUNGICIDI	7969	197	AA	0	31.44	OZ	10	15S	03E	G	WESTERN	3.93	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050012	8/15/2007	4.97	A	ENDURA FUNGICIDI	7969	197	AA	0	39.76	OZ	10	15S	03E	G	WESTERN	4.97	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	8/15/2007	5.08	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.48	GA	10	15S	03E	G	WESTERN	5.08	A	LETTUCE LEAF
27S192A	BOSS FAR	050012	8/15/2007	3.93	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.37	GA	10	15S	03E	G	WESTERN	3.93	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050012	8/15/2007	4.97	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.47	GA	10	15S	03E	G	WESTERN	4.97	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	8/15/2007	5.08	A	IMPULSE 1.6 FL	42750	109	AA	0	0.15	GA	10	15S	03E	G	WESTERN	5.08	A	LETTUCE LEAF
27S192A	BOSS FAR	050012	8/15/2007	3.93	A	IMPULSE 1.6 FL	42750	109	AA	0	0.12	GA	10	15S	03E	G	WESTERN	3.93	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050012	8/15/2007	4.97	A	MSR SPRAY CONCE	10163	220	ZC	0	1.24	GA	10	15S	03E	G	WESTERN	4.97	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	8/15/2007	5.08	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.17	GA	10	15S	03E	G	WESTERN	5.08	A	LETTUCE LEAF
27S192A	BOSS FAR	050012	8/15/2007	3.93	A	TRIGARD	100	654	AA	0	0.65	LB	10	15S	03E	G	WESTERN	3.93	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050012	8/22/2007	4.97	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	24.85	OZ	10	15S	03E	G	WESTERN	4.97	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	8/22/2007	5.08	A	BLOCKADE 50WG P	100	922	ZB	0	5.08	OZ	10	15S	03E	G	WESTERN	5.08	A	LETTUCE LEAF

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050012	8/22/2007	3.93	A	BLOCKADE 50WG P	100	922	ZB	0	3.93	OZ	10	15S	03E	G	WESTERN	3.93	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050012	8/22/2007	5.08	A	DU PONT LANNATE	352	342	ZB	0	5.08	LB	10	15S	03E	G	WESTERN	5.08	A	LETTUCE LEAF
27S192A	BOSS FAR	050012	8/22/2007	3.93	A	DU PONT LANNATE	352	342	ZB	0	3.93	LB	10	15S	03E	G	WESTERN	3.93	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050012	8/22/2007	4.97	A	DU PONT LANNATE	352	342	ZB	0	4.97	LB	10	15S	03E	G	WESTERN	4.97	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	8/22/2007	5.08	A	DUPONT MANEX FU	352	655	AA	0	2.03	GA	10	15S	03E	G	WESTERN	5.08	A	LETTUCE LEAF
27S192A	BOSS FAR	050012	8/22/2007	3.93	A	DUPONT MANEX FU	352	655	AA	0	1.57	GA	10	15S	03E	G	WESTERN	3.93	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050012	8/22/2007	4.97	A	DUPONT MANEX FU	352	655	AA	0	1.99	GA	10	15S	03E	G	WESTERN	4.97	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	8/22/2007	4.97	A	DUPONT TANOS FU	352	604	AA	0	2.49	LB	10	15S	03E	G	WESTERN	4.97	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	8/22/2007	5.08	A	FIRST CHOICE BRE	11656	50095	AA	0	0.48	QT	10	15S	03E	G	WESTERN	5.08	A	LETTUCE LEAF
27S192A	BOSS FAR	050012	8/22/2007	3.93	A	FIRST CHOICE BRE	11656	50095	AA	0	0.37	QT	10	15S	03E	G	WESTERN	3.93	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050012	8/22/2007	4.97	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.47	GA	10	15S	03E	G	WESTERN	4.97	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	8/22/2007	5.08	A	IMPULSE 1.6 FL	42750	109	AA	0	0.15	GA	10	15S	03E	G	WESTERN	5.08	A	LETTUCE LEAF
27S192A	BOSS FAR	050012	8/22/2007	3.93	A	IMPULSE 1.6 FL	42750	109	AA	0	0.12	GA	10	15S	03E	G	WESTERN	3.93	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050012	8/22/2007	4.97	A	MSR SPRAY CONCE	10163	220	ZC	0	1.24	GA	10	15S	03E	G	WESTERN	4.97	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	9/6/2007	3.93	A	DU PONT LANNATE	352	342	ZB	0	1.97	LB	10	15S	03E	G	WESTERN	3.93	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050012	9/6/2007	4.97	A	DU PONT LANNATE	352	342	ZB	0	2.49	LB	10	15S	03E	G	WESTERN	4.97	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	9/6/2007	3.93	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.37	GA	10	15S	03E	G	WESTERN	3.93	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050012	9/6/2007	4.97	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.47	GA	10	15S	03E	G	WESTERN	4.97	A	LETTUCE HEAD
27S192A	BOSS FAR	050012	9/6/2007	3.93	A	IMPULSE 1.6 FL	42750	109	AA	0	0.12	GA	10	15S	03E	G	WESTERN	3.93	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050012	9/6/2007	4.97	A	IMPULSE 1.6 FL	42750	109	AA	0	0.15	GA	10	15S	03E	G	WESTERN	4.97	A	LETTUCE HEAD
27S192A	BOSS FAR	050013	7/28/2007	7	A	DIAZINON 50W	66222	10	ZA	0	7	LB	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	7/28/2007	7	A	DUPONT MANEX FU	352	655	AA	0	2.8	GA	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	7/28/2007	7	A	ENDURA FUNGICIDI	7969	197	AA	0	56	OZ	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	7/28/2007	7	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.66	GA	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	7/28/2007	7	A	IMPULSE 1.6 FL	42750	109	AA	0	0.21	GA	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	7/28/2007	7	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.23	GA	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	8/10/2007	7	A	DU PONT LANNATE	352	342	ZB	0	7	LB	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	8/10/2007	7	A	DUPONT MANEX FU	352	655	AA	0	2.8	GA	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	8/10/2007	7	A	FIRST CHOICE NO F	11656	50009	ZB	0	0.66	GA	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	8/10/2007	7	A	IMPULSE 1.6 FL	42750	109	AA	0	0.21	GA	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	8/10/2007	7	A	TRIGARD	100	654	AA	0	1.16	LB	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	8/27/2007	7	A	ALIETTE WDG FUN	264	516	ZB	0	21	LB	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050013	8/27/2007	7	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.23	GA	10	15S	03E	G	WESTERN	7	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	7/28/2007	11.62	A	DIAZINON 50W	66222	10	ZA	0	11.62	LB	10	15S	03E	G	WESTERN	11.62	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	7/28/2007	11.62	A	DUPONT MANEX FU	352	655	AA	0	4.65	GA	10	15S	03E	G	WESTERN	11.62	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	7/28/2007	11.62	A	ENDURA FUNGICIDI	7969	197	AA	0	92.96	OZ	10	15S	03E	G	WESTERN	11.62	A	LETTUCE ROMAINE

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050014	7/28/2007	11.62	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.09	GA	10	15S	03E	G	WESTERN	11.62	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	7/28/2007	11.62	A	IMPULSE 1.6 FL	42750	109	AA	0	0.34	GA	10	15S	03E	G	WESTERN	11.62	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	7/28/2007	11.62	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.39	GA	10	15S	03E	G	WESTERN	11.62	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	8/8/2007	11.62	A	ASSAIL 70 WP INSE	8033	23	AA	82695	17.43	OZ	10	15S	03E	G	WESTERN	11.62	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	8/8/2007	11.62	A	DU PONT LANNATE	352	342	ZB	0	11.62	LB	10	15S	03E	G	WESTERN	11.62	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	8/8/2007	11.62	A	DUPONT MANEX FU	352	655	AA	0	4.65	GA	10	15S	03E	G	WESTERN	11.62	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	8/8/2007	11.62	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.09	GA	10	15S	03E	G	WESTERN	11.62	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	8/8/2007	11.62	A	TRIGARD	100	654	AA	0	1.93	LB	10	15S	03E	G	WESTERN	11.62	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050014	8/23/2007	11.62	A	POUNCE 25 WP	279	3051	AA	0	9.3	LB	10	15S	03E	G	WESTERN	11.62	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050015	7/25/2007	12.4	A	ACEPHATE 75SP AG	51036	236	AA	0	16.49	LB	10	15S	03E	G	WESTERN	12.4	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	7/25/2007	12.4	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	62	OZ	10	15S	03E	G	WESTERN	12.4	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	7/25/2007	12.4	A	DUPONT MANEX FU	352	655	AA	0	4.96	GA	10	15S	03E	G	WESTERN	12.4	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	7/25/2007	12.4	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.4	GA	10	15S	03E	G	WESTERN	12.4	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	7/25/2007	12.4	A	MSR SPRAY CONCE	10163	220	ZC	0	3.1	GA	10	15S	03E	G	WESTERN	12.4	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	7/25/2007	12.4	A	ROVRAL BRAND 4 F	264	482	ZA	0	3.1	GA	10	15S	03E	G	WESTERN	12.4	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	7/30/2007	12.4	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.16	GA	10	15S	03E	G	WESTERN	12.4	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	7/30/2007	12.4	A	MSR SPRAY CONCE	10163	220	ZC	0	3.1	GA	10	15S	03E	G	WESTERN	12.4	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	7/30/2007	12.4	A	TRIGARD	100	654	AA	0	2.06	LB	10	15S	03E	G	WESTERN	12.4	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	7/30/2007	12.4	A	VENOM INSECTICID	59639	135	AA	0	2.33	LB	10	15S	03E	G	WESTERN	12.4	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	8/15/2007	12.4	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.16	GA	10	15S	03E	G	WESTERN	12.4	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	8/15/2007	12.4	A	GOWAN MALATHIOI	10163	21	ZB	0	3.1	GA	10	15S	03E	G	WESTERN	12.4	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	8/15/2007	12.4	A	IMPULSE 1.6 FL	42750	109	AA	0	0.37	GA	10	15S	03E	G	WESTERN	12.4	A	LETTUCE HEAD
27S192A	BOSS FAR	050015	8/15/2007	12.4	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.42	GA	10	15S	03E	G	WESTERN	12.4	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	7/19/2007	12.2	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	61	OZ	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	7/19/2007	12.2	A	DUPONT MANEX FU	352	655	AA	0	4.88	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	7/19/2007	12.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.14	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	7/19/2007	12.2	A	IMPULSE 1.6 FL	42750	109	AA	0	0.36	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	7/19/2007	12.2	A	MSR SPRAY CONCE	10163	220	ZC	0	3.05	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	7/19/2007	12.2	A	ROVRAL BRAND 4 F	264	482	ZA	0	3.05	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	7/26/2007	12.2	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	61	OZ	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	7/26/2007	12.2	A	DIAZINON 50W	66222	10	ZA	0	12.2	LB	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	7/26/2007	12.2	A	DU PONT LANNATE	352	342	ZB	0	12.2	LB	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	7/26/2007	12.2	A	DUPONT MANEX FU	352	655	AA	0	4.88	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	7/26/2007	12.2	A	DUPONT TANOS FU	352	604	AA	0	6.1	LB	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	7/26/2007	12.2	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.37	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD
27S192A	BOSS FAR	050016	7/26/2007	12.2	A	IMPULSE 1.6 FL	42750	109	AA	0	0.36	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE HEAD

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAR	050016	7/31/2007	12.2	A	DUPONT MANEX FU	352	655	AA	0	4.88	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	7/31/2007	12.2	A	FIRST CHOICE BRE	11656	50095	AA	0	1.15	QT	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	7/31/2007	12.2	A	IMPULSE 1.6 FL	42750	109	AA	0	0.36	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	7/31/2007	12.2	A	MUSTANG 1.5 EW I	279	3126	ZA	0	0.41	GA	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050016	7/31/2007	12.2	A	VENOM INSECTICID	59639	135	AA	0	2.29	LB	10	15S	03E	G	WESTERN	12.2	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	7/11/2007	12.7	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	63.5	OZ	10	15S	03E	G	WESTERN	12.7	A	LETTUCE HEAD
27S192A	BOSS FAR	050017	7/11/2007	12.7	A	ASSAIL 70 WP INSE	8033	23	AA	82695	21.59	OZ	10	15S	03E	G	WESTERN	12.7	A	LETTUCE HEAD
27S192A	BOSS FAR	050017	7/11/2007	12.7	A	DU PONT LANNATE	352	342	ZB	0	12.7	LB	10	15S	03E	G	WESTERN	12.7	A	LETTUCE HEAD
27S192A	BOSS FAR	050017	7/11/2007	12.7	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.19	GA	10	15S	03E	G	WESTERN	12.7	A	LETTUCE HEAD
27S192A	BOSS FAR	050017	7/11/2007	12.7	A	ROVRAL BRAND 4 F	264	482	ZA	0	3.18	GA	10	15S	03E	G	WESTERN	12.7	A	LETTUCE HEAD
27S192A	BOSS FAR	050017	7/19/2007	12.7	A	AGRI-MEK 0.15 EC M	100	898	ZA	0	50.8	OZ	10	15S	03E	G	WESTERN	12.7	A	LETTUCE HEAD
27S192A	BOSS FAR	050017	7/19/2007	12.7	A	ASSAIL 70 WP INSE	8033	23	AA	82695	21.59	OZ	10	15S	03E	G	WESTERN	12.7	A	LETTUCE HEAD
27S192A	BOSS FAR	050017	7/19/2007	12.7	A	DIAZINON 50W	66222	10	ZA	0	12.7	LB	10	15S	03E	G	WESTERN	12.7	A	LETTUCE HEAD
27S192A	BOSS FAR	050017	7/19/2007	12.7	A	DUPONT MANEX FU	352	655	AA	0	5.08	GA	10	15S	03E	G	WESTERN	12.7	A	LETTUCE HEAD
27S192A	BOSS FAR	050017	7/19/2007	12.7	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.43	GA	10	15S	03E	G	WESTERN	12.7	A	LETTUCE HEAD
27S192A	BOSS FAR	050017	7/19/2007	12.7	A	MSR SPRAY CONCE	10163	220	ZC	0	3.18	GA	10	15S	03E	G	WESTERN	12.7	A	LETTUCE HEAD
27S192A	BOSS FAR	050017	7/26/2007	12.7	A	ALIETTE WDG FUN	264	516	ZB	0	38.1	LB	10	15S	03E	G	WESTERN	12.7	A	LETTUCE HEAD
27S192A	BOSS FAR	050017	7/26/2007	12.7	A	DU PONT LANNATE	352	342	ZB	0	12.7	LB	10	15S	03E	G	WESTERN	12.7	A	LETTUCE HEAD
27S192A	BOSS FAR	050017	7/26/2007	12.7	A	GOWAN MALATHIO	10163	21	ZB	0	3.18	GA	10	15S	03E	G	WESTERN	12.7	A	LETTUCE HEAD
27S192A	BOSS FAR	050017	7/26/2007	12.7	A	IMPULSE 1.6 FL	42750	109	AA	0	0.38	GA	10	15S	03E	G	WESTERN	12.7	A	LETTUCE HEAD
27S192A	BOSS FAR	050017	8/2/2007	13	A	ALIETTE WDG FUN	264	516	ZB	0	39	LB	10	15S	03E	G	WESTERN	13	A	LETTUCE HEAD
27S192A	BOSS FAR	050017	8/2/2007	13	A	GOWAN MALATHIO	10163	21	ZB	0	3.25	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE HEAD
27S192A	BOSS FAR	050017	8/2/2007	13	A	IMPULSE 1.6 FL	42750	109	AA	0	0.39	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE HEAD
27S192A	BOSS FAR	050017	8/2/2007	13	A	INTREPID 2F	62719	442	AA	0	0.81	GA	10	15S	03E	G	WESTERN	13	A	LETTUCE HEAD
27S192A	BOSS FAR	050017	10/8/2007	12.76	A	DIAZINON 50W	66222	10	ZA	0	12.76	LB	10	15S	03E	G	WESTERN	12.76	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	10/8/2007	12.76	A	DUPONT MANEX FU	352	655	AA	0	5.1	GA	10	15S	03E	G	WESTERN	12.76	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	10/8/2007	12.76	A	ENDURA FUNGICIDI	7969	197	AA	0	102.08	OZ	10	15S	03E	G	WESTERN	12.76	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	10/8/2007	12.76	A	FIRST CHOICE NO F	11656	50009	ZB	0	1.2	GA	10	15S	03E	G	WESTERN	12.76	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	10/8/2007	12.76	A	IMPULSE 1.6 FL	42750	109	AA	0	0.38	GA	10	15S	03E	G	WESTERN	12.76	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	10/8/2007	12.76	A	MUSTANG 1.5 EW I	279	3126	ZA	0	0.43	GA	10	15S	03E	G	WESTERN	12.76	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	10/19/2007	12.76	A	ALIETTE WDG FUN	264	516	ZB	0	38.28	LB	10	15S	03E	G	WESTERN	12.76	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	10/19/2007	12.76	A	DU PONT LANNATE	352	342	ZB	0	12.76	LB	10	15S	03E	G	WESTERN	12.76	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	10/19/2007	12.76	A	DUPONT MANEX FU	352	655	AA	0	5.1	GA	10	15S	03E	G	WESTERN	12.76	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	10/19/2007	12.76	A	PROVADO 1.6 FLOW	264	763	AA	0	0.37	GA	10	15S	03E	G	WESTERN	12.76	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	10/31/2007	12.76	A	ALIETTE WDG FUN	264	516	ZB	0	51.04	LB	10	15S	03E	G	WESTERN	12.76	A	LETTUCE ROMAINE
27S192A	BOSS FAR	050017	10/31/2007	12.76	A	ASSAIL 70 WP INSE	8033	23	AA	82695	19.14	OZ	10	15S	03E	G	WESTERN	12.76	A	LETTUCE ROMAINE

Permit	Permittee	Loc	Date	Treated	Area	PestName	EPAFirm	EPAPest	Alph	Aux	Amt	Unit	S	T	R	Meth	Appr	Planted	Units	Commodity
27S192A	BOSS FAF	050017	10/31/2007	12.76	A	MUSTANG 1.5 EW IN	279	3126	ZA	0	0.43	GA	10	15S	03E	G	WESTERN	12.76	A	LETTUCE ROMAINE

Appendix 11

Environmental database search report

The EDR Radius Map
with GeoCheck®

Uni-Kool
Abbott Street
Salinas, CA 93901

Inquiry Number: 2211225.2s

May 05, 2008

The Standard in Environmental Risk Information

440 Wheelers Farms Road
Milford, Connecticut 06461

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

ABBOTT STREET
SALINAS, CA 93901

COORDINATES

Latitude (North):	36.646140 - 36° 38' 46.1''
Longitude (West):	121.620530 - 121° 37' 13.9''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	623312.7
UTM Y (Meters):	4056302.5
Elevation:	62 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	36121-F5 NATIVIDAD, CA
Most Recent Revision:	1984
West Map:	36121-F6 SALINAS, CA
Most Recent Revision:	1984

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

FEDERAL RECORDS

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
Delisted NPL ---------- National Priority List Deletions
NPL LIENS ---------- Federal Superfund Liens
CERCLIS ---------- Comprehensive Environmental Response, Compensation, and Liability Information System
LIENS 2 ---------- CERCLA Lien Information
CORRACTS ---------- Corrective Action Report

EXECUTIVE SUMMARY

RCRA-TSDF RCRA - Transporters, Storage and Disposal
RCRA-LQG RCRA - Large Quantity Generators
RCRA-CESQG RCRA - Conditionally Exempt Small Quantity Generator
RCRA-NonGen RCRA - Non Generators
US ENG CONTROLS Engineering Controls Sites List
US INST CONTROL Sites with Institutional Controls
ERNS Emergency Response Notification System
HMIRS Hazardous Materials Information Reporting System
DOT OPS Incident and Accident Data
US CDL Clandestine Drug Labs
US BROWNFIELDS A Listing of Brownfields Sites
DOD Department of Defense Sites
FUDS Formerly Used Defense Sites
LUCIS Land Use Control Information System
CONSENT Superfund (CERCLA) Consent Decrees
ROD Records Of Decision
UMTRA Uranium Mill Tailings Sites
ODI Open Dump Inventory
DEBRIS REGION 9 Torres Martinez Reservation Illegal Dump Site Locations
MINES Mines Master Index File
TRIS Toxic Chemical Release Inventory System
TSCA Toxic Substances Control Act
FTTS FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS FIFRA/TSCA Tracking System Administrative Case Listing
SSTS Section 7 Tracking Systems
ICIS Integrated Compliance Information System
PADS PCB Activity Database System
MLTS Material Licensing Tracking System
RADINFO Radiation Information Database
FINDS Facility Index System/Facility Registry System
RAATS RCRA Administrative Action Tracking System

STATE AND LOCAL RECORDS

HIST Cal-Sites Historical Calsites Database
CA BOND EXP. PLAN Bond Expenditure Plan
SCH School Property Evaluation Program
Toxic Pits Toxic Pits Cleanup Act Sites
SWF/LF Solid Waste Information System
CA WDS Waste Discharge System
WMUDS/SWAT Waste Management Unit Database
SWRCY Recycler Database
SLIC Statewide SLIC Cases
UST Active UST Facilities
AST Aboveground Petroleum Storage Tank Facilities
LIENS Environmental Liens Listing
CHMIRS California Hazardous Material Incident Report System
Notify 65 Proposition 65 Records
DEED Deed Restriction Listing
VCP Voluntary Cleanup Program Properties
DRYCLEANERS Cleaner Facilities
WIP Well Investigation Program Case List
CDL Clandestine Drug Labs
RESPONSE State Response Sites

EXECUTIVE SUMMARY

HAZNET Facility and Manifest Data
AIRS Emissions Inventory Data
HAULERS Registered Waste Tire Haulers Listing

TRIBAL RECORDS

INDIAN RESERV Indian Reservations
INDIAN ODI Report on the Status of Open Dumps on Indian Lands
INDIAN LUST Leaking Underground Storage Tanks on Indian Land
INDIAN UST Underground Storage Tanks on Indian Land

EDR PROPRIETARY RECORDS

Manufactured Gas Plants EDR Proprietary Manufactured Gas Plants

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

FEDERAL RECORDS

CERC-NFRAP: Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

A review of the CERC-NFRAP list, as provided by EDR, and dated 12/03/2007 has revealed that there is 1 CERC-NFRAP site within approximately 0.625 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
SOILSERV INC	***1427 ABBOTT STREET***	***1/4 - 1/2 NNW***	***7***	***22***

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 03/06/2008 has revealed that there is 1

RCRA-SQG site within approximately 0.375 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
JOHN PRYOR CO	***1505 ABBOTT***	***1/4 - 1/2 NNE***	***A6***	***18***

STATE AND LOCAL RECORDS

Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites). This listing is no longer updated by the state agency.

A review of the Cortese list, as provided by EDR, and dated 04/01/2001 has revealed that there are 3 Cortese sites within approximately 0.625 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
STURDY OIL CO	***1511 ABBOTT***	***1/8 - 1/4 NNE***	***A2***	***6***
JOHN PRYOR CO	***1505 ABBOTT***	***1/4 - 1/2 NNE***	***A6***	***18***
CLAIRE PATLEE TRUCKING	***1111 HARKINS RD***	***1/2 - 1 WNW***	***10***	***33***

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the LUST list, as provided by EDR, and dated 01/07/2008 has revealed that there are 5 LUST sites within approximately 0.625 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
STURDY OIL CO	***1511 ABBOTT ST***	***1/8 - 1/4 NNE***	***A3***	***10***
Facility Status: Pollution Characterization				
JOHN PRYOR CO	***1505 ABBOTT***	***1/4 - 1/2 NNE***	***A6***	***18***
Facility Status: Case Closed				
BAY AREA/DIABLO PETROLEUM	1356 DAYTON ST	1/4 - 1/2 WNW	8	28
Facility Status: Post remedial action monitoring				
ROSSI DISTRIBUTING	1044 HARKINS RD	1/2 - 1 NW	9	30
Facility Status: Case Closed				
CLAIRE PATLEE TRUCKING	***1111 HARKINS RD***	***1/2 - 1 WNW***	***10***	***33***
Facility Status: Case Closed				

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there is 1 CA FID UST site within approximately 0.375 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
STURDY OIL	1511 ABBOTT ST.,	1/8 - 1/4 NNE	A5	17

EXECUTIVE SUMMARY

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 3 HIST UST sites within approximately 0.375 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
JOHN STR. SERVICE	1511 ABBOTT ST	1/8 - 1/4 NNE	A1	6
STURDY OIL CO	***1511 ABBOTT ST***	***1/8 - 1/4 NNE***	***A3***	***10***
STURDY OIL CO.	1511 ABBOTT ST	1/8 - 1/4 NNE	A4	16

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there is 1 SWEEPS UST site within approximately 0.375 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
STURDY OIL CO	***1511 ABBOTT***	***1/8 - 1/4 NNE***	***A2***	***6***

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 02/26/2008 has revealed that there is 1 ENVIROSTOR site within approximately 1.125 miles of the target property.

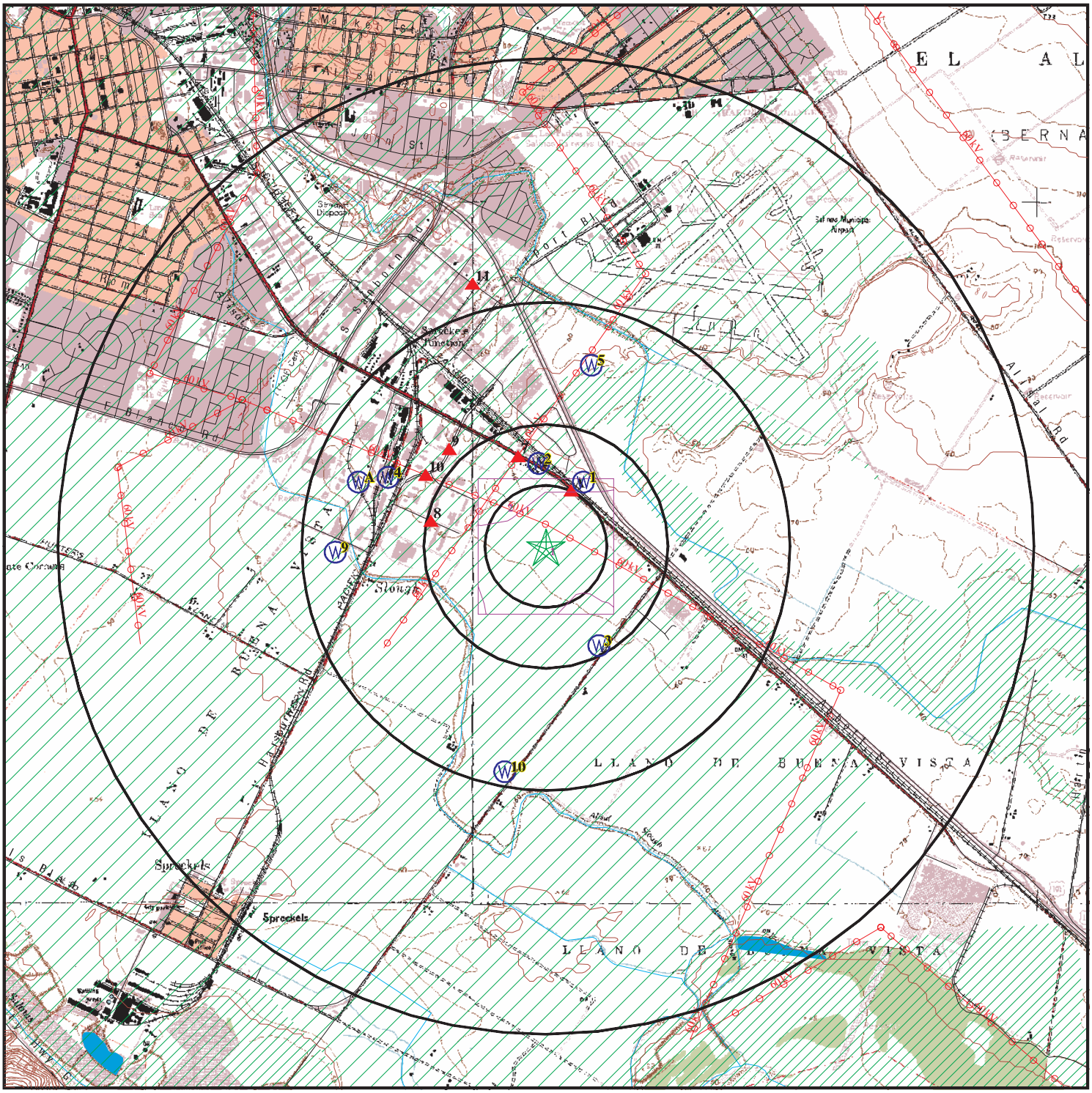
Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
WFS - SALINAS FACILITY	***1127 TERVEN***	***1 - 2 NNW***	***11***	***35***
Facility Status: Refer: Other Agency				

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

Site Name	Database(s)
GEORGIA-PACIFIC CORP.	SWEEPS UST
BUNN YUKI RANCH	CA FID UST, SWEEPS UST
LAGUNA SECA RECREATION AREA	CA FID UST, SWEEPS UST
KANTRO ENTERPRISES, INC.	SWEEPS UST
HWY 70 / 183 (CROSS-SAN JOHN RD)	CDL
700 N MAIN ST / HWY 101	CDL
VEHICLE STOP HWY 68	CDL
FIRESTONE RANCH	LUST, Cortese
PG&E GAS PLANT SALINAS	CERC-NFRAP
DAVIS RD DSPL SITE	CERC-NFRAP
BERMAN STEEL CO	CERC-NFRAP
TORRO PARK MAINTENANCE	LUST
CASILLAS BROS. BEACON	LUST
SARGENT RANCH	LUST, HIST LUST
BUNN YUKI RANCH	HIST UST
ASSOCIATED-TAGLINE, INC.	AST
GEORGIA PACIFIC	HAZNET
CALTRANS DIST 5/CONSTR/EA05-491504/HWY 68 REHABILI	HAZNET
LAMAR BLAIR	HAZNET
INMAN DISTRIBUTING	HAZNET
HOME DEPOT/WHITE CAP CONSTR SUPPLY-HDWC0027	HAZNET
SALINAS SHIRT PRINTERS	HAZNET
SONORA PACKING	HAZNET
JOE'S LUBE SERVICE	HAZNET
MONTEREY REGIONAL WASTE MGMT DIST	HAZNET
AB INITIO DEVELOPMENT	HAZNET
BERMAN STEEL - SALINAS	CA BOND EXP. PLAN
ASSOCIATED TAGLINE CHEMICALS	CA WDS
CA UTILITIES STP	CA WDS
PACIFIC GAS & ELECTRIC CO	DOT OPS
PUREGRO COMPANY	SSTS

OVERVIEW MAP - 2211225.2s

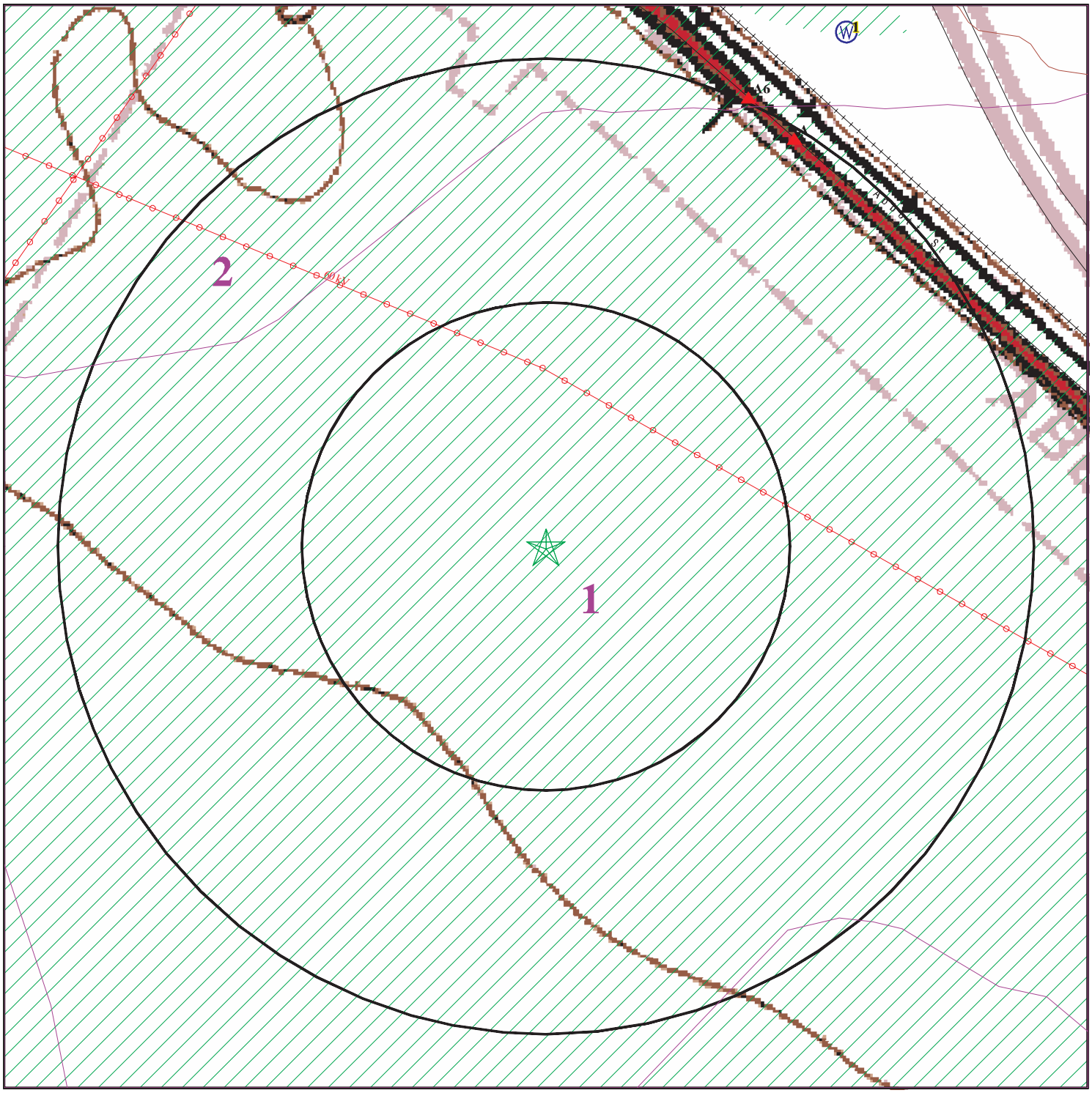


- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Uni-Kool	CLIENT:	O Brien & Gere Companies
ADDRESS:	Abbott Street Salinas CA 93901	CONTACT:	Janelle Amendola
LAT/LONG:	36.6461 / 121.6205	INQUIRY #:	2211225.2s
		DATE:	May 05, 2008 12:01 pm

DETAIL MAP - 2211225.2s



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites

0 1/16 1/8 1/4 Miles

- Indian Reservations BIA
- Power transmission lines
- Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Uni-Kool	CLIENT: O Brien & Gere Companies
ADDRESS: Abbott Street Salinas CA 93901	CONTACT: Janelle Amendola
LAT/LONG: 36.6461 / 121.6205	INQUIRY #: 2211225.2s DATE: May 05, 2008 12:02 pm

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FEDERAL RECORDS								
NPL		1.125	0	0	0	0	0	0
Proposed NPL		1.125	0	0	0	0	0	0
Delisted NPL		1.125	0	0	0	0	0	0
NPL LIENS		0.125	0	NR	NR	NR	NR	0
CERCLIS		0.625	0	0	0	0	NR	0
CERC-NFRAP		0.625	0	0	1	0	NR	1
LIENS 2		0.125	0	NR	NR	NR	NR	0
CORRACTS		1.125	0	0	0	0	0	0
RCRA-TSDF		0.625	0	0	0	0	NR	0
RCRA-LQG		0.375	0	0	0	NR	NR	0
RCRA-SQG		0.375	0	0	1	NR	NR	1
RCRA-CESQG		0.375	0	0	0	NR	NR	0
RCRA-NonGen		0.125	0	NR	NR	NR	NR	0
US ENG CONTROLS		0.625	0	0	0	0	NR	0
US INST CONTROL		0.625	0	0	0	0	NR	0
ERNS		0.125	0	NR	NR	NR	NR	0
HMIRS		0.125	0	NR	NR	NR	NR	0
DOT OPS		0.125	0	NR	NR	NR	NR	0
US CDL		0.125	0	NR	NR	NR	NR	0
US BROWNFIELDS		0.625	0	0	0	0	NR	0
DOD		1.125	0	0	0	0	0	0
FUDS		1.125	0	0	0	0	0	0
LUCIS		0.625	0	0	0	0	NR	0
CONSENT		1.125	0	0	0	0	0	0
ROD		1.125	0	0	0	0	0	0
UMTRA		0.625	0	0	0	0	NR	0
ODI		0.625	0	0	0	0	NR	0
DEBRIS REGION 9		0.500	0	0	0	NR	NR	0
MINES		0.375	0	0	0	NR	NR	0
TRIS		0.125	0	NR	NR	NR	NR	0
TSCA		0.125	0	NR	NR	NR	NR	0
FTTS		0.125	0	NR	NR	NR	NR	0
HIST FTTS		0.125	0	NR	NR	NR	NR	0
SSTS		0.125	0	NR	NR	NR	NR	0
ICIS		0.125	0	NR	NR	NR	NR	0
PADS		0.125	0	NR	NR	NR	NR	0
MLTS		0.125	0	NR	NR	NR	NR	0
RADINFO		0.125	0	NR	NR	NR	NR	0
FINDS		0.125	0	NR	NR	NR	NR	0
RAATS		0.125	0	NR	NR	NR	NR	0
STATE AND LOCAL RECORDS								
HIST Cal-Sites		1.125	0	0	0	0	0	0
CA BOND EXP. PLAN		1.125	0	0	0	0	0	0
SCH		0.375	0	0	0	NR	NR	0
Toxic Pits		1.125	0	0	0	0	0	0
SWF/LF		0.625	0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CA WDS		0.125	0	NR	NR	NR	NR	0
WMUDS/SWAT		0.625	0	0	0	0	NR	0
Cortese		0.625	0	1	1	1	NR	3
SWRCY		0.625	0	0	0	0	NR	0
LUST		0.625	0	1	2	2	NR	5
CA FID UST		0.375	0	1	0	NR	NR	1
SLIC		0.625	0	0	0	0	NR	0
UST		0.375	0	0	0	NR	NR	0
HIST UST		0.375	0	3	0	NR	NR	3
AST		0.375	0	0	0	NR	NR	0
LIENS		0.125	0	NR	NR	NR	NR	0
SWEEPS UST		0.375	0	1	0	NR	NR	1
CHMIRS		0.125	0	NR	NR	NR	NR	0
Notify 65		1.125	0	0	0	0	0	0
DEED		0.625	0	0	0	0	NR	0
VCP		0.625	0	0	0	0	NR	0
DRYCLEANERS		0.375	0	0	0	NR	NR	0
WIP		0.375	0	0	0	NR	NR	0
CDL		0.125	0	NR	NR	NR	NR	0
RESPONSE		1.125	0	0	0	0	0	0
HAZNET		0.125	0	NR	NR	NR	NR	0
AIRS		0.125	0	NR	NR	NR	NR	0
HAULERS		0.125	0	NR	NR	NR	NR	0
ENVIROSTOR		1.125	0	0	0	0	1	1
TRIBAL RECORDS								
INDIAN RESERV		1.125	0	0	0	0	0	0
INDIAN ODI		0.625	0	0	0	0	NR	0
INDIAN LUST		0.625	0	0	0	0	NR	0
INDIAN UST		0.375	0	0	0	NR	NR	0
EDR PROPRIETARY RECORDS								
Manufactured Gas Plants		1.125	0	0	0	0	0	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1
NNE
1/8-1/4
0.244 mi.
1291 ft.

JOHN STR. SERVICE
1511 ABBOTT ST
SALINAS, CA 93901

HIST UST **U001593164**
N/A

Site 1 of 6 in cluster A

Relative:
Equal

Actual:
62 ft.

HIST UST:

Region:	STATE
Facility ID:	00000030448
Facility Type:	Gas Station
Other Type:	Not reported
Total Tanks:	0003
Contact Name:	EARL LAXON
Telephone:	4087581129
Owner Name:	STURDY OIL CO.
Owner Address:	1511 ABBOTT STREET
Owner City,St,Zip:	SALINAS, CA 93901
Tank Num:	001
Container Num:	1
Year Installed:	Not reported
Tank Capacity:	00012000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Tank Construction:	Not reported
Leak Detection:	Stock Inventor, 10
Tank Num:	002
Container Num:	2
Year Installed:	Not reported
Tank Capacity:	00012000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Tank Construction:	Not reported
Leak Detection:	Stock Inventor, 10
Tank Num:	003
Container Num:	3
Year Installed:	Not reported
Tank Capacity:	00012000
Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Tank Construction:	Not reported
Leak Detection:	Stock Inventor, 10

A2
NNE
1/8-1/4
0.244 mi.
1291 ft.

STURDY OIL CO
1511 ABBOTT
SALINAS, CA 93901

Cortese **S105035153**
SWEEPS UST **N/A**

Site 2 of 6 in cluster A

Relative:
Equal

Actual:
62 ft.

Cortese:

Region:	CORTESE
Facility Addr2:	Not reported

SWEEPS UST:

Status:	A
Comp Number:	30487
Number:	9

STURDY OIL CO (Continued) **S105035153**

Board Of Equalization: 44-014918
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 07-31-88
Tank Status: A
Owner Tank Id: 1
Swrcb Tank Id: 27-000-030487-000001
Actv Date: 07-01-85
Capacity: 20000
Tank Use: M.V. FUEL
Stg: P
Content: DIESEL
Number Of Tanks: 11

Status: A
Comp Number: 30487
Number: 9
Board Of Equalization: 44-014918
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 07-31-88
Tank Status: A
Owner Tank Id: 2
Swrcb Tank Id: 27-000-030487-000002
Actv Date: 07-01-85
Capacity: 20000
Tank Use: M.V. FUEL
Stg: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: A
Comp Number: 30487
Number: 9
Board Of Equalization: 44-014918
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 07-31-88
Tank Status: A
Owner Tank Id: 3
Swrcb Tank Id: 27-000-030487-000003
Actv Date: 07-01-85
Capacity: 20000
Tank Use: M.V. FUEL
Stg: P
Content: LEADED
Number Of Tanks: Not reported

Status: A
Comp Number: 30487
Number: 9
Board Of Equalization: 44-014918
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 07-31-88
Tank Status: A
Owner Tank Id: 4

STURDY OIL CO (Continued) **S105035153**

Swrcb Tank Id: 27-000-030487-000004
Actv Date: 07-01-85
Capacity: 12000
Tank Use: M.V. FUEL
Stg: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: A
Comp Number: 30487
Number: 9
Board Of Equalization: 44-014918
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 07-31-88
Tank Status: A
Owner Tank Id: 5
Swrcb Tank Id: 27-000-030487-000005
Actv Date: 07-01-85
Capacity: 6000
Tank Use: M.V. FUEL
Stg: P
Content: LEADED
Number Of Tanks: Not reported

Status: A
Comp Number: 30487
Number: 9
Board Of Equalization: 44-014918
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 07-31-88
Tank Status: A
Owner Tank Id: 6
Swrcb Tank Id: 27-000-030487-000006
Actv Date: 07-01-85
Capacity: 7500
Tank Use: M.V. FUEL
Stg: P
Content: LEADED
Number Of Tanks: Not reported

Status: A
Comp Number: 30487
Number: 9
Board Of Equalization: 44-014918
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 07-31-88
Tank Status: A
Owner Tank Id: 7
Swrcb Tank Id: 27-000-030487-000007
Actv Date: 07-01-85
Capacity: 7500
Tank Use: M.V. FUEL
Stg: P
Content: REG UNLEADED

STURDY OIL CO (Continued) **S105035153**

Number Of Tanks: Not reported

Status: A
Comp Number: 30487
Number: 9
Board Of Equalization: 44-014918
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 07-31-88
Tank Status: A
Owner Tank Id: 8
Swrcb Tank Id: 27-000-030487-000008
Actv Date: 07-01-85
Capacity: 5000
Tank Use: UNKNOWN
Stg: P
Content: Not reported
Number Of Tanks: Not reported

Status: A
Comp Number: 30487
Number: 9
Board Of Equalization: 44-014918
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 07-31-88
Tank Status: A
Owner Tank Id: 9
Swrcb Tank Id: 27-000-030487-000009
Actv Date: 07-01-85
Capacity: 550
Tank Use: UNKNOWN
Stg: P
Content: Not reported
Number Of Tanks: Not reported

Status: A
Comp Number: 30487
Number: 9
Board Of Equalization: 44-014918
Ref Date: 07-01-85
Act Date: Not reported
Created Date: 07-31-88
Tank Status: A
Owner Tank Id: 10
Swrcb Tank Id: 27-000-030487-000010
Actv Date: 07-01-85
Capacity: 1000
Tank Use: UNKNOWN
Stg: P
Content: Not reported
Number Of Tanks: Not reported

Status: A
Comp Number: 30487
Number: 9
Board Of Equalization: 44-014918

STURDY OIL CO (Continued) **S105035153**

Ref Date:	07-01-85
Act Date:	Not reported
Created Date:	07-31-88
Tank Status:	A
Owner Tank Id:	11
Swrcb Tank Id:	27-000-030487-000011
Actv Date:	07-01-85
Capacity:	1000
Tank Use:	OIL
Stg:	W
Content:	WASTE OIL
Number Of Tanks:	Not reported

A3 **STURDY OIL CO** **HAZNET** **U001593237**
NNE **1511 ABBOTT ST** **LUST** **N/A**
1/8-1/4 **SALINAS, CA 93901** **HIST UST**
0.244 mi. **AIRS**
1291 ft. **Site 3 of 6 in cluster A**

Relative:
Equal

Actual:
62 ft.

HAZNET:

Gepaid:	CAL000139399
Contact:	D SMITH/TRANSPORTATION MGR
Telephone:	8314228801
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	PO BOX 90
Mailing City,St,Zip:	SALINAS, CA 939020090
Gen County:	Monterey
TSD EPA ID:	CAL000190816
TSD County:	Stanislaus
Waste Category:	Waste oil and mixed oil
Disposal Method:	Recycler
Tons:	0.62
Facility County:	Not reported

Gepaid:	CAL000139399
Contact:	STURDY OIL CO
Telephone:	0000000000
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	PO BOX 90
Mailing City,St,Zip:	SALINAS, CA 939020090
Gen County:	Monterey
TSD EPA ID:	CAD000088252
TSD County:	Los Angeles
Waste Category:	Other organic solids
Disposal Method:	Transfer Station
Tons:	.3000
Facility County:	Monterey

Gepaid:	CAL000139399
Contact:	D SMITH/TRANSPORTATION MGR
Telephone:	8314228801
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	PO BOX 90
Mailing City,St,Zip:	SALINAS, CA 939020090
Gen County:	Monterey

STURDY OIL CO (Continued) **U001593237**

TSD EPA ID: Not reported
TSD County: 99
Waste Category: Waste oil and mixed oil
Disposal Method: Recycler
Tons: 1.37
Facility County: Not reported

Gepaid: CAL000139399
Contact: D SMITH/TRANSPORTATION MGR
Telephone: 8314228801
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: PO BOX 90
Mailing City,St,Zip: SALINAS, CA 939020090
Gen County: Monterey
TSD EPA ID: Not reported
TSD County: Los Angeles
Waste Category: Unspecified organic liquid mixture
Disposal Method: Treatment, Tank
Tons: 0.75
Facility County: Not reported

Gepaid: CAL000139399
Contact: D SMITH/TRANSPORTATION MGR
Telephone: 8314228801
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: PO BOX 90
Mailing City,St,Zip: SALINAS, CA 939020090
Gen County: Monterey
TSD EPA ID: CAD980887418
TSD County: Alameda
Waste Category: Waste oil and mixed oil
Disposal Method: Recycler
Tons: 1.81
Facility County: Monterey

Click this hyperlink while viewing on your computer to access
9 additional CA_HAZNET: record(s) in the EDR Site Report.

LUST:
Region: STATE
Case Type: Other ground water affected
Cross Street: HARKINS RD
Enf Type: Not reported
Funding: SI
How Discovered: Subsurface Monitoring
How Stopped: Not reported
Leak Cause: UNK
Leak Source: UNK
Global Id: T0605300091
Stop Date: Not reported
Confirm Leak: Not reported
Workplan: Not reported
Prelim Assess: Not reported
Pollution Char: 2006-02-16 00:00:00
Remed Plan: Not reported

STURDY OIL CO (Continued) **U001593237**

Remed Action: Not reported
Monitoring: Not reported
Close Date: Not reported
Discover Date: 1993-04-09 00:00:00
Enforcement Dt: Not reported
Release Date: 1993-04-08 00:00:00
Review Date: 1998-07-22 00:00:00
Enter Date: 1993-05-07 00:00:00
MTBE Date: 2007-08-29 00:00:00
GW Qualifier: =
Soil Qualifier: Not reported
Max MTBE GW ppb: 8.5
Max MTBE Soil ppb: Not reported
County: 27
Org Name: Not reported
Reg Board: Central Coast Region
Status: Pollution Characterization
Chemical: Stoddard Solvent
Contact Person: Not reported
Responsible Party: JON FANO
RP Address: 1511 ABBOTT ST
Interim: No
Oversight Prgm: LUST
MTBE Class: A
MTBE Conc: 11
MTBE Fuel: 0
MTBE Tested: MTBE Detected. Site tested for MTBE and MTBE detected
Staff: JWG
Staff Initials: UST
Lead Agency: Regional Board
Local Agency: 27000
Hydr Basin #: SALINAS VALLEY (3-4)
Beneficial: Not reported
Priority: 3A3
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Local Case #: Not reported
Case Number: 2347
Qty Leaked: Not reported
Abate Method: U
Operator: Not reported
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported
Summary: Not reported

LUST:
Region: 3
Regional Board: Central Coast Region
Release Date: 04/08/1993
Enter Date: 05/07/1993
Case Number: 2347
Responsible Party: JON FANO
RP Address: 1511 ABBOTT ST
Contact: Not reported

STURDY OIL CO (Continued) **U001593237**

Cross Street: HARKINS RD
Local Agency: 27000
Substance: Stoddard Solvent
Discovered Date: 4/9/93
How Discovered: Subsurface Monitoring
Stop Date: Not reported
How Stopped: Not reported
Leak Source: UNK
Leak Cause: UNK
Lead Agency: Regional Board
Case Type: O
Status: Post remedial action monitoring
Staff Initials: JWG
Review Date: 07/22/1998
Confirm Leak: Not reported
Workplan: Not reported
Prelim Assess: Not reported
Pollution Char: / /
Remedial Plan: Not reported
Remedial Action: Not reported
Monitoring: 03/01/1997
Enforcement Type: Not reported
Enforce Date: Not reported
Close Date: Not reported
Pilot Program: UST
Interim Action: 0
Funding: Not reported
MTBE Class: *
Max MTBE Grnd Wtr: Not reported
Max MTBE Soil: Not reported
Max MTBE Data: / /
MTBE Tested: YES
Lat/Long: 36.64945 / -121.6184795
Soil Qualifier: Not reported
Grnd Wtr Qualifier: Not reported
Mtbe Concentratn: 1
Mtbe Fuel: 0
Org Name: Not reported
Facility County: Monterey
Global ID: T0605300091
Basin Plan: 9.10
Beneficial: Not reported
Priority: 3A3
UST Cleanup Fund ID: Not reported
Suspended: Not reported
Local Case Num: Not reported
Quantity: Not reported
Abatement Method: U
Operator: Not reported
Water System: Not reported
Well Name: Not reported
Distance From Well: 0
Assigned Name: Not reported
Summary: Not reported

HIST UST:
Region: STATE

STURDY OIL CO (Continued) **U001593237**

Facility ID: 00000030487
Facility Type: Other
Other Type: BULK PLANT
Total Tanks: 0011
Contact Name: NEIL FANOE
Telephone: 4084228801
Owner Name: STURDY OIL CO
Owner Address: 1511 ABBOTT ST
Owner City,St,Zip: SALINAS, CA 93901

Tank Num: 001
Container Num: 1
Year Installed: 1968
Tank Capacity: 00020000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Tank Construction: Not reported
Leak Detection: Stock Inventor, 10

Tank Num: 002
Container Num: 2
Year Installed: 1968
Tank Capacity: 00020000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: Not reported
Leak Detection: Stock Inventor, 10

Tank Num: 003
Container Num: 3
Year Installed: 1968
Tank Capacity: 00020000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Tank Construction: Not reported
Leak Detection: Stock Inventor, 10

Tank Num: 004
Container Num: 4
Year Installed: 1968
Tank Capacity: 00012000
Tank Used for: PRODUCT
Type of Fuel: PREMIUM
Tank Construction: Not reported
Leak Detection: Stock Inventor, 10

Tank Num: 005
Container Num: 5
Year Installed: 1963
Tank Capacity: 00006000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Tank Construction: Not reported
Leak Detection: Stock Inventor, 10

Tank Num: 006
Container Num: 6

STURDY OIL CO (Continued) **U001593237**

Year Installed: 1963
Tank Capacity: 00007500
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Tank Construction: Not reported
Leak Detection: Stock Inventor, 10

Tank Num: 007
Container Num: 7
Year Installed: 1963
Tank Capacity: 00007500
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: Not reported
Leak Detection: Stock Inventor, 10

Tank Num: 008
Container Num: 8
Year Installed: 1978
Tank Capacity: 00005000
Tank Used for: PRODUCT
Type of Fuel: Not reported
Tank Construction: Not reported
Leak Detection: Stock Inventor, 10

Tank Num: 009
Container Num: 9
Year Installed: 1963
Tank Capacity: 00000550
Tank Used for: PRODUCT
Type of Fuel: Not reported
Tank Construction: Not reported
Leak Detection: Stock Inventor, 10

Tank Num: 010
Container Num: 10
Year Installed: 1963
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: Not reported
Tank Construction: Not reported
Leak Detection: Stock Inventor, 10

Tank Num: 011
Container Num: 11
Year Installed: 1963
Tank Capacity: 00001000
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Tank Construction: Not reported
Leak Detection: None

EMI:
Year: 1997
Carbon Monoxide Emissions Tons/Yr: 27
Air Basin: NCC
Facility ID: 1917

STURDY OIL CO (Continued) **U001593237**

Air District Name:	MBU
SIC Code:	5171
Air District Name:	MONTEREY BAY UNIFIED APCD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers & Smllr Tons/Yr:	0

A4 **STURDY OIL CO.** **HIST UST** **U001593238**
NNE **1511 ABBOTT ST** **N/A**
1/8-1/4 **SALINAS, CA 93901**
0.244 mi.
1291 ft. **Site 4 of 6 in cluster A**

Relative: **Equal**

Actual: **62 ft.**

HIST UST:

Region:	STATE
Facility ID:	00000044421
Facility Type:	Gas Station
Other Type:	Not reported
Total Tanks:	0002
Contact Name:	NEIL FANOE
Telephone:	4084228801
Owner Name:	HAZEL MORTENSEN
Owner Address:	ALISAL RD. - MAIL - PO BOX 443
Owner City,St,Zip:	SALINAS, CA 93902
Tank Num:	001
Container Num:	#1
Year Installed:	1932
Tank Capacity:	00000000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Tank Construction:	Not reported
Leak Detection:	Not reported
Tank Num:	002
Container Num:	#2
Year Installed:	Not reported
Tank Capacity:	00000000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Tank Construction:	Not reported
Leak Detection:	Not reported

A5
NNE
1/8-1/4
0.244 mi.
1291 ft.

STURDY OIL
1511 ABBOTT ST.,
SALINAS, CA 93901

Site 5 of 6 in cluster A

CA FID UST **S101622720**
N/A

Relative:
Equal

Actual:
62 ft.

CA FID UST:

Facility ID:	27000148
Regulated By:	UTNKA
Regulated ID:	Not reported
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	4084228801
Mail To:	Not reported
Mailing Address:	P.O. BOX 227
Mailing Address 2:	Not reported
Mailing City,St,Zip:	SALINAS 93902
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

Facility ID:	27000148
Regulated By:	UTNKA
Regulated ID:	00030448
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	4087581129
Mail To:	Not reported
Mailing Address:	1511 ABBOTT ST
Mailing Address 2:	Not reported
Mailing City,St,Zip:	SALINAS 93901
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

Facility ID:	27000148
Regulated By:	UTNKA
Regulated ID:	00030487
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	4084228801
Mail To:	Not reported
Mailing Address:	1511 ABBOTT
Mailing Address 2:	Not reported
Mailing City,St,Zip:	SALINAS 93901
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported

STURDY OIL (Continued) **S101622720**

Status: Active

Facility ID: 27000148
Regulated By: UTNKA
Regulated ID: 00044421
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 4084228801
Mail To: Not reported
Mailing Address: 1511 ABBOTT ST
Mailing Address 2: Not reported
Mailing City,St,Zip: SALINAS 93901
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

A6 **JOHN PRYOR CO** **RCRA-SQG 1000305906**
NNE **1505 ABBOTT** **FINDS CAD029066750**
1/4-1/2 **SALINAS, CA 93902** **LUST**
0.252 mi. **Cortese**
1332 ft. **Site 6 of 6 in cluster A**

Relative:
Equal

Actual:
62 ft.

RCRA-SQG:
Date form received by agency: 09/01/1996
Facility name: JOHN PRYOR CO
Facility address: 1505 ABBOTT
SALINAS, CA 93902
EPA ID: CAD029066750
Mailing address: PO BOX 59
SALINAS, CA 93902
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: JOHN PRYOR CO
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported

JOHN PRYOR CO (Continued) **1000305906**

Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: Unknown
Mixed waste (haz. and radioactive): Unknown
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: Unknown
Furnace exemption: Unknown
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Commercial status unknown

Historical Generators:
Date form received by agency: 08/25/1980
Facility name: JOHN PRYOR CO
Classification: Large Quantity Generator

Violation Status: No violations found

FINDS:
Other Pertinent Environmental Activity Identified at Site

California - Hazardous Waste Tracking System - Datamart

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

LUST:
Region: STATE
Case Type: Undefined
Cross Street: SANBORN
Enf Type: R
Funding: Undefined

JOHN PRYOR CO (Continued) **1000305906**

How Discovered:	Tank Closure
How Stopped:	Not reported
Leak Cause:	Corrosion
Leak Source:	Tank
Global Id:	T0605300297
Stop Date:	1989-07-12 00:00:00
Confirm Leak:	Not reported
Workplan:	Not reported
Prelim Assess:	Not reported
Pollution Char:	Not reported
Remed Plan:	Not reported
Remed Action:	Not reported
Monitoring:	Not reported
Close Date:	1990-07-23 00:00:00
Discover Date:	1989-07-12 00:00:00
Enforcement Dt:	1965-01-01 00:00:00
Release Date:	1989-07-12 00:00:00
Review Date:	1989-07-24 00:00:00
Enter Date:	1989-07-24 00:00:00
MTBE Date:	Not reported
GW Qualifier:	Not reported
Soil Qualifier:	Not reported
Max MTBE GW ppb:	Not reported
Max MTBE Soil ppb:	Not reported
County:	27
Org Name:	Not reported
Reg Board:	Central Coast Region
Status:	Case Closed
Chemical:	Kerosene
Contact Person:	Not reported
Responsible Party:	Not reported
RP Address:	Not reported
Interim:	No
Oversight Prgm:	LUST
MTBE Class:	*
MTBE Conc:	0
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
Staff:	JWG
Staff Initials:	UST
Lead Agency:	Local Agency
Local Agency:	27000
Hydr Basin #:	SALINAS VALLEY (3-4)
Beneficial:	Not reported
Priority:	0
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Local Case #:	Not reported
Case Number:	4
Qty Leaked:	Not reported
Abate Method:	Excavate and Treat - remove contaminated soil and treat (includes spreading or land farming)
Operator:	Not reported
Water System Name:	Not reported
Well Name:	Not reported
Distance To Lust:	0

Waste Discharge Global ID: Not reported

JOHN PRYOR CO (Continued) **1000305906**

Waste Disch Assigned Name: Not reported
Summary: Not reported

LUST:

Region:	3
Regional Board:	Central Coast Region
Release Date:	07/12/1989
Enter Date:	07/24/1989
Case Number:	4
Responsible Party:	Not reported
RP Address:	Not reported
Contact:	Not reported
Cross Street:	SANBORN
Local Agency:	27000
Substance:	Kerosene
Discovered Date:	7/12/89
How Discovered:	Tank Closure
Stop Date:	7/12/89
How Stopped:	Not reported
Leak Source:	Tank
Leak Cause:	Corrosion
Lead Agency:	Local Agency
Case Type:	U
Status:	Case Closed
Staff Initials:	JWG
Review Date:	07/24/1989
Confirm Leak:	Not reported
Workplan:	Not reported
Prelim Assess:	Not reported
Pollution Char:	/ /
Remedial Plan:	Not reported
Remedial Action:	Not reported
Monitoring:	/ /
Enforcement Type:	None Taken
Enforce Date:	1/1/65
Close Date:	7/23/90
Pilot Program:	UST
Interim Action:	0
Funding:	R
MTBE Class:	*
Max MTBE Grnd Wtr:	Not reported
Max MTBE Soil:	Not reported
Max MTBE Data:	/ /
MTBE Tested:	NRQ
Lat/Long:	36.649546 / -121.6186085
Soil Qualifier:	Not reported
Grnd Wtr Qualifier:	Not reported
Mtbe Concentratn:	0
Mtbe Fuel:	0
Org Name:	Not reported
Facility County:	Monterey
Global ID:	T0605300297
Basin Plan:	9.10
Beneficial:	Not reported
Priority:	0
UST Cleanup Fund ID:	Not reported
Suspended:	Not reported

JOHN PRYOR CO (Continued) **1000305906**

Local Case Num: Not reported
Quantity: Not reported
Abatement Method: Excavate and Treat - remove contaminated soil and treat (includes spreading or land farming)
Operator: Not reported
Water System: Not reported
Well Name: Not reported
Distance From Well: 0
Assigned Name: Not reported
Summary: Not reported

Cortese:
Region: CORTESE
Facility Addr2: 1505 ABBOTT ST

7
NNW
1/4-1/2
0.387 mi.
2043 ft.

Relative:
Equal

Actual:
62 ft.

SOILSERV INC
1427 ABBOTT STREET
SALINAS, CA 93901

RCRA-SQG **1000292296**
FINDS **CAD009165325**
HAZNET
CERC-NFRAP
HIST UST
FTTS
HIST FTTS

RCRA-SQG:
Date form received by agency: 09/01/1996
Facility name: SOILSERV INC
Facility address: 1427 ABBOTT ST
SALINAS, CA 93901
EPA ID: CAD009165325
Mailing address: PO BOX 3650
SALINAS, CA 93912
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 09
Land type: Facility is not located on Indian land. Additional information is not known.
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: SOILSERV INCORPORATED
Owner/operator address: PO BOX 3650
SALINAS, CA 93912
Owner/operator country: Not reported
Owner/operator telephone: (408) 422-6473
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: SOILSERV INCORPORATED

SOILSERV INC (Continued) **1000292296**

Owner/operator address: PO BOX 3650
CITY NOT REPORTED, CA 99999
Owner/operator country: Not reported
Owner/operator telephone: (408) 422-6473
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: Unknown
Mixed waste (haz. and radioactive): Unknown
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: Unknown
Furnace exemption: Unknown
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No
Off-site waste receiver: Commercial status unknown

Historical Generators:
Date form received by agency: 09/01/1996
Facility name: SOILSERV INC
Classification: Small Quantity Generator

Date form received by agency: 02/19/1992
Facility name: SOILSERV INC
Classification: Large Quantity Generator

Date form received by agency: 04/03/1991
Facility name: SOILSERV INC
Classification: Large Quantity Generator

Date form received by agency: 08/18/1980
Facility name: SOILSERV INC
Classification: Large Quantity Generator

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 07/01/1991
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State Contractor/Grantee

Evaluation date: 11/22/1982
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported

SOILSERV INC (Continued) **1000292296**

Date achieved compliance: Not reported
Evaluation lead agency: EPA

FINDS:
Other Pertinent Environmental Activity Identified at Site

California - Hazardous Waste Tracking System - Datamart

NCDB (National Compliance Data Base) supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). The system tracks inspections in regions and states with cooperative agreements, enforcement actions, and settlements.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZNET:

Gepaid:	CAD009165325
Contact:	DOW AGROSCIENCES
Telephone:	6194538030
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	PO BOX 3650
Mailing City,St,Zip:	SALINAS, CA 939123650
Gen County:	Monterey
TSD EPA ID:	CAD044429835
TSD County:	Los Angeles
Waste Category:	Aqueous solution with less than 10% total organic residues
Disposal Method:	Not reported
Tons:	.0000
Facility County:	Monterey

Gepaid:	CAD009165325
Contact:	DOW AGROSCIENCES
Telephone:	6194538030
Facility Addr2:	Not reported
Mailing Name:	Not reported
Mailing Address:	PO BOX 3650
Mailing City,St,Zip:	SALINAS, CA 939123650
Gen County:	Monterey
TSD EPA ID:	CAT000646117
TSD County:	Kings
Waste Category:	Empty containers less than 30 gallons
Disposal Method:	Disposal, Land Fill
Tons:	101.1360
Facility County:	Monterey

Gepaid:	CAD009165325
Contact:	DOW AGROSCIENCES
Telephone:	6194538030
Facility Addr2:	Not reported

SOILSERV INC (Continued) **1000292296**

Mailing Name: Not reported
Mailing Address: PO BOX 3650
Mailing City,St,Zip: SALINAS, CA 939123650
Gen County: Monterey
TSD EPA ID: CAT080013352
TSD County: Los Angeles
Waste Category: Unspecified organic liquid mixture
Disposal Method: Recycler
Tons: .4000
Facility County: Monterey

Gepaid: CAD009165325
Contact: DOW AGROSCIENCES
Telephone: 6194538030
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: PO BOX 3650
Mailing City,St,Zip: SALINAS, CA 939123650
Gen County: Monterey
TSD EPA ID: WAD991281767
TSD County: 99
Waste Category: Paint sludge
Disposal Method: Recycler
Tons: .2000
Facility County: Monterey

Gepaid: CAD009165325
Contact: YVETTE BLACK, ENVIRON AFF
Telephone: 8314226473
Facility Addr2: Not reported
Mailing Name: Not reported
Mailing Address: PO BOX 3650
Mailing City,St,Zip: SALINAS, CA 939123650
Gen County: Monterey
TSD EPA ID: CAT000646117
TSD County: Kings
Waste Category: Empty containers less than 30 gallons
Disposal Method: Disposal, Land Fill
Tons: 101.13
Facility County: Not reported

Click this hyperlink while viewing on your computer to access
26 additional CA_HAZNET: record(s) in the EDR Site Report.

CERC-NFRAP:
Site ID: 0901186
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: NFRAP

CERCLIS-NFRAP Site Contact Name(s):
Contact Name: Matt Mitguard
Contact Tel: (415) 972-3096
Contact Title: Site Assessment Manager (SAM)

Contact Name: Nuria Muniz

SOILSERV INC (Continued) **1000292296**

Contact Tel: (415) 972-3811
Contact Title: Site Assessment Manager (SAM)

Site Description: Not reported

CERCLIS-NFRAP Assessment History:
Action: DISCOVERY
Date Started: Not reported
Date Completed: 10/26/1990
Priority Level: Not reported

Action: ARCHIVE SITE
Date Started: Not reported
Date Completed: 03/31/1992
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT
Date Started: Not reported
Date Completed: 03/31/1992
Priority Level: NFRAP (No Futher Remedial Action Planned

HIST UST:
Region: STATE
Facility ID: 00000000662
Facility Type: Other
Other Type: SIC 0729,5191,2879
Total Tanks: 0006
Contact Name: DENNIS SITES
Telephone: 4084226473
Owner Name: SOILSERV, INC.
Owner Address: 1427 ABBOTT STREET/P.O. BOX 36
Owner City,St,Zip: SALINAS, CA 93912

Tank Num: 001
Container Num: A-1
Year Installed: 1971
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: 06
Tank Construction: Not reported
Leak Detection: Stock Inventor

Tank Num: 002
Container Num: D-2
Year Installed: 1977
Tank Capacity: 00002000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Tank Construction: Not reported
Leak Detection: Stock Inventor

Tank Num: 003
Container Num: G-3
Year Installed: 1971
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED

SOILSERV INC (Continued) **1000292296**

Tank Construction: Not reported
Leak Detection: Stock Inventor

Tank Num: 004
Container Num: S-1
Year Installed: 1980
Tank Capacity: 00001000
Tank Used for: WASTE
Type of Fuel: Not reported
Tank Construction: 4 inches
Leak Detection: Visual

Tank Num: 005
Container Num: P-1
Year Installed: 1979
Tank Capacity: 00018000
Tank Used for: WASTE
Type of Fuel: Not reported
Tank Construction: Not reported
Leak Detection: Visual, 10

Tank Num: 006
Container Num: P-2
Year Installed: 1979
Tank Capacity: 00018000
Tank Used for: WASTE
Type of Fuel: Not reported
Tank Construction: Not reported
Leak Detection: Visual, 10

FTTS INSP:
Inspection Number: Not reported
Region: 09
Inspection Date: Not reported
Inspector: GFARMER
Violation occurred: No
Investigation Type: General Product Review
Investigation Reason: Neutral Scheme, State
Legislation Code: FIFRA
Facility Function: Producer

Inspection Number: Not reported
Region: 09
Inspection Date: Not reported
Inspector: GFARMER
Violation occurred: Yes
Investigation Type: General Product Review
Investigation Reason: Neutral Scheme, State
Legislation Code: FIFRA
Facility Function: Producer

HIST FTTS INSP:
Inspection Number: 199411032933 1
Region: 09
Inspection Date: Not reported

SOILSERV INC (Continued) **1000292296**

Inspector:	GFARMER
Violation occurred:	No
Investigation Type:	General Product Review
Investigation Reason:	Neutral Scheme, State
Legislation Code:	FIFRA
Facility Function:	Producer

Inspection Number:	19941103F2933 1
Region:	09
Inspection Date:	Not reported
Inspector:	GFARMER
Violation occurred:	Yes
Investigation Type:	General Product Review
Investigation Reason:	Neutral Scheme, State
Legislation Code:	FIFRA
Facility Function:	Producer

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8 **BAY AREA/DIABLO PETROLEUM** **LUST** **S102425019**
WNW **1356 DAYTON ST** **N/A**
1/4-1/2 **SALINAS, CA 02378**
0.483 mi.
2548 ft.

Relative:
Equal

Actual:
62 ft.

LUST:

Region:	STATE
Case Type:	Soil only
Cross Street:	HARKINS
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	OM
How Stopped:	Not reported
Leak Cause:	UNK
Leak Source:	UNK
Global Id:	T0605300096
Stop Date:	Not reported
Confirm Leak:	Not reported
Workplan:	Not reported
Prelim Assess:	Not reported
Pollution Char:	Not reported
Remed Plan:	Not reported
Remed Action:	Not reported
Monitoring:	1975-01-01 00:00:00
Close Date:	Not reported
Discover Date:	1993-06-03 00:00:00
Enforcement Dt:	Not reported
Release Date:	1993-07-07 00:00:00
Review Date:	1993-08-20 00:00:00
Enter Date:	1993-08-20 00:00:00
MTBE Date:	Not reported
GW Qualifier:	Not reported
Soil Qualifier:	Not reported
Max MTBE GW ppb:	Not reported
Max MTBE Soil ppb:	Not reported
County:	27
Org Name:	Not reported
Reg Board:	Central Coast Region
Status:	Post remedial action monitoring

BAY AREA/DIABLO PETROLEUM (Continued) **S102425019**

Chemical: Diesel
Contact Person: Not reported
Responsible Party: Not reported
RP Address: Not reported
Interim: No
Oversight Prgm: LUST
MTBE Class: *
MTBE Conc: 0
MTBE Fuel: 0
MTBE Tested: Not Required to be Tested.
Staff: JWG
Staff Initials: Not reported
Lead Agency: Local Agency
Local Agency: 27000
Hydr Basin #: SALINAS VALLEY (3-4)
Beneficial: Not reported
Priority: 0
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Local Case #: Not reported
Case Number: 2378
Qty Leaked: Not reported
Abate Method: Excavate and Dispose - remove contaminated soil and dispose in approved site
Operator: Not reported
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported
Summary: INITIAL SAMPLES SHOWED ELEVATED LEVELS OF BTEX @ LEVELS (PPB1.6,2.0,2.0,14.0. DIESEL WAS BELOW ACTION LEVELS. SUBSEQUENTSAMPLING OF BTEX SHOW N.D. FOR ALL CONSTITUENTS. H2O>50; SECOND SAMPLES TAKEN AT 31 FT.

LUST:
Region: 3
Regional Board: Central Coast Region
Release Date: 07/07/1993
Enter Date: 08/20/1993
Case Number: 2378
Responsible Party: Not reported
RP Address: Not reported
Contact: Not reported
Cross Street: HARKINS
Local Agency: 27000
Substance: Diesel
Discovered Date: 6/3/93
How Discovered: OM
Stop Date: Not reported
How Stopped: Not reported
Leak Source: UNK
Leak Cause: UNK
Lead Agency: Local Agency
Case Type: S
Status: Post remedial action monitoring
Staff Initials: JWG
Review Date: 08/20/1993

BAY AREA/DIABLO PETROLEUM (Continued) **S102425019**

Confirm Leak:	Not reported
Workplan:	Not reported
Prelim Assess:	Not reported
Pollution Char:	/ /
Remedial Plan:	Not reported
Remedial Action:	Not reported
Monitoring:	01/01/1975
Enforcement Type:	Not reported
Enforce Date:	Not reported
Close Date:	Not reported
Pilot Program:	UST
Interim Action:	0
Funding:	Not reported
MTBE Class:	*
Max MTBE Grnd Wtr:	Not reported
Max MTBE Soil:	Not reported
Max MTBE Data:	/ /
MTBE Tested:	NRQ
Lat/Long:	36.647763 / -121.6294898
Soil Qualifier:	Not reported
Grnd Wtr Qualifier:	Not reported
Mtbe Concentratn:	0
Mtbe Fuel:	0
Org Name:	Not reported
Facility County:	Monterey
Global ID:	T0605300096
Basin Plan:	9.10
Beneficial:	Not reported
Priority:	0
UST Cleanup Fund ID:	Not reported
Suspended:	Not reported
Local Case Num:	Not reported
Quantity:	Not reported
Abatement Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site
Operator:	Not reported
Water System:	Not reported
Well Name:	Not reported
Distance From Well:	0
Assigned Name:	Not reported
Summary:	INITIAL SAMPLES SHOWED ELEVATED LEVELS OF BTEX @ LEVELS (PPB1.6,2.0,2.0,14.0. DIESEL WAS BELOW ACTION LEVELS. SUBSEQUENTSAMPLING OF BTEX SHOW N.D. FOR ALL CONSTITUENTS. H2O>50; SECOND SAMPLES TAKEN AT 31 FT.

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9 **ROSSI DISTRIBUTING** **LUST** **S102436034**
NW **1044 HARKINS RD** **N/A**
1/2-1 **SALINAS, CA 93901**
0.563 mi.
2974 ft.

Relative:
Equal

Actual:
62 ft.

LUST:

Region:	STATE
Case Type:	Soil only
Cross Street:	ABBOTT
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Not reported

ROSSI DISTRIBUTING (Continued) **S102436034**

Leak Cause: Structure Failure
Leak Source: Tank
Global Id: T0605300287
Stop Date: 1986-12-23 00:00:00
Confirm Leak: Not reported
Workplan: Not reported
Prelim Assess: Not reported
Pollution Char: Not reported
Remed Plan: Not reported
Remed Action: Not reported
Monitoring: Not reported
Close Date: 1987-03-27 00:00:00
Discover Date: 1986-12-23 00:00:00
Enforcement Dt: Not reported
Release Date: 1987-03-18 00:00:00
Review Date: 1987-03-27 00:00:00
Enter Date: 1987-03-30 00:00:00
MTBE Date: Not reported
GW Qualifier: Not reported
Soil Qualifier: Not reported
Max MTBE GW ppb: Not reported
Max MTBE Soil ppb: Not reported
County: 27
Org Name: Not reported
Reg Board: Central Coast Region
Status: Case Closed
Chemical: Gasoline
Contact Person: Not reported
Responsible Party: Not reported
RP Address: Not reported
Interim: No
Oversight Prgm: LUST
MTBE Class: *
MTBE Conc: 0
MTBE Fuel: 1
MTBE Tested: Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
Staff: JWG
Staff Initials: UST
Lead Agency: Local Agency
Local Agency: 27000
Hydr Basin #: SALINAS VALLEY (3-4)
Beneficial: Not reported
Priority: 0
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Local Case #: Not reported
Case Number: 377
Qty Leaked: Not reported
Abate Method: U
Operator: Not reported
Water System Name: WIMPLET FOODS WATER SYSTEM
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: W0605302244
Waste Disch Assigned Name: 2702244-001GEN
Summary: TANK REMOVED. EVIDENCE OF LEAKAGE. GROUND WATER (DEPTH APPNX 60') NOT CONTAMINATED.

ROSSI DISTRIBUTING (Continued) **S102436034**

LUST:

Region:	3
Regional Board:	Central Coast Region
Release Date:	03/18/1987
Enter Date:	03/30/1987
Case Number:	377
Responsible Party:	Not reported
RP Address:	Not reported
Contact:	Not reported
Cross Street:	ABBOTT
Local Agency:	27000
Substance:	Gasoline
Discovered Date:	12/23/86
How Discovered:	Tank Closure
Stop Date:	12/23/86
How Stopped:	Not reported
Leak Source:	Tank
Leak Cause:	Structure Failure
Lead Agency:	Local Agency
Case Type:	S
Status:	Case Closed
Staff Initials:	JWG
Review Date:	03/27/1987
Confirm Leak:	Not reported
Workplan:	Not reported
Prelim Assess:	Not reported
Pollution Char:	/ /
Remedial Plan:	Not reported
Remedial Action:	Not reported
Monitoring:	/ /
Enforcement Type:	Not reported
Enforce Date:	Not reported
Close Date:	3/27/87
Pilot Program:	UST
Interim Action:	0
Funding:	Not reported
MTBE Class:	*
Max MTBE Grnd Wtr:	Not reported
Max MTBE Soil:	Not reported
Max MTBE Data:	/ /
MTBE Tested:	NT
Lat/Long:	36.6523849 / -121.6274608
Soil Qualifier:	Not reported
Grnd Wtr Qualifier:	Not reported
Mtbe Concentratn:	0
Mtbe Fuel:	1
Org Name:	Not reported
Facility County:	Monterey
Global ID:	T0605300287
Basin Plan:	9.10
Beneficial:	Not reported
Priority:	0
UST Cleanup Fund ID:	Not reported
Suspended:	Not reported
Local Case Num:	Not reported
Quantity:	Not reported
Abatement Method:	U

ROSSI DISTRIBUTING (Continued) **S102436034**

Operator: Not reported
Water System: WIMPLET FOODS WATER SYSTEM
Well Name: LPA REPORTED PRIMARY SOURCE
Distance From Well: 0
Assigned Name: 2702244-001GEN
Summary: TANK REMOVED. EVIDENCE OF LEAKAGE. GROUND WATER (DEPTH APPNX 60') NOT CONTAMINATED.

10
WNW
1/2-1
0.573 mi.
3028 ft.

CLAIRE PATLEE TRUCKING **LUST** **S102428110**
1111 HARKINS RD **Cortese** **N/A**
SALINAS, CA 93901

Relative:
Equal

Actual:
62 ft.

LUST:
Region: STATE
Case Type: Soil only
Cross Street: BURTON
Enf Type: Not reported
Funding: Not reported
How Discovered: Tank Closure
How Stopped: Not reported
Leak Cause: Overfill
Leak Source: Piping
Global Id: T0605300285
Stop Date: 1987-03-18 00:00:00
Confirm Leak: Not reported
Workplan: Not reported
Prelim Assess: Not reported
Pollution Char: Not reported
Remed Plan: Not reported
Remed Action: Not reported
Monitoring: Not reported
Close Date: 1987-04-02 00:00:00
Discover Date: 1987-03-18 00:00:00
Enforcement Dt: Not reported
Release Date: 1987-03-30 00:00:00
Review Date: 1987-04-02 00:00:00
Enter Date: 1987-04-02 00:00:00
MTBE Date: Not reported
GW Qualifier: Not reported
Soil Qualifier: Not reported
Max MTBE GW ppb: Not reported
Max MTBE Soil ppb: Not reported
County: 27
Org Name: Not reported
Reg Board: Central Coast Region
Status: Case Closed
Chemical: Gasoline
Contact Person: Not reported
Responsible Party: Not reported
RP Address: Not reported
Interim: Not reported
Oversight Prgm: LUST
MTBE Class: *
MTBE Conc: 0
MTBE Fuel: 1
MTBE Tested: Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.

CLAIRE PATLEE TRUCKING (Continued) **S102428110**

Staff: JWG
Staff Initials: UST
Lead Agency: Local Agency
Local Agency: 27000
Hydr Basin #: SALINAS VALLEY (3-4)
Beneficial: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Local Case #: Not reported
Case Number: 375
Qty Leaked: Not reported
Abate Method: Excavate and Treat - remove contaminated soil and treat (includes spreading or land farming)
Operator: Not reported
Water System Name: Not reported
Well Name: Not reported
Distance To Lust: 0
Waste Discharge Global ID: Not reported
Waste Disch Assigned Name: Not reported
Summary: 1,000 GALLON GAS TANK HAD PIPELINE LEAK. 10,000 GALLON DIESEL TANK HAD OVERSPILL. SOIL NOT CONTAMINATED BELOW 18 FEET.

LUST:
Region: 3
Regional Board: Central Coast Region
Release Date: 03/30/1987
Enter Date: 04/02/1987
Case Number: 375
Responsible Party: Not reported
RP Address: Not reported
Contact: Not reported
Cross Street: BURTON
Local Agency: 27000
Substance: Gasoline
Discovered Date: 3/18/87
How Discovered: Tank Closure
Stop Date: 3/18/87
How Stopped: Not reported
Leak Source: Piping
Leak Cause: Overfill
Lead Agency: Local Agency
Case Type: S
Status: Case Closed
Staff Initials: JWG
Review Date: 04/02/1987
Confirm Leak: Not reported
Workplan: Not reported
Prelim Assess: Not reported
Pollution Char: / /
Remedial Plan: Not reported
Remedial Action: Not reported
Monitoring: / /
Enforcement Type: Not reported
Enforce Date: Not reported
Close Date: 4/2/87
Pilot Program: LIA

CLAIRE PATLEE TRUCKING (Continued) **S102428110**

Interim Action: Not reported
Funding: Not reported
MTBE Class: *
Max MTBE Grnd Wtr: Not reported
Max MTBE Soil: Not reported
Max MTBE Data: / /
MTBE Tested: NT
Lat/Long: 36.6503619 / -121.6304729
Soil Qualifier: Not reported
Grnd Wtr Qualifier: Not reported
Mtbe Concentratn: 0
Mtbe Fuel: 1
Org Name: Not reported
Facility County: Monterey
Global ID: T0605300285
Basin Plan: 9.10
Beneficial: Not reported
Priority: Not reported
UST Cleanup Fund ID: Not reported
Suspended: Not reported
Local Case Num: Not reported
Quantity: Not reported
Abatement Method: Excavate and Treat - remove contaminated soil and treat (includes spreading or land farming)
Operator: Not reported
Water System: Not reported
Well Name: Not reported
Distance From Well: 0
Assigned Name: Not reported
Summary: 1,000 GALLON GAS TANK HAD PIPELINE LEAK. 10,000 GALLON DIESEL TANK HAD OVERSPILL. SOIL NOT CONTAMINATED BELOW 18 FEET.

Cortese:
Region: CORTESE
Facility Addr2: 1111 HARKINS RD

11
NNW
> 1
1.119 mi.
5909 ft.

WFS - SALINAS FACILITY **Cortese** **S101481319**
1127 TERVEN **ENVIROSTOR** **N/A**
SALINAS, CA 93901

Relative:
Higher

Actual:
64 ft.

Cortese:
Region: CORTESE
Facility Addr2: Not reported

ENVIROSTOR:
Site Type: Historical
Site Type Detailed: * Historical
Acres: Not reported
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Referred - Not Assigned
Division Branch: North Coast
Facility ID: 27280007
Site Code: Not reported

WFS - SALINAS FACILITY (Continued) **S101481319**

Assembly: 28
Senate: 12
Special Program: * CERC2
Status: Refer: Other Agency
Status Date: 1994-06-27 00:00:00
Restricted Use: NO
Funding: Not reported
Latitude: 36.6613888888889
Longitude: -121.625833333333
Alias Name: SEVAN,J.F. INSECTICIDES
CAD085309052
27280007
Alias Type: Alternate Name
Envirostor ID Number
EPA Identification Number

APN: NONE SPECIFIED
APN Description: Not reported
Comments: PRELIM ASSESS DONE SOIL CONTMN BY GASOLINE DISCOVERED DURIN U/G TANK REMOVAL. SOIL EXCAVATED UNDER MONTEREY COUNTY OVERSIGHT. NO PESTICIDE RELATED PROBLEMS.FACILITY IDENTIFIED ID'ED FROM WADE'S QUEST-1965 ID'ED FROM 1960 SAL CITY DIR;NOT LISTEDSITE SCREENING DONE PA RECOM DUE TO LACK OF INFORMATION

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Discovery
Completed Date: 09/01/81

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment Report
Completed Date: 03/30/88

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 04/01/87

Confirmed: NONE SPECIFIED
Confirmed Description: Not reported
Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Media Affected: NONE SPECIFIED
Media Affected Desc: Not reported

Management:
Management Required: NONE SPECIFIED
Management Required Desc: Not reported
Potential: 10076, 10077, 10099
Potenital Description: * Pesticides - Rinse Waters
Potenital Description: * Pesticides - Wastes From Production
Potenital Description: * EMPTY PESTICIDE CONTAINERS, 30 GALLONS OR MORE
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported

WFS - SALINAS FACILITY (Continued) **S101481319**

Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported
PastUse: NONE SPECIFIED

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHULUAR	1005435448	PUREGRO COMPANY	HIGHWAY 101 WEST MAINE	93901	SSTS
SALINAS	S105960425	BERMAN STEEL - SALINAS	HIGHWAY 101 AT SPENCE ROAD	93908	CA BOND EXP. PLAN
SALINAS	S106926687	GEORGIA-PACIFIC CORP.	21860 HIGHWAY 101 SOUTH	93908	SWEEPS UST
SALINAS	S101622654	BUNN YUKI RANCH	HIGHWAY 101 S	93901	CA FID UST, SWEEPS UST
SALINAS	S102817158	GEORGIA PACIFIC	21860 HWY 101	93901	HAZNET
SALINAS	U001593121	BUNN YUKI RANCH	HWY 101 S.	93901	HIST UST
SALINAS	S102004796	ASSOCIATED TAGLINE CHEMICALS	HWY 183 3 MI W OF SALINAS		CA WDS
SALINAS	A100175934	ASSOCIATED-TAGLINE, INC.	1504 HWY. 183		AST
SALINAS	S104494738	TORRO PARK MAINTENANCE	501 HWY 68	93908	LUST
SALINAS	S106162459	CASILLAS BROS. BEACON	100 HIGHWAY 68	93908	LUST
SALINAS	S108200551	CALTRANS DIST 5/CONSTR/EA05-491504/HWY 68 REHABILI	HWY 68 PM 21.7	93901	HAZNET
SALINAS	S107538874		HWY 70 / 183 (CROSS-SAN JOHN RD)	93901	CDL
SALINAS	S103646563	LAMAR BLAIR	252-56 ABBOTT (N.E. CORNER OF	93901	HAZNET
SALINAS	S104567689	INMAN DISTRIBUTING	845 ABBOTT	93901	HAZNET
SALINAS	S108209039	HOME DEPOT/WHITE CAP CONSTR SUPPLY-HDWC0027	1276 ABBOTT ST UNIT C	93901	HAZNET
SALINAS	S102429981	FIRESTONE RANCH	ABBOTT ST	93901	LUST, Cortese
SALINAS	1003878896	PG&E GAS PLANT SALINAS	BRIDGE E LAKE SOLEDAD & E MARK	93901	CERC-NFRAP
SALINAS	S103986094	SALINAS SHIRT PRINTERS	1328 BURTON 8-B	93901	HAZNET
SALINAS	1003878510	DAVIS RD DSPL SITE	DAVIS RD	93901	CERC-NFRAP
SALINAS	S106088961	SONORA PACKING	1315 DAYTON ST UNIT B	93901	HAZNET
SALINAS	S108210374	JOE'S LUBE SERVICE	1381 DAYTON ST BLDG F	93901	HAZNET
SALINAS	1009630367	PACIFIC GAS & ELECTRIC CO	HARIS ROAD, 1/4 MILE S/O ABBOTT ST.	93901	DOT OPS
SALINAS	1003878666	BERMAN STEEL CO	ON HWY 101 APPROX 3 MI S OF	93901	CERC-NFRAP
SALINAS	S107535843		700 N MAIN ST / HWY 101		CDL
SALINAS	S101588760	LAGUNA SECA RECREATION AREA	1025 MONTEREY/SALINAS HWY	93908	CA FID UST, SWEEPS UST
SALINAS	S105088841	MONTEREY REGIONAL WASTE MGMT DIST	1021 MONTEREY/SALINAS HWY	93901	HAZNET
SALINAS	S106928077	KANTRO ENTERPRISES, INC.	24997 OLD STATE ROAD	93901	SWEEPS UST
SALINAS	S102004802	CA UTILITIES STP	RESERVATION RD/HWY 68		CA WDS
SALINAS	S103948441	AB INITIO DEVELOPMENT	5660 SALINAS MONTEREY HWY	93901	HAZNET
SALINAS	S107540632		VEHICLE STOP HWY 68		CDL
UNINCORPORATED	S104542035	SARGENT RANCH	HIGHWAY 25 AT 101	93901	LUST, HIST LUST

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

FEDERAL RECORDS

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 01/31/2008
Date Data Arrived at EDR: 02/08/2008
Date Made Active in Reports: 03/17/2008
Number of Days to Update: 38

Source: EPA
Telephone: N/A
Last EDR Contact: 04/28/2008
Next Scheduled EDR Contact: 07/28/2008
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 5
Telephone 312-886-6686

EPA Region 10
Telephone 206-553-8665

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6774

EPA Region 9
Telephone: 415-947-4246

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 01/31/2008
Date Data Arrived at EDR: 02/04/2008
Date Made Active in Reports: 03/17/2008
Number of Days to Update: 42

Source: EPA
Telephone: N/A
Last EDR Contact: 04/28/2008
Next Scheduled EDR Contact: 07/28/2008
Data Release Frequency: Quarterly

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 01/31/2008
Date Data Arrived at EDR: 02/08/2008
Date Made Active in Reports: 03/17/2008
Number of Days to Update: 38

Source: EPA
Telephone: N/A
Last EDR Contact: 04/28/2008
Next Scheduled EDR Contact: 07/28/2008
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 02/19/2008
Next Scheduled EDR Contact: 05/19/2008
Data Release Frequency: No Update Planned

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 01/09/2008
Date Data Arrived at EDR: 02/05/2008
Date Made Active in Reports: 02/20/2008
Number of Days to Update: 15

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 04/25/2008
Next Scheduled EDR Contact: 06/16/2008
Data Release Frequency: Quarterly

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 12/03/2007
Date Data Arrived at EDR: 12/06/2007
Date Made Active in Reports: 02/20/2008
Number of Days to Update: 76

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 03/17/2008
Next Scheduled EDR Contact: 06/16/2008
Data Release Frequency: Quarterly

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/08/2008
Date Data Arrived at EDR: 03/07/2008
Date Made Active in Reports: 03/20/2008
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 02/15/2008
Next Scheduled EDR Contact: 05/19/2008
Data Release Frequency: Varies

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/12/2007
Date Data Arrived at EDR: 12/18/2007
Date Made Active in Reports: 02/20/2008
Number of Days to Update: 64

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/03/2008
Next Scheduled EDR Contact: 06/02/2008
Data Release Frequency: Quarterly

RCRA-TSDF: RCRA - Transporters, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/06/2008
Date Data Arrived at EDR: 03/06/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 43

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/06/2008
Next Scheduled EDR Contact: 05/19/2008
Data Release Frequency: Quarterly

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/06/2008
Date Data Arrived at EDR: 03/06/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 43

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/06/2008
Next Scheduled EDR Contact: 05/19/2008
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/06/2008
Date Data Arrived at EDR: 03/06/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 43

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/06/2008
Next Scheduled EDR Contact: 05/19/2008
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/06/2008
Date Data Arrived at EDR: 03/06/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 43

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/06/2008
Next Scheduled EDR Contact: 05/19/2008
Data Release Frequency: Varies

RCRA-NonGen: RCRA - Non Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/06/2008
Date Data Arrived at EDR: 03/06/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 43

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/06/2008
Next Scheduled EDR Contact: 05/19/2008
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 01/18/2008
Date Data Arrived at EDR: 01/31/2008
Date Made Active in Reports: 03/17/2008
Number of Days to Update: 46

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 03/31/2008
Next Scheduled EDR Contact: 06/30/2008
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 01/18/2008
Date Data Arrived at EDR: 01/31/2008
Date Made Active in Reports: 03/17/2008
Number of Days to Update: 46

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 03/31/2008
Next Scheduled EDR Contact: 06/30/2008
Data Release Frequency: Varies

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2007
Date Data Arrived at EDR: 01/23/2008
Date Made Active in Reports: 03/17/2008
Number of Days to Update: 54

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 04/22/2008
Next Scheduled EDR Contact: 07/21/2008
Data Release Frequency: Annually

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 10/31/2007
Date Data Arrived at EDR: 01/17/2008
Date Made Active in Reports: 03/17/2008
Number of Days to Update: 60

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 04/16/2008
Next Scheduled EDR Contact: 07/14/2008
Data Release Frequency: Annually

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 02/14/2008
Date Data Arrived at EDR: 02/27/2008
Date Made Active in Reports: 03/20/2008
Number of Days to Update: 22

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 02/27/2008
Next Scheduled EDR Contact: 05/26/2008
Data Release Frequency: Varies

CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 12/28/2007
Number of Days to Update: 25

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/28/2008
Next Scheduled EDR Contact: 06/23/2008
Data Release Frequency: Quarterly

US BROWNFIELDS: A Listing of Brownfields Sites

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 01/03/2008
Date Data Arrived at EDR: 01/17/2008
Date Made Active in Reports: 02/20/2008
Number of Days to Update: 34

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 04/30/2008
Next Scheduled EDR Contact: 07/14/2008
Data Release Frequency: Semi-Annually

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 703-692-8801
Last EDR Contact: 02/08/2008
Next Scheduled EDR Contact: 05/05/2008
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2006
Date Data Arrived at EDR: 08/31/2007
Date Made Active in Reports: 10/11/2007
Number of Days to Update: 41

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 04/03/2008
Next Scheduled EDR Contact: 06/30/2008
Data Release Frequency: Varies

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/09/2005
Date Data Arrived at EDR: 12/11/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 31

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 03/10/2008
Next Scheduled EDR Contact: 06/09/2008
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 09/01/2007
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 12/28/2007
Number of Days to Update: 25

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 04/22/2008
Next Scheduled EDR Contact: 07/21/2008
Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 01/14/2008
Date Data Arrived at EDR: 01/22/2008
Date Made Active in Reports: 01/30/2008
Number of Days to Update: 8

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 03/31/2008
Next Scheduled EDR Contact: 06/30/2008
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 07/13/2007
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 03/17/2008
Next Scheduled EDR Contact: 06/16/2008
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 12/28/2007
Date Data Arrived at EDR: 12/28/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 27

Source: EPA, Region 9
Telephone: 415-972-3336
Last EDR Contact: 03/24/2008
Next Scheduled EDR Contact: 06/23/2008
Data Release Frequency: Varies

MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/07/2008
Date Data Arrived at EDR: 03/26/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 23

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 03/26/2008
Next Scheduled EDR Contact: 06/23/2008
Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2006
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 02/29/2008
Next Scheduled EDR Contact: 06/16/2008
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2002
Date Data Arrived at EDR: 04/14/2006
Date Made Active in Reports: 05/30/2006
Number of Days to Update: 46

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 04/28/2008
Next Scheduled EDR Contact: 07/14/2008
Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 01/15/2008
Date Data Arrived at EDR: 01/22/2008
Date Made Active in Reports: 01/30/2008
Number of Days to Update: 8

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 03/17/2008
Next Scheduled EDR Contact: 06/16/2008
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 01/15/2008
Date Data Arrived at EDR: 01/22/2008
Date Made Active in Reports: 01/30/2008
Number of Days to Update: 8

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 03/17/2008
Next Scheduled EDR Contact: 06/16/2008
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2006
Date Data Arrived at EDR: 03/14/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/14/2008
Next Scheduled EDR Contact: 07/14/2008
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 07/27/2007
Date Data Arrived at EDR: 08/13/2007
Date Made Active in Reports: 10/11/2007
Number of Days to Update: 59

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 04/14/2008
Next Scheduled EDR Contact: 07/14/2008
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 12/04/2007
Date Data Arrived at EDR: 02/07/2008
Date Made Active in Reports: 03/17/2008
Number of Days to Update: 39

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 02/07/2008
Next Scheduled EDR Contact: 05/05/2008
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 01/15/2008
Date Data Arrived at EDR: 02/07/2008
Date Made Active in Reports: 03/17/2008
Number of Days to Update: 39

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 03/31/2008
Next Scheduled EDR Contact: 06/30/2008
Data Release Frequency: Quarterly

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 01/29/2008
Date Data Arrived at EDR: 01/31/2008
Date Made Active in Reports: 03/17/2008
Number of Days to Update: 46

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 05/01/2008
Next Scheduled EDR Contact: 07/28/2008
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 01/04/2008
Date Data Arrived at EDR: 01/10/2008
Date Made Active in Reports: 02/20/2008
Number of Days to Update: 41

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 03/31/2008
Next Scheduled EDR Contact: 06/30/2008
Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 03/03/2008
Next Scheduled EDR Contact: 06/02/2008
Data Release Frequency: No Update Planned

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 03/06/2007
Date Made Active in Reports: 04/13/2007
Number of Days to Update: 38

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 03/13/2008
Next Scheduled EDR Contact: 06/09/2008
Data Release Frequency: Biennially

STATE AND LOCAL RECORDS

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/25/2008
Next Scheduled EDR Contact: 05/26/2008
Data Release Frequency: No Update Planned

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 02/26/2008
Date Data Arrived at EDR: 02/27/2008
Date Made Active in Reports: 03/27/2008
Number of Days to Update: 29

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/27/2008
Next Scheduled EDR Contact: 02/25/2008
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 04/28/2008
Next Scheduled EDR Contact: 07/28/2008
Data Release Frequency: No Update Planned

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 03/10/2008
Date Data Arrived at EDR: 03/12/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 33

Source: Integrated Waste Management Board
Telephone: 916-341-6320
Last EDR Contact: 03/12/2008
Next Scheduled EDR Contact: 06/09/2008
Data Release Frequency: Quarterly

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 03/03/2008
Next Scheduled EDR Contact: 06/02/2008
Data Release Frequency: Quarterly

CA WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 03/17/2008
Next Scheduled EDR Contact: 06/16/2008
Data Release Frequency: Quarterly

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites). This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 05/29/2001
Date Made Active in Reports: 07/26/2001
Number of Days to Update: 58

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 04/21/2008
Next Scheduled EDR Contact: 07/21/2008
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 01/07/2008
Date Data Arrived at EDR: 01/09/2008
Date Made Active in Reports: 02/14/2008
Number of Days to Update: 36

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 04/09/2008
Next Scheduled EDR Contact: 07/07/2008
Data Release Frequency: Quarterly

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 04/14/2008
Next Scheduled EDR Contact: 07/14/2008
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks
California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 05/05/2008
Next Scheduled EDR Contact: 08/04/2008
Data Release Frequency: Varies

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 03/31/2008
Next Scheduled EDR Contact: 06/30/2008
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 03/03/2008
Next Scheduled EDR Contact: 06/02/2008
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 01/01/2008
Date Data Arrived at EDR: 01/23/2008
Date Made Active in Reports: 02/14/2008
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 04/23/2008
Next Scheduled EDR Contact: 06/30/2008
Data Release Frequency: Quarterly

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 03/24/2008
Next Scheduled EDR Contact: 06/23/2008
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 02/11/2008
Next Scheduled EDR Contact: 05/12/2008
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 04/07/2008
Next Scheduled EDR Contact: 07/07/2008
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 02/19/2008
Next Scheduled EDR Contact: 05/19/2008
Data Release Frequency: No Update Planned

LUST: Geotracker's Leaking Underground Fuel Tank Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 01/07/2008
Date Data Arrived at EDR: 01/09/2008
Date Made Active in Reports: 02/14/2008
Number of Days to Update: 36

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 04/09/2008
Next Scheduled EDR Contact: 07/07/2008
Data Release Frequency: Quarterly

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 02/19/2008
Next Scheduled EDR Contact: 05/19/2008
Data Release Frequency: No Update Planned

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SLIC: Statewide SLIC Cases

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 01/07/2008
Date Data Arrived at EDR: 01/09/2008
Date Made Active in Reports: 02/14/2008
Number of Days to Update: 36

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 01/09/2008
Next Scheduled EDR Contact: 07/07/2008
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 02/19/2008
Next Scheduled EDR Contact: 05/19/2008
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 04/07/2008
Next Scheduled EDR Contact: 04/07/2008
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 02/11/2008
Next Scheduled EDR Contact: 05/12/2008
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 04/21/2008
Next Scheduled EDR Contact: 07/21/2008
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 03/31/2008
Next Scheduled EDR Contact: 06/30/2008
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 03/31/2008
Next Scheduled EDR Contact: 06/30/2008
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 03/03/2008
Next Scheduled EDR Contact: 06/02/2008
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 03/03/2008
Next Scheduled EDR Contact: 05/19/2008
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 03/31/2008
Next Scheduled EDR Contact: 06/30/2008
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 02/25/2008
Next Scheduled EDR Contact: 05/26/2008
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 04/08/2008
Date Data Arrived at EDR: 04/09/2008
Date Made Active in Reports: 05/01/2008
Number of Days to Update: 22

Source: SWRCB
Telephone: 916-480-1028
Last EDR Contact: 04/09/2008
Next Scheduled EDR Contact: 07/07/2008
Data Release Frequency: Semi-Annually

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 03/24/2008
Date Data Arrived at EDR: 03/25/2008
Date Made Active in Reports: 04/09/2008
Number of Days to Update: 15

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 03/24/2008
Next Scheduled EDR Contact: 06/23/2008
Data Release Frequency: Varies

HIST UST: Hazardous Substance Storage Container Database
The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 02/05/2008
Date Data Arrived at EDR: 02/06/2008
Date Made Active in Reports: 03/14/2008
Number of Days to Update: 37

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/05/2008
Next Scheduled EDR Contact: 08/04/2008
Data Release Frequency: Varies

AST: Aboveground Petroleum Storage Tank Facilities
Registered Aboveground Storage Tanks.

Date of Government Version: 11/01/2007
Date Data Arrived at EDR: 11/27/2007
Date Made Active in Reports: 02/14/2008
Number of Days to Update: 79

Source: State Water Resources Control Board
Telephone: 916-341-5712
Last EDR Contact: 04/28/2008
Next Scheduled EDR Contact: 07/28/2008
Data Release Frequency: Quarterly

SWEEPS UST: SWEEPS UST Listing
Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CHMIRS: California Hazardous Material Incident Report System
California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/23/2007
Date Made Active in Reports: 04/06/2007
Number of Days to Update: 42

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 05/02/2008
Next Scheduled EDR Contact: 05/19/2008
Data Release Frequency: Varies

NOTIFY 65: Proposition 65 Records

Proposition 65 Notification Records. NOTIFY 65 contains facility notifications about any release which could impact drinking water and thereby expose the public to a potential health risk.

Date of Government Version: 10/21/1993
Date Data Arrived at EDR: 11/01/1993
Date Made Active in Reports: 11/19/1993
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 04/14/2008
Next Scheduled EDR Contact: 07/14/2008
Data Release Frequency: No Update Planned

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 04/01/2008
Date Data Arrived at EDR: 04/02/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 12

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/02/2008
Next Scheduled EDR Contact: 06/30/2008
Data Release Frequency: Semi-Annually

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 02/26/2008
Date Data Arrived at EDR: 02/27/2008
Date Made Active in Reports: 03/27/2008
Number of Days to Update: 29

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/27/2008
Next Scheduled EDR Contact: 05/26/2008
Data Release Frequency: Quarterly

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 07/31/2007
Date Data Arrived at EDR: 07/31/2007
Date Made Active in Reports: 08/09/2007
Number of Days to Update: 9

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 05/02/2008
Next Scheduled EDR Contact: 06/30/2008
Data Release Frequency: Annually

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 10/25/2007
Date Data Arrived at EDR: 01/23/2008
Date Made Active in Reports: 02/14/2008
Number of Days to Update: 22

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 04/23/2008
Next Scheduled EDR Contact: 07/21/2008
Data Release Frequency: Varies

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 09/30/2007
Date Data Arrived at EDR: 10/15/2007
Date Made Active in Reports: 11/07/2007
Number of Days to Update: 23

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 04/21/2008
Next Scheduled EDR Contact: 07/21/2008
Data Release Frequency: Varies

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 02/26/2008
Date Data Arrived at EDR: 02/27/2008
Date Made Active in Reports: 03/27/2008
Number of Days to Update: 29

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/27/2008
Next Scheduled EDR Contact: 05/26/2008
Data Release Frequency: Quarterly

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/2006
Date Data Arrived at EDR: 10/04/2007
Date Made Active in Reports: 11/07/2007
Number of Days to Update: 34

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 02/08/2008
Next Scheduled EDR Contact: 05/05/2008
Data Release Frequency: Annually

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 04/17/2007
Date Made Active in Reports: 05/10/2007
Number of Days to Update: 23

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 04/18/2008
Next Scheduled EDR Contact: 07/14/2008
Data Release Frequency: Varies

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 02/26/2008
Date Data Arrived at EDR: 02/27/2008
Date Made Active in Reports: 03/27/2008
Number of Days to Update: 29

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/27/2008
Next Scheduled EDR Contact: 05/26/2008
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 02/12/2008
Date Data Arrived at EDR: 02/14/2008
Date Made Active in Reports: 03/14/2008
Number of Days to Update: 29

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 04/28/2008
Next Scheduled EDR Contact: 06/09/2008
Data Release Frequency: Varies

TRIBAL RECORDS

INDIAN RESERV: Indian Reservations
This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 02/08/2008
Next Scheduled EDR Contact: 05/05/2008
Data Release Frequency: Semi-Annually

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 02/25/2008
Next Scheduled EDR Contact: 05/26/2008
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 06/01/2007
Date Data Arrived at EDR: 06/14/2007
Date Made Active in Reports: 07/05/2007
Number of Days to Update: 21

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 02/15/2008
Next Scheduled EDR Contact: 05/19/2008
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 02/20/2008
Date Data Arrived at EDR: 03/04/2008
Date Made Active in Reports: 03/17/2008
Number of Days to Update: 13

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 02/15/2008
Next Scheduled EDR Contact: 05/19/2008
Data Release Frequency: Quarterly

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 03/12/2008
Date Data Arrived at EDR: 03/14/2008
Date Made Active in Reports: 03/20/2008
Number of Days to Update: 6

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 02/15/2008
Next Scheduled EDR Contact: 05/19/2008
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 02/28/2008
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 03/17/2008
Number of Days to Update: 17

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 02/15/2008
Next Scheduled EDR Contact: 05/19/2008
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 02/25/2008
Date Data Arrived at EDR: 02/26/2008
Date Made Active in Reports: 03/17/2008
Number of Days to Update: 20

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 02/15/2008
Next Scheduled EDR Contact: 05/19/2008
Data Release Frequency: Quarterly

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 02/21/2008
Date Data Arrived at EDR: 02/26/2008
Date Made Active in Reports: 03/20/2008
Number of Days to Update: 23

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 02/15/2008
Next Scheduled EDR Contact: 05/19/2008
Data Release Frequency: Quarterly

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 09/05/2007
Date Data Arrived at EDR: 10/02/2007
Date Made Active in Reports: 10/11/2007
Number of Days to Update: 9

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 02/15/2008
Next Scheduled EDR Contact: 05/19/2008
Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land
A listing of underground storage tank locations on Indian Land.

Date of Government Version: 03/12/2008
Date Data Arrived at EDR: 03/14/2008
Date Made Active in Reports: 03/20/2008
Number of Days to Update: 6

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 02/15/2008
Next Scheduled EDR Contact: 05/19/2008
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land
No description is available for this data

Date of Government Version: 02/28/2008
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 03/17/2008
Number of Days to Update: 17

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 02/15/2008
Next Scheduled EDR Contact: 05/19/2008
Data Release Frequency: Semi-Annually

INDIAN UST R7: Underground Storage Tanks on Indian Land
No description is available for this data

Date of Government Version: 06/01/2007
Date Data Arrived at EDR: 06/14/2007
Date Made Active in Reports: 07/05/2007
Number of Days to Update: 21

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 02/15/2008
Next Scheduled EDR Contact: 05/19/2008
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land
No description is available for this data

Date of Government Version: 02/25/2008
Date Data Arrived at EDR: 02/26/2008
Date Made Active in Reports: 03/20/2008
Number of Days to Update: 23

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 02/15/2008
Next Scheduled EDR Contact: 05/19/2008
Data Release Frequency: Quarterly

INDIAN UST R4: Underground Storage Tanks on Indian Land
No description is available for this data

Date of Government Version: 09/05/2007
Date Data Arrived at EDR: 10/02/2007
Date Made Active in Reports: 10/11/2007
Number of Days to Update: 9

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 02/15/2008
Next Scheduled EDR Contact: 05/19/2008
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land
No description is available for this data

Date of Government Version: 12/21/2007
Date Data Arrived at EDR: 12/21/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 34

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 12/21/2007
Next Scheduled EDR Contact: 05/19/2008
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land
No description is available for this data

Date of Government Version: 02/21/2008
Date Data Arrived at EDR: 02/26/2008
Date Made Active in Reports: 03/20/2008
Number of Days to Update: 23

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 02/15/2008
Next Scheduled EDR Contact: 05/19/2008
Data Release Frequency: Quarterly

INDIAN UST R8: Underground Storage Tanks on Indian Land
No description is available for this data

Date of Government Version: 02/20/2008
Date Data Arrived at EDR: 03/04/2008
Date Made Active in Reports: 03/17/2008
Number of Days to Update: 13

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 02/15/2008
Next Scheduled EDR Contact: 05/19/2008
Data Release Frequency: Quarterly

EDR PROPRIETARY RECORDS

Manufactured Gas Plants: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/28/2008
Date Data Arrived at EDR: 01/29/2008
Date Made Active in Reports: 02/14/2008
Number of Days to Update: 16

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 05/05/2008
Next Scheduled EDR Contact: 07/21/2008
Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 01/28/2008
Date Data Arrived at EDR: 01/29/2008
Date Made Active in Reports: 02/08/2008
Number of Days to Update: 10

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 05/05/2008
Next Scheduled EDR Contact: 07/21/2008
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 03/07/2008
Date Data Arrived at EDR: 03/11/2008
Date Made Active in Reports: 03/27/2008
Number of Days to Update: 16

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 02/25/2008
Next Scheduled EDR Contact: 05/26/2008
Data Release Frequency: Semi-Annually

FRESNO COUNTY:

CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 01/16/2008
Date Data Arrived at EDR: 01/17/2008
Date Made Active in Reports: 02/14/2008
Number of Days to Update: 28

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 04/18/2008
Next Scheduled EDR Contact: 07/14/2008
Data Release Frequency: Semi-Annually

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing

Kern County Sites and Tanks Listing.

Date of Government Version: 04/01/2008
Date Data Arrived at EDR: 04/18/2008
Date Made Active in Reports: 05/01/2008
Number of Days to Update: 13

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 04/16/2008
Next Scheduled EDR Contact: 06/02/2008
Data Release Frequency: Quarterly

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 07/07/1999
Date Made Active in Reports: N/A
Number of Days to Update: 0

Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 04/14/2008
Next Scheduled EDR Contact: 07/14/2008
Data Release Frequency: No Update Planned

HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 11/29/2007
Date Data Arrived at EDR: 01/22/2008
Date Made Active in Reports: 02/14/2008
Number of Days to Update: 23

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 02/11/2008
Next Scheduled EDR Contact: 05/12/2008
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities

Solid Waste Facilities in Los Angeles County.

Date of Government Version: 02/12/2008
Date Data Arrived at EDR: 02/21/2008
Date Made Active in Reports: 03/27/2008
Number of Days to Update: 35

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 02/14/2008
Next Scheduled EDR Contact: 05/12/2008
Data Release Frequency: Varies

City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 03/01/2008
Date Data Arrived at EDR: 03/20/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 25

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 03/12/2008
Next Scheduled EDR Contact: 06/09/2008
Data Release Frequency: Varies

Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 05/30/2007
Date Data Arrived at EDR: 07/11/2007
Date Made Active in Reports: 08/09/2007
Number of Days to Update: 29

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 02/11/2008
Next Scheduled EDR Contact: 05/12/2008
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 02/11/2008
Date Data Arrived at EDR: 02/21/2008
Date Made Active in Reports: 03/14/2008
Number of Days to Update: 22

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 02/11/2008
Next Scheduled EDR Contact: 05/12/2008
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/28/2003
Date Data Arrived at EDR: 10/23/2003
Date Made Active in Reports: 11/26/2003
Number of Days to Update: 34

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 02/19/2008
Next Scheduled EDR Contact: 05/19/2008
Data Release Frequency: Annually

City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 02/26/2008
Date Data Arrived at EDR: 02/27/2008
Date Made Active in Reports: 03/14/2008
Number of Days to Update: 16

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 02/25/2008
Next Scheduled EDR Contact: 05/12/2008
Data Release Frequency: Semi-Annually

MARIN COUNTY:

Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 02/04/2008
Date Data Arrived at EDR: 02/21/2008
Date Made Active in Reports: 03/14/2008
Number of Days to Update: 22

Source: Public Works Department Waste Management
Telephone: 415-499-6647
Last EDR Contact: 04/28/2008
Next Scheduled EDR Contact: 07/28/2008
Data Release Frequency: Semi-Annually

NAPA COUNTY:

Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008
Date Data Arrived at EDR: 01/16/2008
Date Made Active in Reports: 02/14/2008
Number of Days to Update: 29

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 04/07/2008
Next Scheduled EDR Contact: 06/23/2008
Data Release Frequency: Semi-Annually

Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008
Date Data Arrived at EDR: 01/16/2008
Date Made Active in Reports: 02/08/2008
Number of Days to Update: 23

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 04/21/2008
Next Scheduled EDR Contact: 06/23/2008
Data Release Frequency: Annually

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 03/03/2008
Date Data Arrived at EDR: 03/20/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 25

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 03/06/2008
Next Scheduled EDR Contact: 06/02/2008
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 03/03/2008
Date Data Arrived at EDR: 03/25/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 20

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 03/06/2008
Next Scheduled EDR Contact: 06/02/2008
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 03/03/2008
Date Data Arrived at EDR: 03/18/2008
Date Made Active in Reports: 04/09/2008
Number of Days to Update: 22

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 03/06/2008
Next Scheduled EDR Contact: 06/02/2008
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 07/23/2007
Date Data Arrived at EDR: 07/23/2007
Date Made Active in Reports: 08/09/2007
Number of Days to Update: 17

Source: Placer County Health and Human Services
Telephone: 530-889-7312
Last EDR Contact: 03/17/2008
Next Scheduled EDR Contact: 06/16/2008
Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 08/06/2007
Date Data Arrived at EDR: 08/07/2007
Date Made Active in Reports: 09/26/2007
Number of Days to Update: 50

Source: Department of Public Health
Telephone: 951-358-5055
Last EDR Contact: 04/14/2008
Next Scheduled EDR Contact: 07/14/2008
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 08/06/2007
Date Data Arrived at EDR: 08/07/2007
Date Made Active in Reports: 09/24/2007
Number of Days to Update: 48

Source: Health Services Agency
Telephone: 951-358-5055
Last EDR Contact: 04/14/2008
Next Scheduled EDR Contact: 07/14/2008
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Contaminated Sites
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 02/11/2008
Date Data Arrived at EDR: 02/27/2008
Date Made Active in Reports: 03/14/2008
Number of Days to Update: 16

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 05/02/2008
Next Scheduled EDR Contact: 07/28/2008
Data Release Frequency: Quarterly

ML - Regulatory Compliance Master List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 02/11/2008
Date Data Arrived at EDR: 02/27/2008
Date Made Active in Reports: 03/14/2008
Number of Days to Update: 16

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 05/02/2008
Next Scheduled EDR Contact: 07/28/2008
Data Release Frequency: Quarterly

SAN BERNARDINO COUNTY:

Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 03/18/2008
Date Data Arrived at EDR: 03/19/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 26

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 03/03/2008
Next Scheduled EDR Contact: 12/03/2007
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 05/16/2005
Date Data Arrived at EDR: 05/18/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 29

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 04/02/2008
Next Scheduled EDR Contact: 06/30/2008
Data Release Frequency: Quarterly

Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 08/01/2007
Date Data Arrived at EDR: 02/05/2008
Date Made Active in Reports: 02/14/2008
Number of Days to Update: 9

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 02/19/2008
Next Scheduled EDR Contact: 05/19/2008
Data Release Frequency: Varies

Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 11/28/2007
Date Data Arrived at EDR: 03/13/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 32

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 04/23/2008
Next Scheduled EDR Contact: 06/30/2008
Data Release Frequency: Varies

SAN FRANCISCO COUNTY:

Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 03/03/2008
Date Data Arrived at EDR: 03/04/2008
Date Made Active in Reports: 03/14/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 03/03/2008
Next Scheduled EDR Contact: 06/02/2008
Data Release Frequency: Quarterly

Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 03/03/2008
Date Data Arrived at EDR: 03/04/2008
Date Made Active in Reports: 03/14/2008
Number of Days to Update: 10

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 03/03/2008
Next Scheduled EDR Contact: 06/02/2008
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 02/01/2008
Date Data Arrived at EDR: 02/26/2008
Date Made Active in Reports: 03/14/2008
Number of Days to Update: 17

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 04/14/2008
Next Scheduled EDR Contact: 07/14/2008
Data Release Frequency: Semi-Annually

SAN MATEO COUNTY:

Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 01/31/2008
Date Data Arrived at EDR: 02/01/2008
Date Made Active in Reports: 02/14/2008
Number of Days to Update: 13

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 04/07/2008
Next Scheduled EDR Contact: 07/07/2008
Data Release Frequency: Annually

Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 01/09/2008
Date Data Arrived at EDR: 01/11/2008
Date Made Active in Reports: 02/14/2008
Number of Days to Update: 34

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 04/07/2008
Next Scheduled EDR Contact: 07/07/2008
Data Release Frequency: Semi-Annually

SANTA CLARA COUNTY:

HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/24/2008
Next Scheduled EDR Contact: 06/23/2008
Data Release Frequency: No Update Planned

LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 02/01/2008
Date Data Arrived at EDR: 02/05/2008
Date Made Active in Reports: 02/14/2008
Number of Days to Update: 9

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 04/28/2008
Next Scheduled EDR Contact: 06/23/2008
Data Release Frequency: Varies

Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 03/04/2008
Date Data Arrived at EDR: 03/04/2008
Date Made Active in Reports: 03/14/2008
Number of Days to Update: 10

Source: City of San Jose Fire Department
Telephone: 408-277-4659
Last EDR Contact: 03/03/2008
Next Scheduled EDR Contact: 06/02/2008
Data Release Frequency: Annually

SOLANO COUNTY:

Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 09/24/2007
Date Data Arrived at EDR: 10/23/2007
Date Made Active in Reports: 11/07/2007
Number of Days to Update: 15

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 03/24/2008
Next Scheduled EDR Contact: 06/23/2008
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 04/04/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/01/2008
Number of Days to Update: 9

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 03/24/2008
Next Scheduled EDR Contact: 06/23/2008
Data Release Frequency: Quarterly

SONOMA COUNTY:

Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 01/22/2008
Date Data Arrived at EDR: 01/22/2008
Date Made Active in Reports: 02/14/2008
Number of Days to Update: 23

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 04/21/2008
Next Scheduled EDR Contact: 07/21/2008
Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 05/04/2007
Date Data Arrived at EDR: 05/04/2007
Date Made Active in Reports: 05/24/2007
Number of Days to Update: 20

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 03/31/2008
Next Scheduled EDR Contact: 06/30/2008
Data Release Frequency: Semi-Annually

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 02/27/2008
Date Data Arrived at EDR: 03/25/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 20

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/12/2008
Next Scheduled EDR Contact: 06/09/2008
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 08/01/2007
Date Data Arrived at EDR: 08/29/2007
Date Made Active in Reports: 09/26/2007
Number of Days to Update: 28

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 02/19/2008
Next Scheduled EDR Contact: 05/19/2008
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 02/27/2008
Date Data Arrived at EDR: 03/25/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 20

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/12/2008
Next Scheduled EDR Contact: 06/09/2008
Data Release Frequency: Quarterly

Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 03/26/2008
Date Data Arrived at EDR: 04/09/2008
Date Made Active in Reports: 05/01/2008
Number of Days to Update: 22

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 04/09/2008
Next Scheduled EDR Contact: 07/07/2008
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 01/29/2008
Date Data Arrived at EDR: 02/20/2008
Date Made Active in Reports: 03/14/2008
Number of Days to Update: 23

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 04/28/2008
Next Scheduled EDR Contact: 07/14/2008
Data Release Frequency: Annually

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 06/15/2007
Date Made Active in Reports: 08/20/2007
Number of Days to Update: 66

Source: Department of Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 03/14/2008
Next Scheduled EDR Contact: 06/09/2008
Data Release Frequency: Annually

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 09/30/2007
Date Data Arrived at EDR: 12/04/2007
Date Made Active in Reports: 12/31/2007
Number of Days to Update: 27

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/03/2008
Next Scheduled EDR Contact: 06/30/2008
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 02/15/2008
Date Data Arrived at EDR: 02/28/2008
Date Made Active in Reports: 04/09/2008
Number of Days to Update: 41

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 02/28/2008
Next Scheduled EDR Contact: 05/26/2008
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2006
Date Data Arrived at EDR: 12/21/2007
Date Made Active in Reports: 01/10/2008
Number of Days to Update: 20

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 03/10/2008
Next Scheduled EDR Contact: 06/09/2008
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 10/01/2007
Date Data Arrived at EDR: 11/09/2007
Date Made Active in Reports: 01/15/2008
Number of Days to Update: 67

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 03/17/2008
Next Scheduled EDR Contact: 06/16/2008
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2006
Date Data Arrived at EDR: 04/27/2007
Date Made Active in Reports: 06/08/2007
Number of Days to Update: 42

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 04/07/2008
Next Scheduled EDR Contact: 07/07/2008
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data
Source: PennWell Corporation
Telephone: (800) 823-6277
This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

STREET AND ADDRESS INFORMATION

GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

UNI-KOOL
ABBOTT STREET
SALINAS, CA 93901

TARGET PROPERTY COORDINATES

Latitude (North):	36.64614 - 36° 38' 46.1''
Longitude (West):	121.62053 - 121° 37' 13.9''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	623312.7
UTM Y (Meters):	4056302.5
Elevation:	62 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	36121-F5 NATIVIDAD, CA
Most Recent Revision:	1984
West Map:	36121-F6 SALINAS, CA
Most Recent Revision:	1984

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

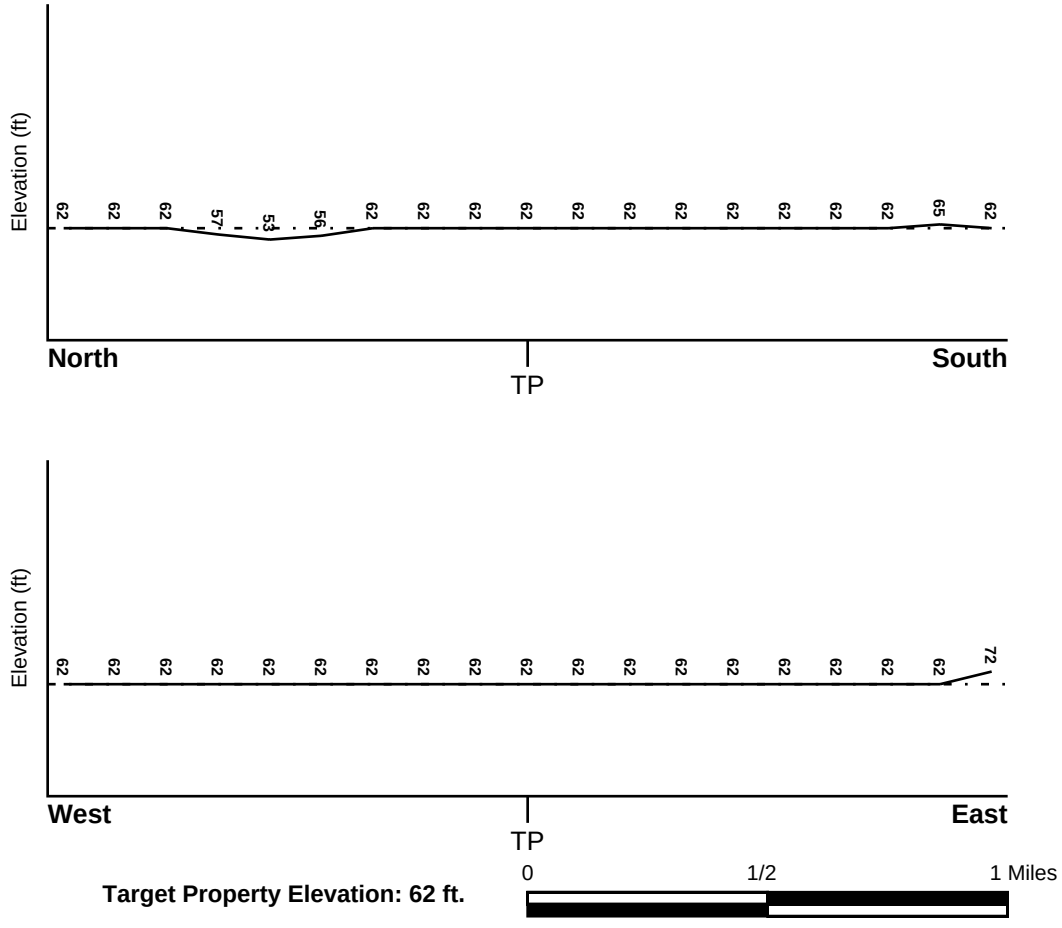
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General West

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
MONTEREY, CA	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 0601950135D

Additional Panels in search area: 0602020005D
0601950131D

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
NATIVIDAD	Not Available

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius: 1.25 miles
Status: Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

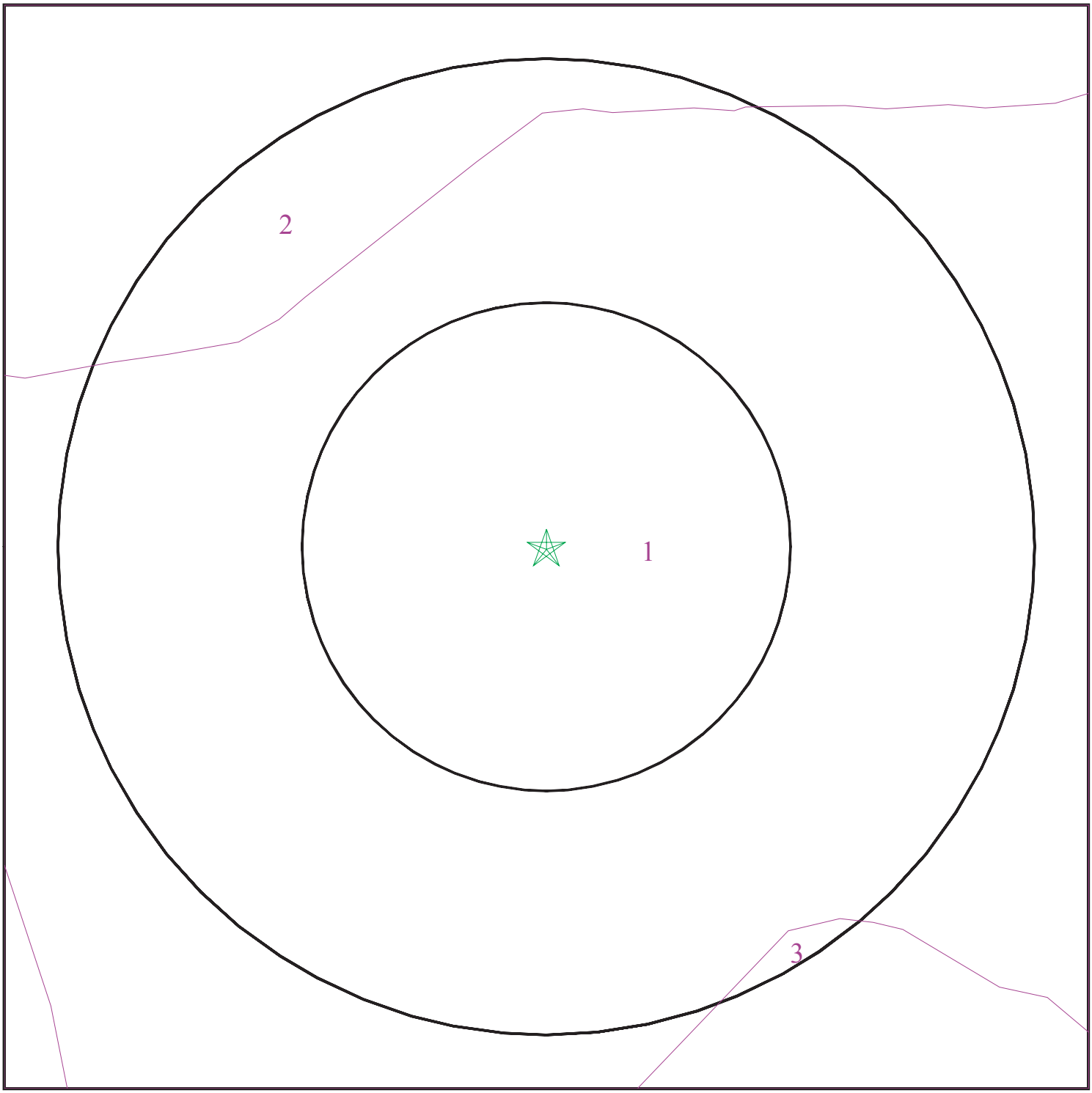
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 2211225.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Uni-Kool	CLIENT:	O Brien & Gere Companies
ADDRESS:	Abbott Street Salinas CA 93901	CONTACT:	Janelle Amendola
LAT/LONG:	36.6461 / 121.6205	INQUIRY #:	2211225.2s
		DATE:	May 05, 2008 12:02 pm

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Cropley

Soil Surface Texture: silty clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	68 inches	silty clay	Not reported	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.4 Min: 0.42	Max: 8.4 Min: 6.6

Soil Map ID: 2

Soil Component Name: Clear Lake, moderately wet

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 122 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	33 inches	clay	Not reported	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.4
2	33 inches	53 inches	silt loam	Not reported	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.4

Soil Map ID: 3

Soil Component Name: Salinas

Soil Surface Texture: clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	5 inches	clay loam	Not reported	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 8.4 Min: 6.6
2	5 inches	75 inches	stratified fine sandy loam to silty clay loam	Not reported	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 8.4 Min: 6.6

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
2	USGS3221281	1/4 - 1/2 Mile North
3	USGS3221245	1/4 - 1/2 Mile SSE
4	USGS3221279	1/2 - 1 Mile WNW
5	USGS3221296	1/2 - 1 Mile NNE
9	USGS3221264	1/2 - 1 Mile West
10	USGS3221235	1/2 - 1 Mile South

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

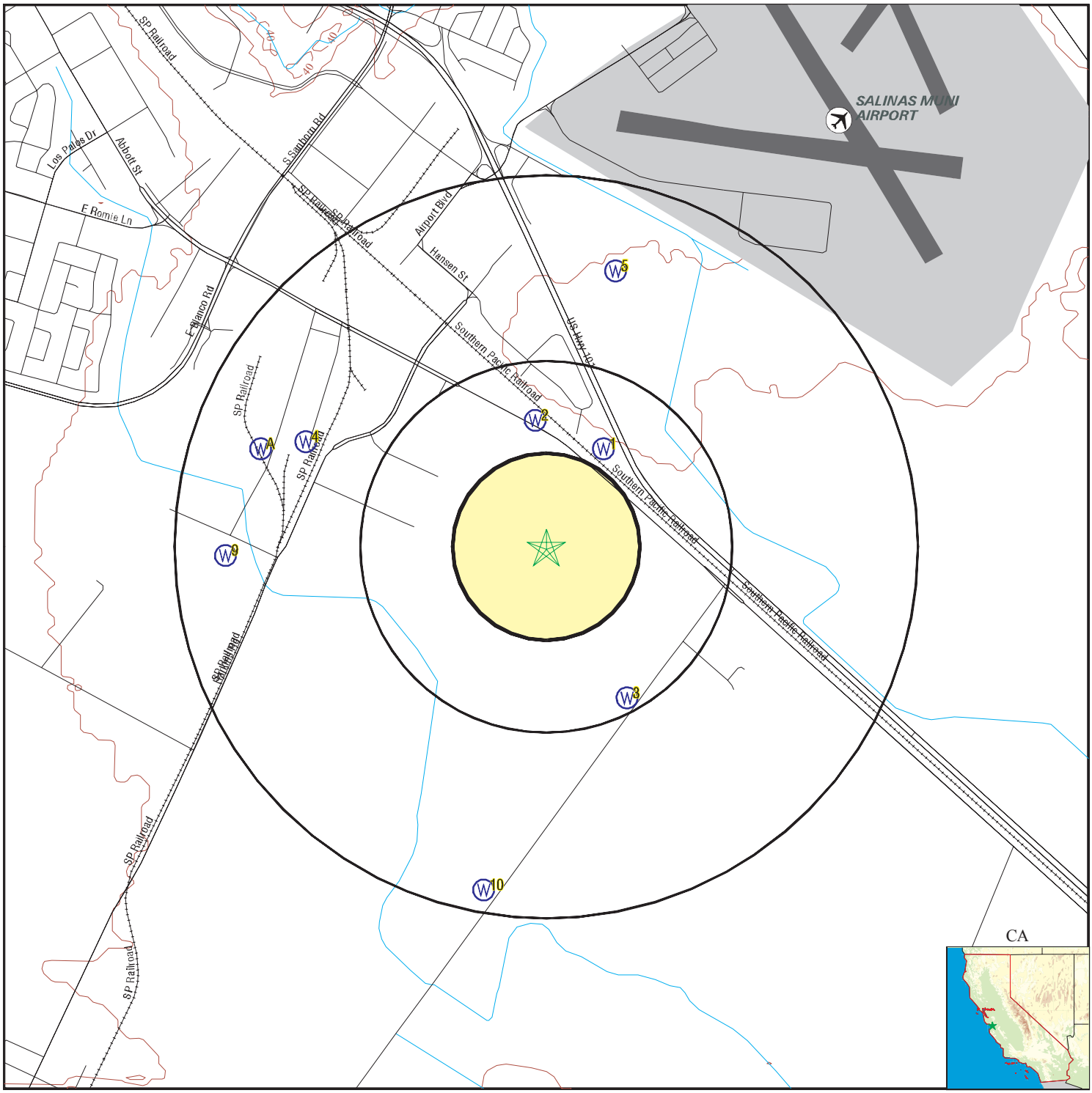
Note: PWS System location is not always the same as well location.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	12785	1/4 - 1/2 Mile NNE
A6	12796	1/2 - 1 Mile WNW
A7	12783	1/2 - 1 Mile WNW
A8	12784	1/2 - 1 Mile WNW

PHYSICAL SETTING SOURCE MAP - 2211225.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Uni-Kool	CLIENT:	O Brien & Gere Companies
ADDRESS:	Abbott Street Salinas CA 93901	CONTACT:	Janelle Amendola
LAT/LONG:	36.6461 / 121.6205	INQUIRY #:	2211225.2s
		DATE:	May 05, 2008 12:02 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

1
NNE | **CA WELLS** | **12785**
1/4 - 1/2 Mile
Higher

Water System Information:

Prime Station Code:	15S/03E-03R02 M	User ID:	HEN
FRDS Number:	2710010015	County:	Monterey
District Number:	05	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Active Untreated
Source Lat/Long:	363900.0 1213700.0	Precision:	Undefined
Source Name:	WELL 17-01		
System Number:	2710010		
System Name:	CWSC Salinas		
Organization That Operates System:			
	P.O. Box 1150		
	San Jose, CA 95108		
Pop Served:	100300	Connections:	1313
Area Served:	PORTION OF SALINAS		
Sample Collected:	01/24/2002 00:00:00	Findings:	30 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/30/2002 00:00:00	Findings:	25 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/06/2002 00:00:00	Findings:	29 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/13/2002 00:00:00	Findings:	31 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/20/2002 00:00:00	Findings:	24 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/27/2002 00:00:00	Findings:	29 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/14/2002 00:00:00	Findings:	28 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/18/2002 00:00:00	Findings:	24 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/27/2002 00:00:00	Findings:	32 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/02/2002 00:00:00	Findings:	34 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/10/2002 00:00:00	Findings:	34 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/17/2002 00:00:00	Findings:	33 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/23/2002 00:00:00	Findings:	5 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	04/23/2002 00:00:00	Findings:	2.1 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	04/24/2002 00:00:00	Findings:	35 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/01/2002 00:00:00	Findings:	34 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	05/07/2002 00:00:00	Findings:	34 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/15/2002 00:00:00	Findings:	26 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/22/2002 00:00:00	Findings:	25 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/29/2002 00:00:00	Findings:	26 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/04/2002 00:00:00	Findings:	35 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/12/2002 00:00:00	Findings:	35 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/19/2002 00:00:00	Findings:	37 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/26/2002 00:00:00	Findings:	37 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/02/2002 00:00:00	Findings:	37 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/09/2002 00:00:00	Findings:	37 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/17/2002 00:00:00	Findings:	36 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/24/2002 00:00:00	Findings:	38 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/31/2002 00:00:00	Findings:	37 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/08/2002 00:00:00	Findings:	39 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/14/2002 00:00:00	Findings:	39 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/20/2002 00:00:00	Findings:	39 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/28/2002 00:00:00	Findings:	43 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/05/2002 00:00:00	Findings:	43 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/19/2002 00:00:00	Findings:	2 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	09/25/2002 00:00:00	Findings:	21 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/03/2002 00:00:00	Findings:	20 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/09/2002 00:00:00	Findings:	14 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/16/2002 00:00:00	Findings:	14 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/22/2002 00:00:00	Findings:	18 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/30/2002 00:00:00	Findings:	18 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	11/07/2002 00:00:00	Findings:	18 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/14/2002 00:00:00	Findings:	16 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/21/2002 00:00:00	Findings:	20 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/26/2002 00:00:00	Findings:	25 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/05/2002 00:00:00	Findings:	17 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/12/2002 00:00:00	Findings:	18 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/19/2002 00:00:00	Findings:	13 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/23/2002 00:00:00	Findings:	18 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/30/2002 00:00:00	Findings:	12 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/09/2003 00:00:00	Findings:	20 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/16/2003 00:00:00	Findings:	19 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/22/2003 00:00:00	Findings:	20 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/29/2003 00:00:00	Findings:	16 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/04/2003 00:00:00	Findings:	16 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/10/2003 00:00:00	Findings:	16 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/20/2003 00:00:00	Findings:	15 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/26/2003 00:00:00	Findings:	18 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/04/2003 00:00:00	Findings:	21 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/12/2003 00:00:00	Findings:	16 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/19/2003 00:00:00	Findings:	15 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/24/2003 00:00:00	Findings:	1.4 UG/L
Chemical:	DCPA (TOTAL DI & MONO ACID DEGRADATES)		
Sample Collected:	03/25/2003 00:00:00	Findings:	15 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/25/2003 00:00:00	Findings:	1.4 UG/L
Chemical:	DCPA (TOTAL DI & MONO ACID DEGRADATES)		
Sample Collected:	04/02/2003 00:00:00	Findings:	16 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/08/2003 00:00:00	Findings:	17 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	04/15/2003 00:00:00	Findings:	26 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/22/2003 00:00:00	Findings:	31 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/29/2003 00:00:00	Findings:	17 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/06/2003 00:00:00	Findings:	32 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/21/2003 00:00:00	Findings:	16 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/28/2003 00:00:00	Findings:	37 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/03/2003 00:00:00	Findings:	34 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/10/2003 00:00:00	Findings:	33 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/17/2003 00:00:00	Findings:	38 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/24/2003 00:00:00	Findings:	37 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/01/2003 00:00:00	Findings:	14 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/08/2003 00:00:00	Findings:	12 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/15/2003 00:00:00	Findings:	18 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/22/2003 00:00:00	Findings:	13 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/29/2003 00:00:00	Findings:	18 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/29/2003 00:00:00	Findings:	1.2 UG/L
Chemical:	DCPA (TOTAL DI & MONO ACID DEGRADATES)		
Sample Collected:	08/05/2003 00:00:00	Findings:	39 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/12/2003 00:00:00	Findings:	39 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/19/2003 00:00:00	Findings:	33 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/26/2003 00:00:00	Findings:	40 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/09/2003 00:00:00	Findings:	20 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/16/2003 00:00:00	Findings:	43 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/23/2003 00:00:00	Findings:	40 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/04/2004 00:00:00	Findings:	13 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/30/2004 00:00:00	Findings:	14 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	04/06/2004 00:00:00	Findings:	17 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/13/2004 00:00:00	Findings:	27 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/20/2004 00:00:00	Findings:	18 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/27/2004 00:00:00	Findings:	39 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/04/2004 00:00:00	Findings:	24 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/13/2004 00:00:00	Findings:	39 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/18/2004 00:00:00	Findings:	43 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/25/2004 00:00:00	Findings:	28 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/03/2004 00:00:00	Findings:	35.687 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/08/2004 00:00:00	Findings:	17.13 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/16/2004 00:00:00	Findings:	21.628 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/22/2004 00:00:00	Findings:	18.707 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/29/2004 00:00:00	Findings:	17.529 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/08/2004 00:00:00	Findings:	35.85 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/15/2004 00:00:00	Findings:	35.957 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/20/2004 00:00:00	Findings:	14.84 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/27/2004 00:00:00	Findings:	35.237 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/05/2004 00:00:00	Findings:	33 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/12/2004 00:00:00	Findings:	26 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/17/2004 00:00:00	Findings:	14.198 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/23/2004 00:00:00	Findings:	36.748 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/31/2004 00:00:00	Findings:	29.84 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/08/2004 00:00:00	Findings:	21.836 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/14/2004 00:00:00	Findings:	39.205 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/21/2004 00:00:00	Findings:	24.113 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	09/28/2004 00:00:00	Findings:	41.889 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/05/2004 00:00:00	Findings:	35.054 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/14/2004 00:00:00	Findings:	11.954 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/21/2004 00:00:00	Findings:	8.249 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/26/2004 00:00:00	Findings:	6.34 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/02/2004 00:00:00	Findings:	17.856 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/09/2004 00:00:00	Findings:	24.86 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/16/2004 00:00:00	Findings:	34.03 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/18/2004 00:00:00	Findings:	1.17 UG/L
Chemical:	DCPA (TOTAL DI & MONO ACID DEGRADATES)		
Sample Collected:	11/23/2004 00:00:00	Findings:	36.349 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/30/2004 00:00:00	Findings:	12.338 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/07/2004 00:00:00	Findings:	18.5 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	12/07/2004 00:00:00	Findings:	3 UNITS
Chemical:	COLOR		
Sample Collected:	12/07/2004 00:00:00	Findings:	1108 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/07/2004 00:00:00	Findings:	7.33
Chemical:	PH, LABORATORY		
Sample Collected:	12/07/2004 00:00:00	Findings:	270 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	12/07/2004 00:00:00	Findings:	269.205 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	12/07/2004 00:00:00	Findings:	.794 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	12/07/2004 00:00:00	Findings:	521 UG/L
Chemical:	NITRITE (AS N)		
Sample Collected:	12/07/2004 00:00:00	Findings:	436 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	12/07/2004 00:00:00	Findings:	109.6 MG/L
Chemical:	CALCIUM		
Sample Collected:	12/07/2004 00:00:00	Findings:	42.191 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	12/07/2004 00:00:00	Findings:	82.474 MG/L
Chemical:	SODIUM		
Sample Collected:	12/07/2004 00:00:00	Findings:	5.586
Chemical:	SODIUM ABSORPTION RATIO		
Sample Collected:	12/07/2004 00:00:00	Findings:	3.581 MG/L
Chemical:	POTASSIUM		

Sample Collected:	12/07/2004 00:00:00	Findings:	68.6 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/07/2004 00:00:00	Findings:	.328 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12/07/2004 00:00:00	Findings:	10.602 UG/L
Chemical:	VANADIUM		
Sample Collected:	12/07/2004 00:00:00	Findings:	750 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	12/07/2004 00:00:00	Findings:	17.135 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/07/2004 00:00:00	Findings:	.4 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	12/07/2004 00:00:00	Findings:	4391.797 UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	12/07/2004 00:00:00	Findings:	6.443 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	12/14/2004 00:00:00	Findings:	13.309 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/21/2004 00:00:00	Findings:	15.55 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/29/2004 00:00:00	Findings:	21.81 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/06/2005 00:00:00	Findings:	35.67 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/10/2005 00:00:00	Findings:	18.349 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/19/2005 00:00:00	Findings:	17.153 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/19/2005 00:00:00	Findings:	1100 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	01/19/2005 00:00:00	Findings:	7.8
Chemical:	PH, LABORATORY		
Sample Collected:	01/19/2005 00:00:00	Findings:	280 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	01/19/2005 00:00:00	Findings:	340 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	01/19/2005 00:00:00	Findings:	430 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	01/19/2005 00:00:00	Findings:	100 MG/L
Chemical:	CALCIUM		
Sample Collected:	01/19/2005 00:00:00	Findings:	44 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	01/19/2005 00:00:00	Findings:	85 MG/L
Chemical:	SODIUM		
Sample Collected:	01/19/2005 00:00:00	Findings:	4 MG/L
Chemical:	POTASSIUM		
Sample Collected:	01/19/2005 00:00:00	Findings:	70 MG/L
Chemical:	CHLORIDE		
Sample Collected:	01/19/2005 00:00:00	Findings:	.5 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		

Sample Collected:	01/19/2005 00:00:00	Findings:	790 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	01/19/2005 00:00:00	Findings:	.96
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	01/19/2005 00:00:00	Findings:	19 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/19/2005 00:00:00	Findings:	.2 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	01/26/2005 00:00:00	Findings:	29.611 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/01/2005 00:00:00	Findings:	34.825 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/10/2005 00:00:00	Findings:	38.533 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/17/2005 00:00:00	Findings:	39.838 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/24/2005 00:00:00	Findings:	40.678 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/03/2005 00:00:00	Findings:	40.566 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/03/2005 00:00:00	Findings:	.46 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	05/10/2005 00:00:00	Findings:	15.169 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/17/2005 00:00:00	Findings:	14.128 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/26/2005 00:00:00	Findings:	13.238 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/02/2005 00:00:00	Findings:	10.357 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/09/2005 00:00:00	Findings:	12.219 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/09/2005 00:00:00	Findings:	.48 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	06/16/2005 00:00:00	Findings:	16.443 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/22/2005 00:00:00	Findings:	16.167 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/28/2005 00:00:00	Findings:	14.54 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/07/2005 00:00:00	Findings:	16.451 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/13/2005 00:00:00	Findings:	19.299 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/19/2005 00:00:00	Findings:	25.976 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/26/2005 00:00:00	Findings:	15.215 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/04/2005 00:00:00	Findings:	16.68 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	08/11/2005 00:00:00	Findings:	14.054 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/16/2005 00:00:00	Findings:	16.702 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/24/2005 00:00:00	Findings:	13.419 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/30/2005 00:00:00	Findings:	16.786 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/08/2005 00:00:00	Findings:	11.786 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/15/2005 00:00:00	Findings:	14.242 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/20/2005 00:00:00	Findings:	16.535 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/27/2005 00:00:00	Findings:	22.346 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/05/2005 00:00:00	Findings:	17.774 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/13/2005 00:00:00	Findings:	15.407 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/20/2005 00:00:00	Findings:	12.927 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/25/2005 00:00:00	Findings:	11.167 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/27/2005 00:00:00	Findings:	.41 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	10/31/2005 00:00:00	Findings:	16.333 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/10/2005 00:00:00	Findings:	15.924 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/15/2005 00:00:00	Findings:	9.342 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/17/2005 00:00:00	Findings:	6.3 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	11/17/2005 00:00:00	Findings:	2.3 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	11/17/2005 00:00:00	Findings:	16 UG/L
Chemical:	URANIUM (UG/L)		
Sample Collected:	11/17/2005 00:00:00	Findings:	11 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	11/22/2005 00:00:00	Findings:	13.247 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/30/2005 00:00:00	Findings:	7.628 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/08/2005 00:00:00	Findings:	.3 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	12/08/2005 00:00:00	Findings:	15.523 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/12/2005 00:00:00	Findings:	7
Chemical:	PH, FIELD		

Sample Collected:	12/13/2005 00:00:00	Findings:	13.291 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/22/2005 00:00:00	Findings:	14.53 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/29/2005 00:00:00	Findings:	14.758 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/05/2006 00:00:00	Findings:	14.584 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/19/2006 00:00:00	Findings:	8.3 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	01/19/2006 00:00:00	Findings:	2.6 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	01/19/2006 00:00:00	Findings:	14 UG/L
Chemical:	URANIUM (UG/L)		
Sample Collected:	01/19/2006 00:00:00	Findings:	9.4 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	02/08/2006 00:00:00	Findings:	14.287 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/02/2006 00:00:00	Findings:	17 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/13/2006 00:00:00	Findings:	7.4
Chemical:	PH, FIELD		
Sample Collected:	04/12/2006 00:00:00	Findings:	17 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/14/2006 00:00:00	Findings:	9.7 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	04/14/2006 00:00:00	Findings:	2.8 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	04/14/2006 00:00:00	Findings:	14 UG/L
Chemical:	URANIUM (UG/L)		
Sample Collected:	04/14/2006 00:00:00	Findings:	9.4 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	05/11/2006 00:00:00	Findings:	17 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/08/2006 00:00:00	Findings:	19.879 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/20/2006 00:00:00	Findings:	14.949 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/27/2006 00:00:00	Findings:	7.4 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	07/27/2006 00:00:00	Findings:	2.9 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	07/27/2006 00:00:00	Findings:	18 UG/L
Chemical:	URANIUM (UG/L)		
Sample Collected:	07/27/2006 00:00:00	Findings:	12 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	11/07/2006 00:00:00	Findings:	7.7
Chemical:	PH, FIELD		
Sample Collected:	12/07/2006 00:00:00	Findings:	18.437 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	12/11/2006 00:00:00	Findings:	7.4
Chemical:	PH, FIELD		
Sample Collected:	12/21/2006 00:00:00	Findings:	.223 PCI/L
Chemical:	RADIUM 226 COUNTING ERROR		
Sample Collected:	12/21/2006 00:00:00	Findings:	7.7 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	12/21/2006 00:00:00	Findings:	2.6 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	12/21/2006 00:00:00	Findings:	15 UG/L
Chemical:	URANIUM (UG/L)		
Sample Collected:	12/21/2006 00:00:00	Findings:	10 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	01/17/2007 00:00:00	Findings:	14.825 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/14/2007 00:00:00	Findings:	12.366 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/12/2007 00:00:00	Findings:	7.4
Chemical:	PH, FIELD		
Sample Collected:	03/21/2007 00:00:00	Findings:	16.266 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/17/2007 00:00:00	Findings:	28.895 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/22/2007 00:00:00	Findings:	40.947 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/11/2007 00:00:00	Findings:	7.5
Chemical:	PH, FIELD		
Sample Collected:	06/26/2007 00:00:00	Findings:	23.176 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/25/2007 00:00:00	Findings:	23.274 MG/L
Chemical:	NITRATE (AS NO3)		

2
North
1/4 - 1/2 Mile
Higher

FED USGS **USGS3221281**

Agency cd:	USGS	Site no:	363904121371201
Site name:	015S003E03R002M		
Latitude:	363904		
Longitude:	1213712	Dec lat:	36.65107111
Dec lon:	-121.62105558	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	053
Country:	US	Land net:	SESES03 T15S R03E M
Location map:	NATIVIDAD	Map scale:	24000
Altitude:	55.00		
Altitude method:	Interpolated from topographic map		
Altitude accuracy:	10		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	AlisalElkhorn Sloughs. California. Area = 232 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19640408
Date inventoried:	Not Reported	Mean greenwich time offset:	PST

Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	648	Hole depth:	648
Source of depth data:	Not Reported		
Project number:	CA-9-358M		
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

3
SSE **FED USGS** **USGS3221245**
1/4 - 1/2 Mile
Higher

Agency cd:	USGS	Site no:	363825121365601
Site name:	015S003E11M001M		
Latitude:	363825		
Longitude:	1213656	Dec lat:	36.64023795
Dec lon:	-121.6166109	Coor meth:	M
Coor accr:	U	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	053
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	Not Reported		
Altitude method:	Not Reported		
Altitude accuracy:	10		
Altitude datum:	Not Reported		
Hydrologic:	San LorenzoSoquel. California. Area = 374 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	1971-08-12
Water quality data end date:	1971-08-12	Water quality data count:	1
Ground water data begin date:	0000-00-00	Ground water data end date:	0000-00-00
Ground water data count:	0		

Ground-water levels, Number of Measurements: 0

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

4
WNW
1/2 - 1 Mile
Higher | **FED USGS** | **USGS3221279**

Agency cd:	USGS	Site no:	363901121375201
Site name:	015S003E03N002M		
Latitude:	363901		
Longitude:	1213752	Dec lat:	36.65023771
Dec lon:	-121.63216704	Coor meth:	M
Coor accr:	F	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	053
Country:	US	Land net:	SWSWS03 T15S R03E M
Location map:	SALINAS	Map scale:	24000
Altitude:	60.00		
Altitude method:	Interpolated from topographic map		
Altitude accuracy:	10		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	AlisalElkhorn Sloughs. California. Area = 232 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19680719
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	524	Hole depth:	524
Source of depth data:	Not Reported		
Project number:	CA-9-358M		
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

5
NNE
1/2 - 1 Mile
Lower | **FED USGS** | **USGS3221296**

Agency cd:	USGS	Site no:	363925121365801
Site name:	015S003E02E001M		
Latitude:	363925		
Longitude:	1213658	Dec lat:	36.6569044
Dec lon:	-121.61716661	Coor meth:	M
Coor accr:	U	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	053
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported

Altitude:	Not Reported		
Altitude method:	Not Reported		
Altitude accuracy:	10		
Altitude datum:	Not Reported		
Hydrologic:	San LorenzoSoquel. California. Area = 374 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	1971-08-10
Water quality data end date:	1971-08-10	Water quality data count:	1
Ground water data begin date:	0000-00-00	Ground water data end date:	0000-00-00
Ground water data count:	0		

Ground-water levels, Number of Measurements: 0

A6
WNW **CA WELLS** **12796**
1/2 - 1 Mile
Higher

Water System Information:

Prime Station Code:	15S/03E-25F01 M	User ID:	HEN
FRDS Number:	2710010022	County:	Monterey
District Number:	05	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Active Untreated
Source Lat/Long:	363900.0 1213800.0	Precision:	1 Mile (One Minute)
Source Name:	WELL 25-01		
System Number:	2710010		
System Name:	CWSC Salinas		
Organization That Operates System:	P.O. Box 1150 San Jose, CA 95108		
Pop Served:	100300	Connections:	1313
Area Served:	PORTION OF SALINAS		
Sample Collected:	03/27/2003 00:00:00	Findings:	550 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/27/2003 00:00:00	Findings:	65 MG/L
Chemical:	CHLORIDE		
Sample Collected:	04/24/2003 00:00:00	Findings:	522 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	04/24/2003 00:00:00	Findings:	60 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/26/2003 00:00:00	Findings:	535 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/26/2003 00:00:00	Findings:	59 MG/L
Chemical:	CHLORIDE		
Sample Collected:	07/30/2003 00:00:00	Findings:	535 US
Chemical:	SPECIFIC CONDUCTANCE		

Sample Collected:	07/30/2003 00:00:00	Findings:	58 MG/L
Chemical:	CHLORIDE		
Sample Collected:	11/20/2003 00:00:00	Findings:	507 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/17/2003 00:00:00	Findings:	509 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/17/2003 00:00:00	Findings:	59 MG/L
Chemical:	CHLORIDE		
Sample Collected:	08/28/2003 00:00:00	Findings:	527 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	08/28/2003 00:00:00	Findings:	58 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/25/2003 00:00:00	Findings:	513 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/25/2003 00:00:00	Findings:	57 MG/L
Chemical:	CHLORIDE		
Sample Collected:	10/29/2003 00:00:00	Findings:	511 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	10/29/2003 00:00:00	Findings:	59 MG/L
Chemical:	CHLORIDE		
Sample Collected:	08/13/2004 00:00:00	Findings:	4 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	08/13/2004 00:00:00	Findings:	2 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	08/13/2004 00:00:00	Findings:	.43 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	08/19/2004 00:00:00	Findings:	554 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	08/19/2004 00:00:00	Findings:	58 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/02/2004 00:00:00	Findings:	552 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/02/2004 00:00:00	Findings:	58 MG/L
Chemical:	CHLORIDE		
Sample Collected:	10/21/2004 00:00:00	Findings:	542 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	10/21/2004 00:00:00	Findings:	57 MG/L
Chemical:	CHLORIDE		
Sample Collected:	10/28/2004 00:00:00	Findings:	1.5 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	10/28/2004 00:00:00	Findings:	.41 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	10/28/2004 00:00:00	Findings:	1.2 UG/L
Chemical:	URANIUM (UG/L)		
Sample Collected:	11/16/2004 00:00:00	Findings:	1.5 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	11/16/2004 00:00:00	Findings:	.39 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	11/16/2004 00:00:00	Findings:	1.3 UG/L
Chemical:	URANIUM (UG/L)		

Sample Collected:	11/18/2004 00:00:00	Findings:	513 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	11/18/2004 00:00:00	Findings:	53.264 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/02/2004 00:00:00	Findings:	517 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/02/2004 00:00:00	Findings:	67 MG/L
Chemical:	CHLORIDE		
Sample Collected:	01/26/2005 00:00:00	Findings:	537 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	01/26/2005 00:00:00	Findings:	59 MG/L
Chemical:	CHLORIDE		
Sample Collected:	01/27/2005 00:00:00	Findings:	8.5 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	01/27/2005 00:00:00	Findings:	2.5 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	02/03/2005 00:00:00	Findings:	1.4 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	02/08/2005 00:00:00	Findings:	14.989 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/17/2005 00:00:00	Findings:	541 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	02/17/2005 00:00:00	Findings:	59.993 MG/L
Chemical:	CHLORIDE		
Sample Collected:	02/17/2005 00:00:00	Findings:	15.258 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/03/2005 00:00:00	Findings:	548 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/03/2005 00:00:00	Findings:	59 MG/L
Chemical:	CHLORIDE		
Sample Collected:	04/26/2005 00:00:00	Findings:	549 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	04/26/2005 00:00:00	Findings:	64 MG/L
Chemical:	CHLORIDE		
Sample Collected:	05/12/2005 00:00:00	Findings:	542 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	05/12/2005 00:00:00	Findings:	59 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/02/2005 00:00:00	Findings:	521 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/02/2005 00:00:00	Findings:	58.632 MG/L
Chemical:	CHLORIDE		
Sample Collected:	07/27/2005 00:00:00	Findings:	1.5 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	07/28/2005 00:00:00	Findings:	532 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	07/28/2005 00:00:00	Findings:	60 MG/L
Chemical:	CHLORIDE		
Sample Collected:	08/23/2005 00:00:00	Findings:	526 US
Chemical:	SPECIFIC CONDUCTANCE		

Sample Collected:	08/23/2005 00:00:00	Findings:	60 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/13/2005 00:00:00	Findings:	519 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/13/2005 00:00:00	Findings:	59.027 MG/L
Chemical:	CHLORIDE		
Sample Collected:	10/04/2005 00:00:00	Findings:	528 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	10/04/2005 00:00:00	Findings:	59.701 MG/L
Chemical:	CHLORIDE		
Sample Collected:	11/01/2005 00:00:00	Findings:	522 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	11/01/2005 00:00:00	Findings:	59.372 MG/L
Chemical:	CHLORIDE		
Sample Collected:	11/17/2005 00:00:00	Findings:	1.8 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	12/08/2005 00:00:00	Findings:	528 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/08/2005 00:00:00	Findings:	59.611 MG/L
Chemical:	CHLORIDE		
Sample Collected:	01/12/2006 00:00:00	Findings:	523 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	01/12/2006 00:00:00	Findings:	59.395 MG/L
Chemical:	CHLORIDE		
Sample Collected:	02/08/2006 00:00:00	Findings:	566 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	02/08/2006 00:00:00	Findings:	67 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/07/2006 00:00:00	Findings:	520 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/07/2006 00:00:00	Findings:	60 MG/L
Chemical:	CHLORIDE		
Sample Collected:	04/12/2006 00:00:00	Findings:	530 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	04/12/2006 00:00:00	Findings:	60 MG/L
Chemical:	CHLORIDE		
Sample Collected:	05/10/2006 00:00:00	Findings:	540 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	05/10/2006 00:00:00	Findings:	60 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/15/2006 00:00:00	Findings:	547 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/15/2006 00:00:00	Findings:	62 MG/L
Chemical:	CHLORIDE		
Sample Collected:	07/13/2006 00:00:00	Findings:	539 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	07/13/2006 00:00:00	Findings:	60.93 MG/L
Chemical:	CHLORIDE		
Sample Collected:	08/10/2006 00:00:00	Findings:	520 US
Chemical:	SPECIFIC CONDUCTANCE		

Sample Collected:	08/10/2006 00:00:00	Findings:	60 MG/L
Chemical:	CHLORIDE		
Sample Collected:	01/28/2004 00:00:00	Findings:	20 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	01/28/2004 00:00:00	Findings:	1 UNITS
Chemical:	COLOR		
Sample Collected:	01/28/2004 00:00:00	Findings:	521 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	01/28/2004 00:00:00	Findings:	7.23
Chemical:	PH, LABORATORY		
Sample Collected:	01/28/2004 00:00:00	Findings:	145 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	01/28/2004 00:00:00	Findings:	177 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	01/28/2004 00:00:00	Findings:	168 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	01/28/2004 00:00:00	Findings:	42 MG/L
Chemical:	CALCIUM		
Sample Collected:	01/28/2004 00:00:00	Findings:	15 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	01/28/2004 00:00:00	Findings:	43 MG/L
Chemical:	SODIUM		
Sample Collected:	01/28/2004 00:00:00	Findings:	43
Chemical:	SODIUM ABSORPTION RATIO		
Sample Collected:	01/28/2004 00:00:00	Findings:	2.1 MG/L
Chemical:	POTASSIUM		
Sample Collected:	01/28/2004 00:00:00	Findings:	59 MG/L
Chemical:	CHLORIDE		
Sample Collected:	01/28/2004 00:00:00	Findings:	.15 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	01/28/2004 00:00:00	Findings:	3 UG/L
Chemical:	ARSENIC		
Sample Collected:	01/28/2004 00:00:00	Findings:	284 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	01/28/2004 00:00:00	Findings:	13 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/28/2004 00:00:00	Findings:	.45 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	01/28/2004 00:00:00	Findings:	9 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	01/29/2004 00:00:00	Findings:	1.9 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	02/05/2004 00:00:00	Findings:	520 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	02/05/2004 00:00:00	Findings:	60 MG/L
Chemical:	CHLORIDE		
Sample Collected:	02/26/2004 00:00:00	Findings:	535 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	02/26/2004 00:00:00	Findings:	61 MG/L
Chemical:	CHLORIDE		

Sample Collected:	03/25/2004 00:00:00	Findings:	535 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/25/2004 00:00:00	Findings:	59 MG/L
Chemical:	CHLORIDE		
Sample Collected:	04/29/2004 00:00:00	Findings:	546 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	04/29/2004 00:00:00	Findings:	59 MG/L
Chemical:	CHLORIDE		
Sample Collected:	05/21/2004 00:00:00	Findings:	.58 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	07/15/2004 00:00:00	Findings:	546 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	07/15/2004 00:00:00	Findings:	59 MG/L
Chemical:	CHLORIDE		
Sample Collected:	05/08/2007 00:00:00	Findings:	634 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	05/08/2007 00:00:00	Findings:	76.624 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/05/2007 00:00:00	Findings:	550 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/05/2007 00:00:00	Findings:	60.94 MG/L
Chemical:	CHLORIDE		
Sample Collected:	07/10/2007 00:00:00	Findings:	552 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	07/10/2007 00:00:00	Findings:	62.01 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/14/2006 00:00:00	Findings:	532 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/14/2006 00:00:00	Findings:	61.449 MG/L
Chemical:	CHLORIDE		
Sample Collected:	10/17/2006 00:00:00	Findings:	541 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	10/17/2006 00:00:00	Findings:	60.002 MG/L
Chemical:	CHLORIDE		
Sample Collected:	11/15/2006 00:00:00	Findings:	542 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	11/15/2006 00:00:00	Findings:	59.73 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/06/2006 00:00:00	Findings:	14.133 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12/07/2006 00:00:00	Findings:	541 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/07/2006 00:00:00	Findings:	59.403 MG/L
Chemical:	CHLORIDE		
Sample Collected:	01/10/2007 00:00:00	Findings:	544 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	01/10/2007 00:00:00	Findings:	61.08 MG/L
Chemical:	CHLORIDE		
Sample Collected:	02/07/2007 00:00:00	Findings:	539 US
Chemical:	SPECIFIC CONDUCTANCE		

Sample Collected:	02/07/2007 00:00:00	Findings:	62.662 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/07/2007 00:00:00	Findings:	541 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/07/2007 00:00:00	Findings:	60.87 MG/L
Chemical:	CHLORIDE		
Sample Collected:	04/04/2007 00:00:00	Findings:	555 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	04/04/2007 00:00:00	Findings:	62.204 MG/L
Chemical:	CHLORIDE		
Sample Collected:	05/23/2002 00:00:00	Findings:	582 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	05/23/2002 00:00:00	Findings:	73 MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/20/2002 00:00:00	Findings:	5 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	06/20/2002 00:00:00	Findings:	4.2 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	06/27/2002 00:00:00	Findings:	529 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/27/2002 00:00:00	Findings:	61 MG/L
Chemical:	CHLORIDE		
Sample Collected:	07/25/2002 00:00:00	Findings:	540 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	07/25/2002 00:00:00	Findings:	60 MG/L
Chemical:	CHLORIDE		
Sample Collected:	08/27/2002 00:00:00	Findings:	533 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	08/27/2002 00:00:00	Findings:	61 MG/L
Chemical:	CHLORIDE		
Sample Collected:	09/26/2002 00:00:00	Findings:	529 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	09/26/2002 00:00:00	Findings:	59 MG/L
Chemical:	CHLORIDE		
Sample Collected:	10/24/2002 00:00:00	Findings:	521 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	10/24/2002 00:00:00	Findings:	59 MG/L
Chemical:	CHLORIDE		
Sample Collected:	11/12/2002 00:00:00	Findings:	7 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	11/12/2002 00:00:00	Findings:	3.9 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	11/21/2002 00:00:00	Findings:	526 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	11/21/2002 00:00:00	Findings:	61 MG/L
Chemical:	CHLORIDE		
Sample Collected:	12/26/2002 00:00:00	Findings:	523 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	12/26/2002 00:00:00	Findings:	59 MG/L
Chemical:	CHLORIDE		

Sample Collected:	01/29/2003 00:00:00	Findings:	528 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	01/29/2003 00:00:00	Findings:	60 MG/L
Chemical:	CHLORIDE		
Sample Collected:	01/29/2003 00:00:00	Findings:	13 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02/26/2003 00:00:00	Findings:	510 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	02/26/2003 00:00:00	Findings:	59 MG/L
Chemical:	CHLORIDE		
Sample Collected:	01/24/2002 00:00:00	Findings:	17 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/31/2002 00:00:00	Findings:	523 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	01/31/2002 00:00:00	Findings:	61 MG/L
Chemical:	CHLORIDE		
Sample Collected:	02/21/2002 00:00:00	Findings:	498 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	02/21/2002 00:00:00	Findings:	50 MG/L
Chemical:	CHLORIDE		
Sample Collected:	03/28/2002 00:00:00	Findings:	499 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/28/2002 00:00:00	Findings:	49 MG/L
Chemical:	CHLORIDE		
Sample Collected:	04/18/2002 00:00:00	Findings:	573 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	04/18/2002 00:00:00	Findings:	67 MG/L
Chemical:	CHLORIDE		

A7
WNW
1/2 - 1 Mile
Higher

CA WELLS **12783**

Water System Information:

Prime Station Code:	15S/03E-03C01 M	User ID:	HEN
FRDS Number:	2710010007	County:	Monterey
District Number:	05	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Active Untreated
Source Lat/Long:	363900.0 1213800.0	Precision:	Undefined
Source Name:	WELL 10-01		
System Number:	2710010		
System Name:	CWSC Salinas		
Organization That Operates System:			
	P.O. Box 1150		
	San Jose, CA 95108		
Pop Served:	100300	Connections:	1313
Area Served:	PORTION OF SALINAS		
Sample Collected:	01/18/2002 00:00:00	Findings:	6.78 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	01/18/2002 00:00:00	Findings:	1.16 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A8
WNW
1/2 - 1 Mile
Higher | **CA WELLS** | **12784**

Water System Information:

Prime Station Code:	15S/03E-03N02 M	User ID:	HEN
FRDS Number:	2710010019	County:	Monterey
District Number:	05	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Inactive Untreated
Source Lat/Long:	363900.0 1213800.0	Precision:	Undefined
Source Name:	WELL 21-01 - INACTIVE		
System Number:	2710010		
System Name:	CWSC Salinas		
Organization That Operates System:			
	P.O. Box 1150		
	San Jose, CA 95108		
Pop Served:	100300	Connections:	1313
Area Served:	PORTION OF SALINAS		
Sample Collected:	08/19/2003 00:00:00	Findings:	43 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/19/2003 00:00:00	Findings:	.9 UG/L
Chemical:	TOLUENE		
Sample Collected:	12/01/2005 00:00:00	Findings:	62.375 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01/19/2006 00:00:00	Findings:	7.3 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	01/19/2006 00:00:00	Findings:	2.4 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	01/19/2006 00:00:00	Findings:	18 UG/L
Chemical:	URANIUM (UG/L)		
Sample Collected:	01/19/2006 00:00:00	Findings:	12 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	01/19/2006 00:00:00	Findings:	3.9 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	01/23/2006 00:00:00	Findings:	7
Chemical:	PH, FIELD		
Sample Collected:	03/13/2006 00:00:00	Findings:	62 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/14/2006 00:00:00	Findings:	60 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/14/2006 00:00:00	Findings:	.61 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	03/15/2006 00:00:00	Findings:	60 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/16/2006 00:00:00	Findings:	56 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/16/2006 00:00:00	Findings:	62 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/21/2006 00:00:00	Findings:	57 MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	03/22/2006 00:00:00	Findings:	60 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/29/2006 00:00:00	Findings:	54 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/30/2006 00:00:00	Findings:	51 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/12/2006 00:00:00	Findings:	54 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/26/2006 00:00:00	Findings:	11 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	04/26/2006 00:00:00	Findings:	2.9 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	04/26/2006 00:00:00	Findings:	17 UG/L
Chemical:	URANIUM (UG/L)		
Sample Collected:	04/26/2006 00:00:00	Findings:	11 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	04/27/2006 00:00:00	Findings:	54 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/11/2006 00:00:00	Findings:	57 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/08/2006 00:00:00	Findings:	44.054 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/13/2006 00:00:00	Findings:	45.43 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/27/2006 00:00:00	Findings:	7.2 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	07/27/2006 00:00:00	Findings:	2.5 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	07/27/2006 00:00:00	Findings:	16 UG/L
Chemical:	URANIUM (UG/L)		
Sample Collected:	07/27/2006 00:00:00	Findings:	11 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	08/09/2006 00:00:00	Findings:	51.822 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/10/2004 00:00:00	Findings:	.53 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	09/14/2006 00:00:00	Findings:	55.882 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/05/2006 00:00:00	Findings:	55.949 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/27/2006 00:00:00	Findings:	.26 PCI/L
Chemical:	RADIUM 226 COUNTING ERROR		
Sample Collected:	10/27/2006 00:00:00	Findings:	6.2 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	10/27/2006 00:00:00	Findings:	2.3 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	10/27/2006 00:00:00	Findings:	16 UG/L
Chemical:	URANIUM (UG/L)		
Sample Collected:	10/27/2006 00:00:00	Findings:	11 PCI/L
Chemical:	URANIUM (PCI/L)		

Sample Collected:	11/09/2006 00:00:00	Findings:	54.86 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/21/2007 00:00:00	Findings:	64.825 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/13/2004 00:00:00	Findings:	59 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/21/2004 00:00:00	Findings:	7.6 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	05/21/2004 00:00:00	Findings:	2.8 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	05/21/2004 00:00:00	Findings:	.35 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	05/27/2004 00:00:00	Findings:	.65 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06/03/2004 00:00:00	Findings:	39.365 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03/21/2007 00:00:00	Findings:	.6 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	04/30/2007 00:00:00	Findings:	70 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/30/2007 00:00:00	Findings:	.53 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05/01/2007 00:00:00	Findings:	71 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/01/2007 00:00:00	Findings:	.57 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06/08/2004 00:00:00	Findings:	.54 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05/02/2007 00:00:00	Findings:	71 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/03/2007 00:00:00	Findings:	72 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/04/2007 00:00:00	Findings:	71 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/07/2007 00:00:00	Findings:	64 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/08/2007 00:00:00	Findings:	64 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/16/2007 00:00:00	Findings:	64 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06/26/2007 00:00:00	Findings:	44.895 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07/08/2004 00:00:00	Findings:	33.086 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/05/2004 00:00:00	Findings:	39 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08/06/2004 00:00:00	Findings:	9.41 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	08/06/2004 00:00:00	Findings:	1.1 PCI/L
Chemical:	URANIUM COUNTING ERROR		

Sample Collected:	08/06/2004 00:00:00	Findings:	8.2 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	08/06/2004 00:00:00	Findings:	2.5 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	08/06/2004 00:00:00	Findings:	.64 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	07/24/2007 00:00:00	Findings:	53.552 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/30/2004 00:00:00	Findings:	39.069 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/05/2004 00:00:00	Findings:	40.332 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10/25/2004 00:00:00	Findings:	7.53
Chemical:	PH, FIELD		
Sample Collected:	04/03/2002 00:00:00	Findings:	1400 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	04/03/2002 00:00:00	Findings:	7.5
Chemical:	PH, LABORATORY		
Sample Collected:	04/03/2002 00:00:00	Findings:	300 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	04/03/2002 00:00:00	Findings:	300 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	04/03/2002 00:00:00	Findings:	520 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	04/03/2002 00:00:00	Findings:	130 MG/L
Chemical:	CALCIUM		
Sample Collected:	04/03/2002 00:00:00	Findings:	47 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	04/03/2002 00:00:00	Findings:	100 MG/L
Chemical:	SODIUM		
Sample Collected:	11/09/2004 00:00:00	Findings:	39.115 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/17/2004 00:00:00	Findings:	5.3 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	11/17/2004 00:00:00	Findings:	2.2 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	11/17/2004 00:00:00	Findings:	.32 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	11/17/2004 00:00:00	Findings:	14 UG/L
Chemical:	URANIUM (UG/L)		
Sample Collected:	11/17/2004 00:00:00	Findings:	9.38 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	12/08/2004 00:00:00	Findings:	62.789 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/11/2005 00:00:00	Findings:	3.6 UG/L
Chemical:	1,4-DIOXANE		
Sample Collected:	04/03/2002 00:00:00	Findings:	5 MG/L
Chemical:	POTASSIUM		
Sample Collected:	04/03/2002 00:00:00	Findings:	82 MG/L
Chemical:	CHLORIDE		

Sample Collected:	04/03/2002 00:00:00	Findings:	.2 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	04/03/2002 00:00:00	Findings:	6 UG/L
Chemical:	SELENIUM		
Sample Collected:	04/03/2002 00:00:00	Findings:	910 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	04/03/2002 00:00:00	Findings:	.78
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	04/03/2002 00:00:00	Findings:	50 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/03/2002 00:00:00	Findings:	.4 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	04/03/2002 00:00:00	Findings:	10 UG/L
Chemical:	CHROMIUM (TOTAL CR-CRVI SCREEN)		
Sample Collected:	04/03/2002 00:00:00	Findings:	131.6 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	04/03/2002 00:00:00	Findings:	16.2 UG/L
Chemical:	DICHLOROMETHANE		
Sample Collected:	04/03/2002 00:00:00	Findings:	131.6 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	04/03/2002 00:00:00	Findings:	1 UG/L
Chemical:	BROMOCHLOROMETHANE		
Sample Collected:	04/26/2005 00:00:00	Findings:	46.481 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/05/2005 00:00:00	Findings:	41.88 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/10/2005 00:00:00	Findings:	19.8 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	05/10/2005 00:00:00	Findings:	1 UNITS
Chemical:	COLOR		
Sample Collected:	05/10/2005 00:00:00	Findings:	1203 US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	05/10/2005 00:00:00	Findings:	7.44
Chemical:	PH, LABORATORY		
Sample Collected:	05/10/2005 00:00:00	Findings:	288 MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	05/10/2005 00:00:00	Findings:	286.909 MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	05/10/2005 00:00:00	Findings:	1.091 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	05/10/2005 00:00:00	Findings:	459.36 MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	05/10/2005 00:00:00	Findings:	112.464 MG/L
Chemical:	CALCIUM		
Sample Collected:	05/10/2005 00:00:00	Findings:	41.029 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	05/10/2005 00:00:00	Findings:	87.329 MG/L
Chemical:	SODIUM		
Sample Collected:	05/10/2005 00:00:00	Findings:	5.762
Chemical:	SODIUM ABSORPTION RATIO		

Sample Collected:	05/10/2005 00:00:00	Findings:	3.699 MG/L
Chemical:	POTASSIUM		
Sample Collected:	05/10/2005 00:00:00	Findings:	71.849 MG/L
Chemical:	CHLORIDE		
Sample Collected:	05/10/2005 00:00:00	Findings:	.29 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	05/10/2005 00:00:00	Findings:	2.175 UG/L
Chemical:	ARSENIC		
Sample Collected:	05/10/2005 00:00:00	Findings:	20.212 UG/L
Chemical:	CHROMIUM (TOTAL)		
Sample Collected:	05/10/2005 00:00:00	Findings:	15.701 UG/L
Chemical:	VANADIUM		
Sample Collected:	05/10/2005 00:00:00	Findings:	790 MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	05/10/2005 00:00:00	Findings:	40.272 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/10/2005 00:00:00	Findings:	.05 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	05/10/2005 00:00:00	Findings:	9097.445 UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	04/03/2002 00:00:00	Findings:	1.5 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04/03/2002 00:00:00	Findings:	1.4 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	06/09/2005 00:00:00	Findings:	35.013 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/03/2002 00:00:00	Findings:	1.4 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	04/03/2002 00:00:00	Findings:	12.2 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	04/03/2002 00:00:00	Findings:	2.04 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	07/26/2005 00:00:00	Findings:	43.427 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05/09/2002 00:00:00	Findings:	1.2 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	05/09/2002 00:00:00	Findings:	.9 UG/L
Chemical:	1,1-DICHLOROETHYLENE		
Sample Collected:	08/23/2005 00:00:00	Findings:	49.098 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09/22/2005 00:00:00	Findings:	50.048 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11/22/2005 00:00:00	Findings:	58.152 MG/L
Chemical:	NITRATE (AS NO3)		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

9
West
1/2 - 1 Mile
Higher | **FED USGS** | **USGS3221264**

Agency cd:	USGS	Site no:	363845121380601
Site name:	015S003E09H002M		
Latitude:	363845		
Longitude:	1213806	Dec lat:	36.6457933
Dec lon:	-121.63605602	Coor meth:	M
Coor accr:	U	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	053
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	Not Reported		
Altitude method:	Not Reported		
Altitude accuracy:	10		
Altitude datum:	Not Reported		
Hydrologic:	San LorenzoSoquel. California. Area = 374 sq.mi.		
Topographic:	Not Reported		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported		
Project number:	Not Reported		
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	1971-08-12
Water quality data end date:	1971-08-12	Water quality data count:	1
Ground water data begin date:	0000-00-00	Ground water data end date:	0000-00-00
Ground water data count:	0		

Ground-water levels, Number of Measurements: 0

10
South
1/2 - 1 Mile
Higher | **FED USGS** | **USGS3221235**

Agency cd:	USGS	Site no:	363758121372101
Site name:	015S003E15B001M		
Latitude:	363758		
Longitude:	1213721	Dec lat:	36.632738
Dec lon:	-121.62355551	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	053
Country:	US	Land net:	NWNES15 T15S R03E M
Location map:	NATIVIDAD	Map scale:	24000

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Altitude:	62.00		
Altitude method:	Interpolated from topographic map		
Altitude accuracy:	10		
Altitude datum:	National Geodetic Vertical Datum of 1929		
Hydrologic:	AlisalElkhorn Sloughs. California. Area = 232 sq.mi.		
Topographic:	Valley flat		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y		
Type of ground water site:	Single well, other than collector or Ranney type		
Aquifer Type:	Not Reported		
Aquifer:	Not Reported		
Well depth:	452	Hole depth:	452
Source of depth data:	Not Reported		
Project number:	CA-9-358M		
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zip	Total Sites	> 4 Pci/L	Pct. > 4 Pci/L
93901	6	0	0.00

Federal EPA Radon Zone for MONTEREY County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 93901

Number of sites tested: 2

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.750 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Health Services
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

Appendix 12

Adjacent Property Release Investigations

HYDRO ANALYSIS, INC.
Environmental & Water Resources Engineering
Groundwater Consultants

QUARTERLY

GROUNDWATER MONITORING REPORT

Fourth Quarter 2007

(sampled on November 7 & 8, 2007)

STURDY OIL COMPANY
BULK PETROLEUM DISTRIBUTION FACILITY

1151 Abbott Street
Salinas, California

December 11, 2007

11100 SAN PABLO AVE., SUITE 200-A, EL CERRITO, CALIFORNIA 94530 • TEL 510-620-0891 • FAX 510-620-0894
www.HydroAnalysis.com

TABLE OF CONTENTS

I. INTRODUCTION

The site location is 1511 Abbott Street, Salinas, California, and has been maintained by the current owners for a number of years as a retail fueling station and bulk petroleum distribution facility. The location of the site is shown in Figure 1.

The current layout of the facility is shown in Figure 2, along with the locations of the thirteen (13) existing shallow groundwater monitoring wells. This report presents the results of recent quarterly groundwater monitoring that was conducted on November 7 & 8, 2007, as required by the Regional Water Quality Control Board (RWQCB), Central Coast Section.

FIGURE 1.

Site Location Map.

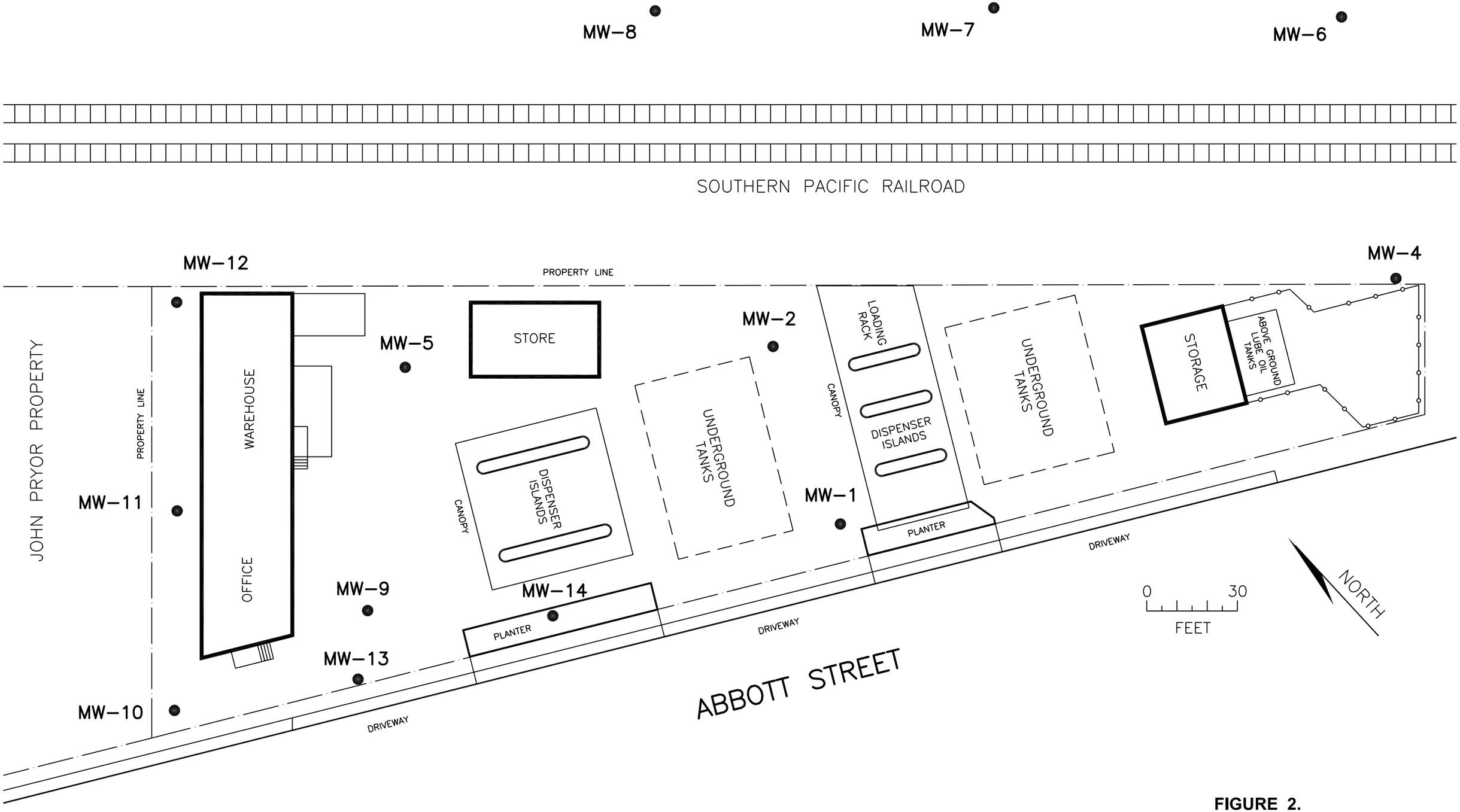


FIGURE 2.

Site Map.

II. FIELD WORK

Monitoring Well Sampling

On November 7 & 8, 2007, groundwater samples were collected from on- and off-site monitoring wells MW-1, MW-2, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9 and MW-12. Due to lack of water, wells samples could not be collected from wells MW-10, MW-11, MW-13 and MW-14.

Prior to groundwater sampling, each well was purged by bailing several casing volumes of water. Field conductivity, temperature, and pH meters were present on-site during the monitoring well sampling. As the purging process proceeds, the three parameters were monitored. Purging continued until readings appear to have reasonably stabilized. A groundwater sample was subsequently collected using a new disposable bailer. The water samples were placed inside appropriate 40 ml VOA vials free of any headspace and 1-liter amber bottles. The samples were immediately placed on ice, then transported under chain-of-custody to the laboratory at the conclusion of the field work.

At the time each monitoring well was sampled, the following information was recorded in the field: 1) depth-to-water prior to purging, using an electrical well sounding tape, 2) identification of any floating product, sheen, or odor prior to purging, using a clear bailer, 3) sample pH, 4) sample temperature, and 5) specific conductance of the sample.

Copies of the well sampling logs are provided in Attachment A.

Wastewater Generation

All water removed from the wells during purging was drummed and stored on-site. The water is periodically collected by a local petroleum waste hauler for treatment and disposal at a licensed TSD facility. The waste disposal is conducted under contract to Sturdy Oil Company, and is beyond the scope of work as described in this report.

III. RESULTS OF WATER LEVEL MEASUREMENTS

Shallow Groundwater Flow Direction

Shallow water table elevations were measured on November 7, 2007. These measurements are shown in Table 1.

Figure 3 presents a contour map for the shallow groundwater table beneath the site. As shown in this figure, the shallow groundwater beneath the major portion of the site appears to be flowing in a northwesterly direction with a relatively flat hydraulic gradient. Beneath the northwesterly portion of the site, however, the shallow groundwater appears to flow in a westerly direction under a steep hydraulic gradient.

It is suspected that the excessively steep hydraulic gradient is related to seasonal groundwater extraction from industrial and agricultural production wells in the area.

TABLE 1.

Shallow Water Table Elevations
November 7, 2007

Well	Top of Casing Elevation (feet)	Depth to Water (feet)	Product Thickness (inch)	Elevation Adjustment (feet)	Water Table Elevation (feet)
MW-1	62.74	19.64	0	0.00	43.10
MW-2	61.99	19.06	FILM	0.00	42.93
MW-4	62.21	18.04	0	0.00	44.17
MW-5	61.70	19.77	FILM	0.00	41.93
MW-6	60.69	16.79	0	0.00	43.90
MW-7	59.85	16.63	0	0.00	43.22
MW-8	59.12	16.40	0	0.00	42.72
MW-9	61.97	36.51	FILM	0.00	25.46
MW-10	61.43	---	---	---	---
MW-11	61.74	---	---	---	---
MW-12	62.18	23.53	SHEEN	0.00	38.65
MW-13	61.62	---	---	---	---
MW-14	63.75	---	---	---	---

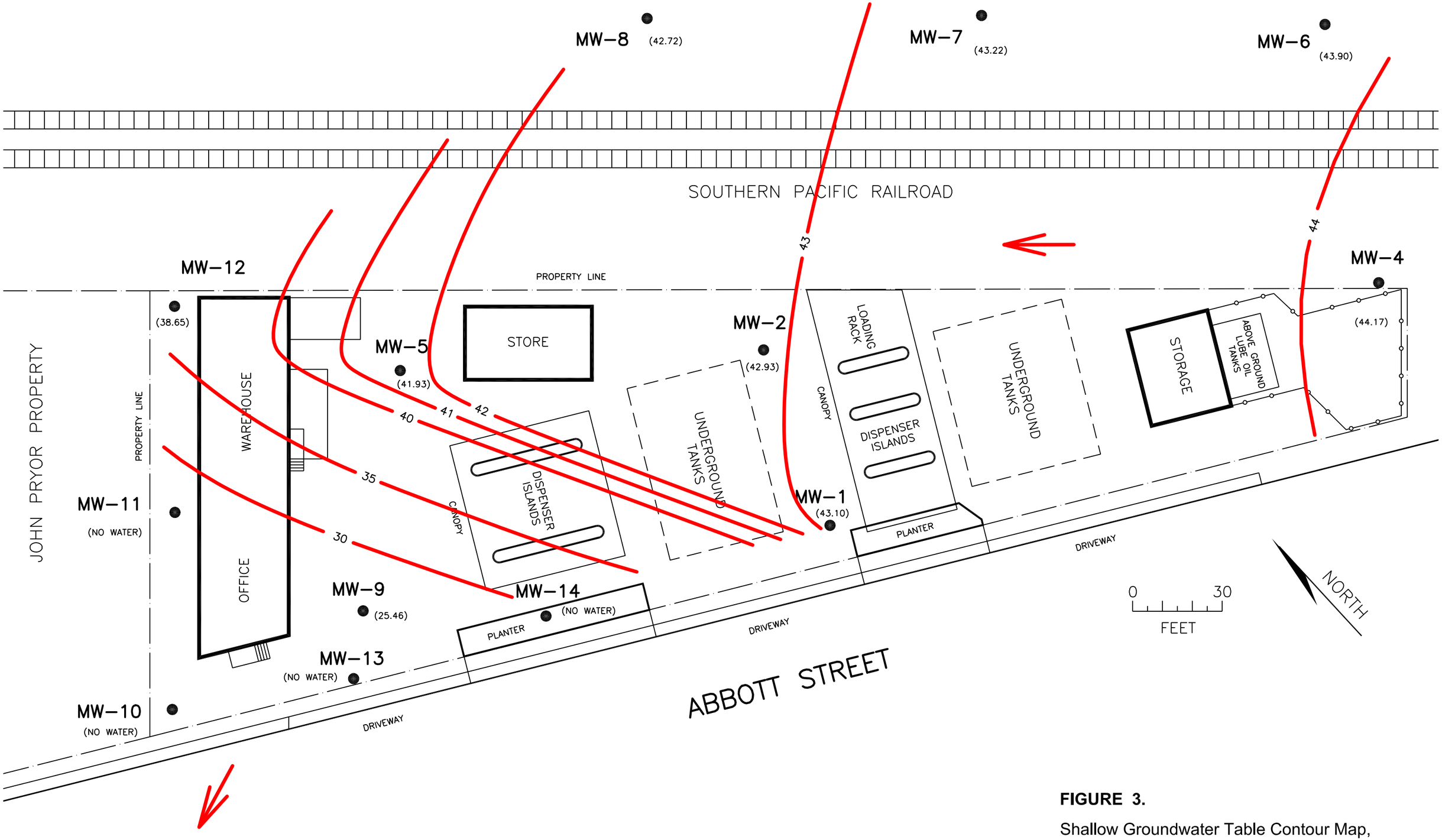


FIGURE 3.

Shallow Groundwater Table Contour Map, measured on November 7, 2007.

Shallow Water Table Hydraulic Gradient

Figure 3 presents the contour map for the shallow groundwater table beneath the site. Beneath the central and easterly portions of the site, an approximate hydraulic gradient is calculated as: dH/dL = 1'/170' = 0.0059 ft/ft. Beneath the northwesterly portion of the site, an approximate hydraulic gradient is calculated as: dH/dL = 10'/45' = 0.22 ft/ft.

Historical Water Level Measurements

The results of all water level measurements collected between February 1, 1993, and the present time are presented in Attachment B.

IV. GROUNDWATER SAMPLING RESULTS

Free-Floating Product

As indicated in Table 2, a "sheen" or "film" was noted on the water surface in wells MW-2, MW-5, MW-9 and MW-12.

Laboratory Analysis

Laboratory analyses were conducted by Test America Laboratory in Pleasanton, California, in accordance with EPA recommended procedures.

Groundwater samples were analyzed for:

1) Total Petroleum Hydrocarbons as Gasoline (EPA method 8260B)

2) Benzene, Toluene, Ethylbenzene, Total Xylenes (EPA method 8260B)

3) MTBE, Oxygenates & Fuel Additives (EPA method 8260B)

4) Diesel-range Organics (EPA method 8015B)

TABLE 2.

Product Thickness (inches)

Well	Date of Measurement												
	04-25-06	05-11-06	05-17-06	07-18-06	10-04-06	03-14-07	03-28-07	04-04-07	04-05-07	04-10-07	04-17-07	04-24-07	05-01-07
MW-1	0	---	0	SHEEN	0	0	0	---	---	---	---	---	---
MW-2	SHEEN	---	0	FILM	SHEEN	SHEEN	SHEEN	---	---	---	---	---	---
MW-4	0	---	0	0	0	0	0	---	---	---	---	---	---
MW-5	FILM	---	0	FILM	FILM	FILM	FILM	---	---	---	---	---	---
MW-6	0	---	0	0	0	0	0	---	---	---	---	---	---
MW-7	0	---	0	0	0	0	0	---	---	---	---	---	---
MW-8	0	---	0	0	0	0	0	---	---	---	---	---	---
MW-9	SHEEN	---	FILM	SHEEN	FILM	FILM	FILM	---	---	---	---	---	---
MW-10	5.5	0.3	0.4	0	---	8.5	0.4	8.5	0.5	1	FILM	FILM	0.3
MW-11	SHEEN	---	0	0	---	0	0	---	---	---	---	---	---
MW-12	0	---	0	0	SHEEN	0	0	---	---	---	---	---	---
MW-13	0	---	0	0	---	0	0	---	---	---	---	---	---
MW-14	SHEEN	---	FILM	0	---	0	0	---	---	---	---	---	---

TABLE 2 (continued).

Product Thickness (inches)

Well	Date of Measurement												
	05-09-07	05-15-07	05-22-07	05-30-07	06-13-07	08-29-07	11-07-07						
MW-1	---	---	---	---	0	0	0						
MW-2	---	---	---	---	SHEEN	0	FILM						
MW-4	---	---	---	---	0	0	0						
MW-5	---	---	---	---	FILM	FILM	FILM						
MW-6	---	---	---	---	0	0	0						
MW-7	---	---	---	---	0	0	0						
MW-8	---	---	---	---	0	0	0						
MW-9	---	---	---	---	FILM	FILM	FILM						
MW-10	FILM	FILM	FILM	FILM	SHEEN	0	---						
MW-11	---	---	---	---	0	0	---						
MW-12	---	---	---	---	0	SHEEN	SHEEN						
MW-13	---	---	---	---	0	0	---						
MW-14	---	---	---	---	0	0	---						

Analytical Results: Monitoring Wells

Tables 3 and 4 present the results of the laboratory analysis for groundwater samples collected from monitoring wells MW-1, MW-2, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, MW-14. Copies of the laboratory reports are provided in Attachment C.

TABLE 3.

Shallow Groundwater Sampling Results
Petroleum Hydrocarbons

Well	Date	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	TPH as Diesel (µg/L)	TPH as Kerosene (µg/L)	TPH as Stoddard Solvent (µg/L)	TPH as Motor Oil (mg/L)
MW-1	03-24-04	**76**	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	ND < 50	ND < 50	ND < 50	ND < 0.5
	09-15-04	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	ND < 50	---	---	---
	04-13-05	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	ND < 50	---	---	---
	06-06-05	ND < 25	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	---	---	---	---
	08-25-05	ND < 50	**5.9**	ND < 0.5	ND < 0.5	ND < 1	**220**	---	---	---
	04-26-06	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	**150**	---	---	---
	07-19-06	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**260 (*)**	---	---	---
	10-05-06	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	ND < 50	---	---	---
	03-16-07	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**130**	---	---	---
	06-14-07	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**210**	---	---	---
	08-30-07	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**130**	---	---	---
	11-08-07	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**110**	---	---	---
MW-2	03-24-04	**302**	**11.5**	ND < 0.5	ND < 0.5	ND < 1	ND < 50	ND < 50	ND < 50	ND < 0.5
	09-16-04	**144**	**18.8**	ND < 0.5	ND < 0.5	ND < 1	ND < 50	---	---	---
	04-13-05	ND < 50	**4.2**	ND < 0.5	ND < 0.5	ND < 1	**44 (*)**	---	---	---
	06-06-05	**91**	**6.7**	ND < 0.5	ND < 0.5	ND < 0.5	---	---	---	---
	08-25-05	**88**	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**660**	---	---	---
	04-26-06	**960**	**12**	**0.62**	ND < 0.5	ND < 1	**660**	---	---	---
	07-19-06	**82**	**5.1**	ND < 0.5	ND < 0.5	ND < 1	**1,200**	---	---	---
	10-05-06	ND < 50	**7.8**	ND < 0.5	ND < 0.5	ND < 1	**380**	---	---	---
	03-16-07	**760**	**28**	ND < 0.5	ND < 0.5	ND < 1	**1,300**	---	---	---
	06-14-07	**150**	**9.1**	ND < 0.5	ND < 0.5	ND < 1	**240**	---	---	---
	08-29-07	**61**	**3.2**	ND < 0.5	ND < 0.5	ND < 1	**420**	---	---	---
	11-08-07	**170**	**18**	ND < 0.5	ND < 0.5	ND < 1	**540**	---	---	---

ND= not detected

(*) hydrocarbon reported in the diesel range does not match diesel standard

TABLE 3. (continued)

Shallow Groundwater Sampling Results
Petroleum Hydrocarbons

Well	Date	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	TPH as Diesel (µg/L)	TPH as Kerosene (µg/L)	TPH as Stoddard Solvent (µg/L)	TPH as Motor Oil (mg/L)
MW-4	03-24-04	---	---	---	---	---	---	---	---	---
	09-16-04	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	ND < 50	---	---	---
	04-13-05	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	ND < 50	---	---	---
	06-06-05	ND < 25	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	---	---	---	---
	08-25-05	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**890**	---	---	---
	04-26-06	ND < 50	ND < 0.5	**1.9**	ND < 0.5	ND < 1	**810**	---	---	---
	07-18-06	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**690 (*)**	---	---	---
	10-04-06	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**600**	---	---	---
	03-16-07	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**680**	---	---	---
	06-13-07	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**780**	---	---	---
	08-29-07	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**640**	---	---	---
	11-07-07	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**690**	---	---	---
MW-5	03-24-04	**551**	**32.7**	**5**	ND < 0.5	ND < 1	**560**	**50**	**53**	ND < 0.5
	09-16-04	**318**	**42.4**	ND < 0.5	ND < 0.5	ND < 1	**860**	---	---	---
	04-13-05	**701**	**130**	**1.1**	**3.3**	**4.7**	**2,280**	---	---	---
	06-06-05	**260**	**40**	ND < 0.5	**0.62**	**0.79**	---	---	---	---
	08-25-05	**450**	**13**	ND < 0.5	ND < 0.5	ND < 1	**1,200**	---	---	---
	04-26-06	**540**	**60**	**0.59**	**0.64**	**1.3**	**1,100**	---	---	---
	07-19-06	**140**	**15**	ND < 0.5	ND < 0.5	ND < 1	**2,100**	---	---	---
	10-05-06	**740**	**58**	**0.57**	**0.56**	**1.2**	**21,000**	---	---	---
	03-16-07	**310**	**33**	ND < 0.5	ND < 0.5	ND < 1	**500**	---	---	---
	06-14-07	**320**	**25**	ND < 0.5	ND < 0.5	ND < 1	**610**	---	---	---
	08-30-07	**1,200**	**51**	**0.64**	**0.68**	**1.2**	**3,200**	---	---	---
	11-07-07	**320**	**47**	ND < 0.5	**0.52**	**1.0**	**540**	---	---	---

ND= not detected

(*) hydrocarbon reported in the diesel range does not match diesel standard

TABLE 3. (continued)

Shallow Groundwater Sampling Results
Petroleum Hydrocarbons

Well	Date	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	TPH as Diesel (µg/L)	TPH as Kerosene (µg/L)	TPH as Stoddard Solvent (µg/L)	TPH as Motor Oil (mg/L)
MW-6	03-24-04	---	---	---	---	---	---	---	---	---
	09-16-04	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	ND < 50	---	---	---
	04-13-05	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	ND < 50	---	---	---
	06-06-05	ND < 25	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	---	---	---	---
	08-24-05	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**180**	---	---	---
	04-26-06	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**78**	---	---	---
	07-18-06	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**200 (*)**	---	---	---
	10-04-06	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**240**	---	---	---
	03-16-07	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**290**	---	---	---
	06-13-07	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**200**	---	---	---
	08-29-07	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**220**	---	---	---
	11-07-07	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**190**	---	---	---
MW-7	03-24-04	---	---	---	---	---	---	---	---	---
	09-16-04	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	ND < 50	---	---	---
	04-13-05	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	ND < 50	---	---	---
	06-06-05	ND < 25	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	---	---	---	---
	08-24-05	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**840**	---	---	---
	04-26-06	ND < 50	ND < 0.5	**0.90**	ND < 0.5	ND < 1	**120**	---	---	---
	07-18-06	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**63 (*)**	---	---	---
	10-04-06	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**87**	---	---	---
	03-16-07	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**130**	---	---	---
	06-13-07	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**190**	---	---	---
	08-29-07	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**110**	---	---	---
	11-07-07	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**200**	---	---	---

ND= not detected

(*) hydrocarbon reported in the diesel range does not match diesel standard

TABLE 3. (continued)

Shallow Groundwater Sampling Results
Petroleum Hydrocarbons

Well	Date	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	TPH as Diesel (µg/L)	TPH as Kerosene (µg/L)	TPH as Stoddard Solvent (µg/L)	TPH as Motor Oil (mg/L)
MW-8	03-24-04	---	---	---	---	---	---	---	---	---
	09-16-04	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	ND < 50	---	---	---
	04-13-05	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	ND < 50	---	---	---
	06-06-05	**33**	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	---	---	---	---
	08-24-05	**62**	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**170**	---	---	---
	04-26-06	**100**	ND < 0.5	**0.89**	ND < 0.5	ND < 1	**220**	---	---	---
	07-18-06	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**300 (*)**	---	---	---
	10-04-06	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**170**	---	---	---
	03-16-07	**60**	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**180**	---	---	---
	06-13-07	**57**	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**230**	---	---	---
	08-29-07	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**140**	---	---	---
	11-07-07	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**190**	---	---	---
MW-9	06-06-05	**65,000**	**16,000**	**9,200**	**2,900**	**12,000**	---	---	---	---
	08-24-05	**71,000**	**17,000**	**8,900**	**3,200**	**12,000**	**5,700**	---	---	---
	04-26-06	**110,000**	**18,000**	**7,800**	**4,000**	**10,000**	**4,800**	---	---	---
	07-18-06	**73,000**	**13,000**	**4,700**	**3,000**	**7,300**	**10,000 (*)**	---	---	---
	10-04-06	**87,000**	**21,000**	**7,800**	**4,100**	**12,000**	**3,300**	---	---	---
	03-14-07	**65,000**	**15,000**	**6,100**	**4,000**	**12,000**	**4,200**	---	---	---
	06-14-07	**71,000**	**14,000**	**4,800**	**3,400**	**9,000**	**5,500**	---	---	---
	08-29-07	**66,000**	**15,000**	**5,600**	**4,000**	**9,600**	**3,200**	---	---	---
	11-07-07	**85,000**	**20,000**	**8,300**	**4,600**	**13,000**	**4,200**	---	---	---

ND= not detected

(*) hydrocarbon reported in the diesel range does not match diesel standard

TABLE 3. (continued)

Shallow Groundwater Sampling Results
Petroleum Hydrocarbons

Well	Date	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	TPH as Diesel (µg/L)	TPH as Kerosene (µg/L)	TPH as Stoddard Solvent (µg/L)	TPH as Motor Oil (mg/L)
MW-10	06-06-05	---	---	---	---	---	---	---	---	---
	08-24-05	---	---	---	---	---	---	---	---	---
	04-25-06	**53,000**	**13,000**	**8,700**	**2,500**	**6,100**	**6,300**	---	---	---
	07-18-06	**39,000**	**7,300**	**610**	**2,600**	**1,500**	---	---	---	---
	10-04-06	---	---	---	---	---	---	---	---	---
	03-14-07	**100,000**	**18,000**	**11,000**	**4,700**	**8,400**	**84,000**	---	---	---
	06-13-07	**20,000**	**5,400**	**210**	**2,400**	**670**	**4,600**	---	---	---
	08-29-07	---	---	---	---	---	---	---	---	---
	11-07-07	---	---	---	---	---	---	---	---	---
MW-11	06-06-05	**29**	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	---	---	---	---
	08-24-05	---	---	---	---	---	---	---	---	---
	04-26-06	**1,800**	**14**	**1.0**	ND < 0.5	**1.3**	**680**	---	---	---
	07-18-06	**1,300**	**150**	**1.1**	**4.7**	**1.1**	---	---	---	---
	10-04-06	---	---	---	---	---	---	---	---	---
	03-14-07	**910**	**18**	ND < 0.5	ND < 0.5	**1.3**	**380**	---	---	---
	06-13-07	---	---	---	---	---	---	---	---	---
	08-29-07	---	---	---	---	---	---	---	---	---
	11-07-07	---	---	---	---	---	---	---	---	---

ND= not detected

TABLE 3. (continued)

Shallow Groundwater Sampling Results
Petroleum Hydrocarbons

Well	Date	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	TPH as Diesel (µg/L)	TPH as Kerosene (µg/L)	TPH as Stoddard Solvent (µg/L)	TPH as Motor Oil (mg/L)
MW-12	07-06-95	ND < 25	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	---	---	---	---
	08-24-05	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**1,200**	---	---	---
	04-26-06	**57**	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**1,200**	---	---	---
	07-18-06	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**2,100 (*)**	---	---	---
	10-05-06	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**960**	---	---	---
	03-16-07	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**1,100**	---	---	---
	06-14-07	**51**	**1.5**	**2.0**	**1.2**	**3.5**	**1,000**	---	---	---
	08-30-07	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**1,000**	---	---	---
	11-08-07	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**800**	---	---	---
MW-13	04-26-06	**55,000**	**11,000**	**2,500**	**4,600**	**13,000**	**6,100**	---	---	---
	07-18-06	**43,000**	**3,600**	**1,700**	**2,500**	**6,000**	---	---	---	---
	10-04-06	---	---	---	---	---	---	---	---	---
	03-14-07	**43,000**	**4,000**	**830**	**3,200**	**2,000**	**5,000**	---	---	---
	06-13-07	---	---	---	---	---	---	---	---	---
	08-29-07	---	---	---	---	---	---	---	---	---
	11-07-07	---	---	---	---	---	---	---	---	---
MW-14	04-26-06	**2,000**	**130**	**6.6**	**0.74**	**90**	**640**	---	---	---
	07-18-06	**740**	**8.1**	**1.3**	ND < 0.5	**2.04**	---	---	---	---
	10-04-06	---	---	---	---	---	---	---	---	---
	03-14-07	**440**	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**210**	---	---	---
	06-13-07	---	---	---	---	---	---	---	---	---
	08-29-07	---	---	---	---	---	---	---	---	---
	11-07-07	---	---	---	---	---	---	---	---	---

ND= not detected

(*) hydrocarbon reported in the diesel range does not match diesel standard

TABLE 4.

Shallow Groundwater Sampling Results
Volatile Organics

Well	Date	MTBE Methyl-t-butyl ether (µg/L)	ETBE Ethyl tert-butyl ether (µg/L)	TAME tert-Amyl methyl ether (µg/L)	DIPE Di-isopropyl ether (µg/L)	TBA Tert-Butanol (µg/L)	Ethanol (µg/L)	DCA 1,2-Dichloro-ethane (µg/L)	EDB 1,2-Dibromo-ethane (µg/L)
MW-1	03-24-04	**15.3**	---	---	---	---	---	ND < 1	ND < 0.5
	09-15-04	**16.3**	ND < 1	ND < 1	ND < 0.5	ND < 10	ND < 100	ND < 1	ND < 0.5
	04-13-05	**0.7**	ND < 1	ND < 1	ND < 0.5	ND < 10	ND < 100	ND < 1	ND < 0.5
	06-06-05	**1.9**	ND < 5	ND < 5	ND < 5	ND < 10	ND < 100	ND < 0.5	ND < 0.5
	08-25-05	**19**	ND < 0.5	ND < 0.5	ND < 1	**13**	ND < 25	**4.9**	ND < 0.5
	04-26-06	**1.8**	ND < 0.5	ND < 0.5	ND < 1	ND < 5	ND < 100	ND < 0.5	ND < 0.5
	07-19-06	**2.8**	ND < 0.5	ND < 0.5	ND < 0.5	ND < 10	ND < 1,000	ND < 0.5	ND < 0.5
	10-05-06	**1.9**	ND < 0.5	ND < 0.5	ND < 0.5	ND < 5	ND < 250	ND < 0.5	ND < 0.5
	03-16-07	**1.1**	ND < 0.5	ND < 0.5	ND < 0.5	ND < 5	ND < 250	ND < 0.5	ND < 0.5
	06-14-07	**4.4**	ND < 0.5	ND < 0.5	ND < 1	ND < 5	ND < 250	ND < 0.5	ND < 0.5
	08-30-07	**3.0**	ND < 0.5	ND < 0.5	ND < 1	ND < 5	ND < 250	ND < 0.5	ND < 0.5
	11-08-07	**1.4**	ND < 0.5	ND < 0.5	ND < 1	ND < 5	ND < 250	ND < 0.5	ND < 0.5
MW-2	03-24-04	**15.6**	---	---	---	---	---	**5**	ND < 0.5
	09-16-04	**20.9**	ND < 1	ND < 1	**9**	ND < 10	ND < 100	**9**	ND < 0.5
	04-13-05	**33.2**	ND < 1	ND < 1	ND < 0.5	ND < 10	ND < 100	**3**	ND < 0.5
	06-06-05	**31**	ND < 5	ND < 5	ND < 5	**20**	ND < 100	**3.6**	ND < 0.5
	08-25-05	**0.87**	ND < 0.5	ND < 0.5	ND < 1	ND < 5	ND < 25	ND < 0.5	ND < 0.5
	04-26-06	**14**	ND < 0.5	ND < 0.5	ND < 1	**6.5**	ND < 100	**5.1**	ND < 0.5
	07-19-06	**12**	ND < 0.5	ND < 0.5	ND < 0.5	ND < 10	ND < 1,000	**2.6**	ND < 0.5
	10-05-06	**14**	ND < 0.5	ND < 0.5	ND < 0.5	ND < 5	ND < 250	**2.4**	ND < 0.5
	03-16-07	**21**	ND < 0.5	ND < 0.5	ND < 0.5	**7.6**	ND < 250	**3.1**	ND < 0.5
	06-14-07	**21**	ND < 0.5	ND < 0.5	**1.4**	**7.3**	ND < 250	**4.4**	ND < 0.5
	08-29-07	**8.5**	ND < 0.5	ND < 0.5	ND < 1	ND < 5	ND < 250	**1.8**	ND < 0.5
	11-08-07	**18**	ND < 0.5	ND < 0.5	ND < 1	**8.8**	ND < 250	**2.6**	ND < 0.5

ND= not detected

TABLE 4. (continued)

Shallow Groundwater Sampling Results
Volatile Organics

Well	Date	MTBE Methyl-t-butyl ether (µg/L)	ETBE Ethyl tert-butyl ether (µg/L)	TAME tert-Amyl methyl ether (µg/L)	DIPE Di-isopropyl ether (µg/L)	TBA Tert-Butanol (µg/L)	Ethanol (µg/L)	DCA 1,2-Dichloro-ethane (µg/L)	EDB 1,2-Dibromo-ethane (µg/L)
MW-4	03-24-04	---	---	---	---	---	---	---	---
	09-16-04	**3.6**	ND < 1	ND < 1	ND < 0.5	ND < 10	ND < 100	ND < 1	ND < 0.5
	04-13-05	ND < 0.5	ND < 1	ND < 1	ND < 0.5	ND < 10	ND < 100	ND < 1	ND < 0.5
	06-06-05	ND < 1	ND < 5	ND < 5	ND < 5	ND < 10	ND < 100	ND < 0.5	ND < 0.5
	08-25-05	**0.75**	ND < 0.5	ND < 0.5	ND < 1	ND < 5	ND < 25	ND < 0.5	ND < 0.5
	04-26-06	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	ND < 5	ND < 100	ND < 0.5	ND < 0.5
	07-18-06	**0.6**	ND < 0.5	ND < 0.5	ND < 0.5	ND < 10	ND < 1,000	ND < 0.5	ND < 0.5
	10-04-06	**0.78**	ND < 0.5	ND < 0.5	ND < 1	ND < 5	ND < 250	ND < 0.5	ND < 0.5
	03-16-07	**0.59**	ND < 0.5	ND < 0.5	ND < 1	ND < 5	ND < 250	ND < 0.5	ND < 0.5
	06-13-07	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	ND < 5	ND < 250	ND < 0.5	ND < 0.5
	08-29-07	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	ND < 5	ND < 250	ND < 0.5	ND < 0.5
	11-07-07	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	ND < 5	ND < 250	ND < 0.5	ND < 0.5
MW-5	03-24-04	**3.8**	---	---	---	---	---	**2**	ND < 0.5
	09-16-04	**4.2**	ND < 1	ND < 1	**8.4**	ND < 10	ND < 100	**10**	ND < 0.5
	04-13-05	ND < 0.5	ND < 1	ND < 1	**12**	ND < 10	ND < 100	**4**	ND < 0.5
	06-06-05	**1.8**	ND < 5	ND < 5	**5.4**	**13**	ND < 100	**6.0**	ND < 0.5
	08-25-05	**1.7**	ND < 0.5	ND < 0.5	ND < 1	ND < 5	ND < 25	**5.2**	ND < 0.5
	04-26-06	**1.7**	ND < 0.5	ND < 0.5	**7.4**	**6.2**	ND < 100	**4.5**	ND < 0.5
	07-19-06	**2.0**	ND < 0.5	ND < 0.5	**5.2**	ND < 5	ND < 250	**5.0**	ND < 0.5
	10-05-06	**1.8**	ND < 0.5	ND < 0.5	**7.3**	ND < 5	ND < 250	**5.2**	ND < 0.5
	03-16-07	**2.6**	ND < 0.5	ND < 0.5	**7.2**	ND < 5	ND < 250	**5.3**	ND < 0.5
	06-14-07	**2.4**	ND < 0.5	ND < 0.5	**4.7**	ND < 5	ND < 250	**5.3**	ND < 0.5
	08-30-07	**1.5**	ND < 0.5	ND < 0.5	**7.6**	**9.3**	ND < 250	**4.6**	ND < 0.5
	11-07-07	**1.5**	ND < 0.5	ND < 0.5	**5.7**	ND < 5	ND < 250	**4.1**	**0.57**

ND= not detected

TABLE 4. (continued)

Shallow Groundwater Sampling Results
Volatile Organics

Well	Date	MTBE Methyl-t-butyl ether (µg/L)	ETBE Ethyl tert-butyl ether (µg/L)	TAME tert-Amyl methyl ether (µg/L)	DIPE Di-isopropyl ether (µg/L)	TBA Tert-Butanol (µg/L)	Ethanol (µg/L)	DCA 1,2-Dichloro-ethane (µg/L)	EDB 1,2-Dibromo-ethane (µg/L)
MW-6	03-24-04	---	---	---	---	---	---	---	---
	09-16-04	ND < 0.5	ND < 1	ND < 1	ND < 0.5	ND < 10	ND < 100	ND < 1	ND < 0.5
	04-13-05	**2.2**	ND < 1	ND < 1	ND < 0.5	ND < 10	ND < 100	ND < 1	ND < 0.5
	06-06-05	ND < 1	ND < 5	ND < 5	ND < 5	ND < 10	ND < 100	ND < 0.5	ND < 0.5
	08-24-05	**1.4**	ND < 0.5	ND < 0.5	ND < 1	ND < 5	ND < 25	ND < 0.5	ND < 0.5
	04-26-06	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	ND < 5	ND < 100	ND < 0.5	ND < 0.5
	07-18-06	**1.2**	ND < 0.5	ND < 0.5	ND < 0.5	ND < 5	ND < 250	ND < 0.5	ND < 0.5
	10-04-06	**1.1**	ND < 0.5	ND < 0.5	ND < 0.5	ND < 5	ND < 250	ND < 0.5	ND < 0.5
	03-16-07	**0.87**	ND < 0.5	ND < 0.5	ND < 0.5	ND < 5	ND < 250	ND < 0.5	ND < 0.5
	06-13-07	**0.55**	ND < 0.5	ND < 0.5	ND < 1	ND < 5	ND < 250	ND < 0.5	ND < 0.5
	08-29-07	**0.66**	ND < 0.5	ND < 0.5	ND < 1	ND < 5	ND < 250	ND < 0.5	ND < 0.5
	11-07-07	**0.75**	ND < 0.5	ND < 0.5	ND < 1	ND < 5	ND < 250	ND < 0.5	ND < 0.5
MW-7	03-24-04	---	---	---	---	---	---	---	---
	09-16-04	ND < 0.5	ND < 1	ND < 1	ND < 0.5	ND < 10	ND < 100	ND < 1	ND < 0.5
	04-13-05	ND < 0.5	ND < 1	ND < 1	ND < 0.5	ND < 10	ND < 100	ND < 1	ND < 0.5
	06-06-05	ND < 1	ND < 5	ND < 5	ND < 5	ND < 10	ND < 100	ND < 0.5	ND < 0.5
	08-24-05	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	ND < 5	ND < 25	ND < 0.5	ND < 0.5
	04-26-06	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	ND < 5	ND < 100	ND < 0.5	ND < 0.5
	07-18-06	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND < 5	ND < 250	ND < 0.5	ND < 0.5
	10-04-06	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND < 5	ND < 250	ND < 0.5	ND < 0.5
	03-16-07	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND < 5	ND < 250	ND < 0.5	ND < 0.5
	06-13-07	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	ND < 5	ND < 250	ND < 0.5	ND < 0.5
	08-29-07	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	ND < 5	ND < 250	ND < 0.5	ND < 0.5
	11-07-07	**0.76**	ND < 0.5	ND < 0.5	ND < 1	ND < 5	ND < 250	ND < 0.5	ND < 0.5

ND= not detected

TABLE 4. (continued)

Shallow Groundwater Sampling Results
Volatile Organics

Well	Date	MTBE Methyl-t-butyl ether (µg/L)	ETBE Ethyl tert-butyl ether (µg/L)	TAME tert-Amyl methyl ether (µg/L)	DIPE Di-isopropyl ether (µg/L)	TBA Tert-Butanol (µg/L)	Ethanol (µg/L)	DCA 1,2-Dichloro-ethane (µg/L)	EDB 1,2-Dibromo-ethane (µg/L)
MW-8	03-24-04	---	---	---	---	---	---	---	---
	09-16-04	**3.5**	ND < 1	ND < 1	ND < 0.5	ND < 10	ND < 100	ND < 1	ND < 0.5
	04-13-05	ND < 0.5	ND < 1	ND < 1	ND < 0.5	ND < 10	ND < 100	ND < 1	ND < 0.5
	06-06-05	ND < 1	ND < 5	ND < 5	ND < 5	ND < 10	ND < 100	ND < 0.5	ND < 0.5
	08-24-05	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	ND < 5	ND < 25	ND < 0.5	ND < 0.5
	04-26-06	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	ND < 5	ND < 100	ND < 0.5	ND < 0.5
	07-18-06	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND < 5	ND < 250	ND < 0.5	ND < 0.5
	10-04-06	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND < 5	ND < 250	ND < 0.5	ND < 0.5
	03-16-07	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND < 5	ND < 250	ND < 0.5	ND < 0.5
	06-13-07	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	**9.4**	ND < 250	ND < 0.5	ND < 0.5
	08-29-07	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	ND < 5	ND < 250	ND < 0.5	ND < 0.5
	11-07-07	ND < 0.5	ND < 0.5	ND < 0.5	ND < 1	ND < 5	ND < 250	ND < 0.5	ND < 0.5
MW-9	06-06-05	ND < 500	ND < 2,500	ND < 2,500	ND < 2,500	ND < 5,000	ND < 20,000	ND < 250	ND < 250
	08-24-05	ND < 50	ND < 50	ND < 50	ND < 100	ND < 500	ND < 2,500	ND < 50	ND < 50
	04-26-06	ND < 100	ND < 100	ND < 100	ND < 200	ND < 1,000	ND < 20,000	ND < 100	ND < 100
	07-18-06	ND < 25	ND < 25	ND < 25	ND < 25	ND < 500	ND < 50,000	**31**	ND < 25
	10-04-06	ND < 100	ND < 100	ND < 100	ND < 200	ND < 1,000	ND < 50,000	ND < 100	ND < 100
	03-14-07	ND < 100	ND < 100	ND < 100	ND < 200	ND < 1,000	ND < 50,000	ND < 100	ND < 100
	06-14-07	ND < 100	ND < 100	ND < 100	ND < 200	ND < 1,000	ND < 50,000	ND < 100	ND < 100
	08-29-07	ND < 100	ND < 100	ND < 100	ND < 200	ND < 1,000	ND < 50,000	**120**	ND < 100
	11-07-07	ND < 100	ND < 100	ND < 100	ND < 200	**1,100**	ND < 50,000	ND < 100	ND < 100

ND= not detected

TABLE 4. (continued)

Shallow Groundwater Sampling Results
Volatile Organics

Well	Date	MTBE Methyl-t-butyl ether (µg/L)	ETBE Ethyl tert-butyl ether (µg/L)	TAME tert-Amyl methyl ether (µg/L)	DIPE Di-isopropyl ether (µg/L)	TBA Tert-Butanol (µg/L)	Ethanol (µg/L)	DCA 1,2-Dichloro-ethane (µg/L)	EDB 1,2-Dibromo-ethane (µg/L)
MW-10	06-06-05	---	---	---	---	---	---	---	---
	08-24-05	---	---	---	---	---	---	---	---
	04-25-06	ND < 50	ND < 50	ND < 50	ND < 100	ND < 500	ND < 10,000	**97**	ND < 50
	07-18-06	ND < 13	ND < 13	ND < 13	ND < 13	**310**	ND < 25,000	**120**	ND < 13
	10-04-06	---	---	---	---	---	---	---	---
	03-14-07	ND < 200	ND < 200	ND < 200	ND < 400	ND < 2,000	ND < 100,000	ND < 200	ND < 200
	06-13-07	ND < 25	ND < 25	ND < 25	ND < 50	ND < 250	ND < 13,000	**53**	ND < 25
	08-29-07	---	---	---	---	---	---	---	---
	11-07-07	---	---	---	---	---	---	---	---
MW-11	06-06-05	**2.4**	ND < 5	ND < 5	ND < 5	ND < 10	ND < 100	ND < 0.5	ND < 0.5
	08-24-05	---	---	---	---	---	---	---	---
	04-26-06	ND < 0.5	ND < 0.5	ND < 0.5	**11**	ND < 5	ND < 100	**1.2**	ND < 0.5
	07-18-06	---	---	---	---	---	---	---	---
	10-04-06	---	---	---	---	---	---	---	---
	03-14-07	**1.2**	ND < 0.5	ND < 0.5	**4.5**	ND < 5	ND < 100	ND < 0.5	ND < 0.5
	06-13-07	---	---	---	---	---	---	---	---
	08-29-07	---	---	---	---	---	---	---	---
	11-07-07	---	---	---	---	---	---	---	---

ND= not detected

TABLE 4. (continued)

Shallow Groundwater Sampling Results
Volatile Organics

Well	Date	MTBE Methyl-t-butyl ether (µg/L)	ETBE Ethyl tert-butyl ether (µg/L)	TAME tert-Amyl methyl ether (µg/L)	DIPE Di-isopropyl ether (µg/L)	TBA Tert-Butanol (µg/L)	Ethanol (µg/L)	DCA 1,2-Dichloro-ethane (µg/L)	EDB 1,2-Dibromo-ethane (µg/L)
MW-12	07-06-95	**1.3**	ND < 5	ND < 5	ND < 5	ND < 10	ND < 100	**2.0**	ND < 0.5
	08-24-05	**1.3**	ND < 0.5	ND < 0.5	ND < 1	ND < 5	ND < 25	**3.4**	ND < 0.5
	04-26-06	**0.99**	ND < 0.5	ND < 0.5	ND < 1	ND < 5	ND < 100	**4.6**	ND < 0.5
	07-18-06	**0.8**	ND < 0.5	ND < 0.5	ND < 0.5	ND < 10	ND < 1,000	**4.4**	ND < 0.5
	10-05-06	**1.0**	ND < 0.5	ND < 0.5	ND < 0.5	ND < 5	ND < 250	**5.2**	ND < 0.5
	03-16-07	**0.54**	ND < 0.5	ND < 0.5	ND < 0.5	ND < 5	ND < 250	**1.6**	ND < 0.5
	06-13-07	**1.3**	ND < 0.5	ND < 0.5	ND < 1	ND < 5	ND < 250	**3.9**	ND < 0.5
	08-30-07	**0.6**	ND < 0.5	ND < 0.5	ND < 1	ND < 5	ND < 250	**3.5**	ND < 0.5
	11-08-07	**0.76**	ND < 0.5	ND < 0.5	ND < 1	ND < 5	ND < 250	**4.6**	ND < 0.5
MW-13	04-26-06	ND < 50	ND < 50	ND < 50	ND < 100	**1,900**	ND < 10,000	**210**	ND < 50
	07-18-06	---	---	---	---	---	---	---	---
	10-04-06	---	---	---	---	---	---	---	---
	03-14-07	ND < 50	ND < 50	ND < 50	ND < 100	**1,400**	ND < 25,000	**60**	ND < 50
	06-14-07	---	---	---	---	---	---	---	---
	08-29-07	---	---	---	---	---	---	---	---
	11-07-07	---	---	---	---	---	---	---	---
MW-14	04-26-06	**130**	ND < 0.5	ND < 0.5	**7.2**	**22**	ND < 100	**2.2**	ND < 0.5
	07-18-06	---	---	---	---	---	---	---	---
	10-04-06	---	---	---	---	---	---	---	---
	03-14-07	**380**	ND < 2.5	ND < 2.5	ND < 5	**29**	ND < 1,300	ND < 2.5	ND < 2.5
	06-13-07	---	---	---	---	---	---	---	---
	08-29-07	---	---	---	---	---	---	---	---
	11-07-07	---	---	---	---	---	---	---	---

ND= not detected

V. DATA ANALYSIS

Concentration Contours

Figures 4, 5, 6 and 7 show lines of equal concentration for Gasoline, Benzene, MTBE and Diesel, respectively, in the shallow groundwater using data from this most recent quarterly groundwater monitoring event.

As shown in Figures 4, 5 and 6, the Gasoline, Benzene and MTBE plumes are centered around the westerly portion of the property and are "open-ended" toward Abbott Street and the adjoining John Pryor property.

As shown in Figure 7, relatively low concentrations of Diesel-range Organics are present in the shallow groundwater throughout the entire site. Elevated concentrations are centered around the westerly portion of the property and appear to coincide somewhat with the Gasoline groundwater concentration plume.

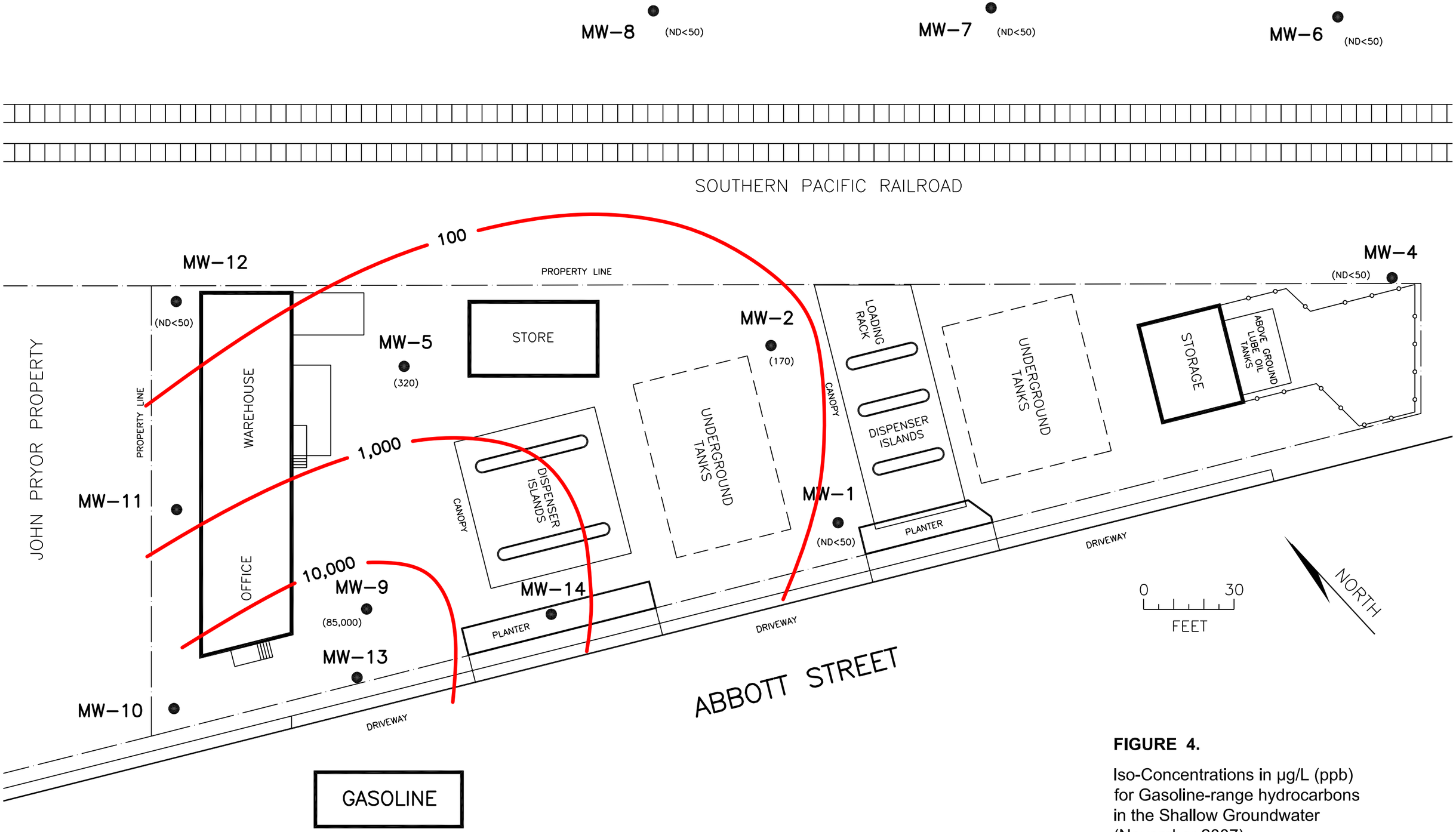


FIGURE 4.

Iso-Concentrations in µg/L (ppb) for Gasoline-range hydrocarbons in the Shallow Groundwater (November 2007)

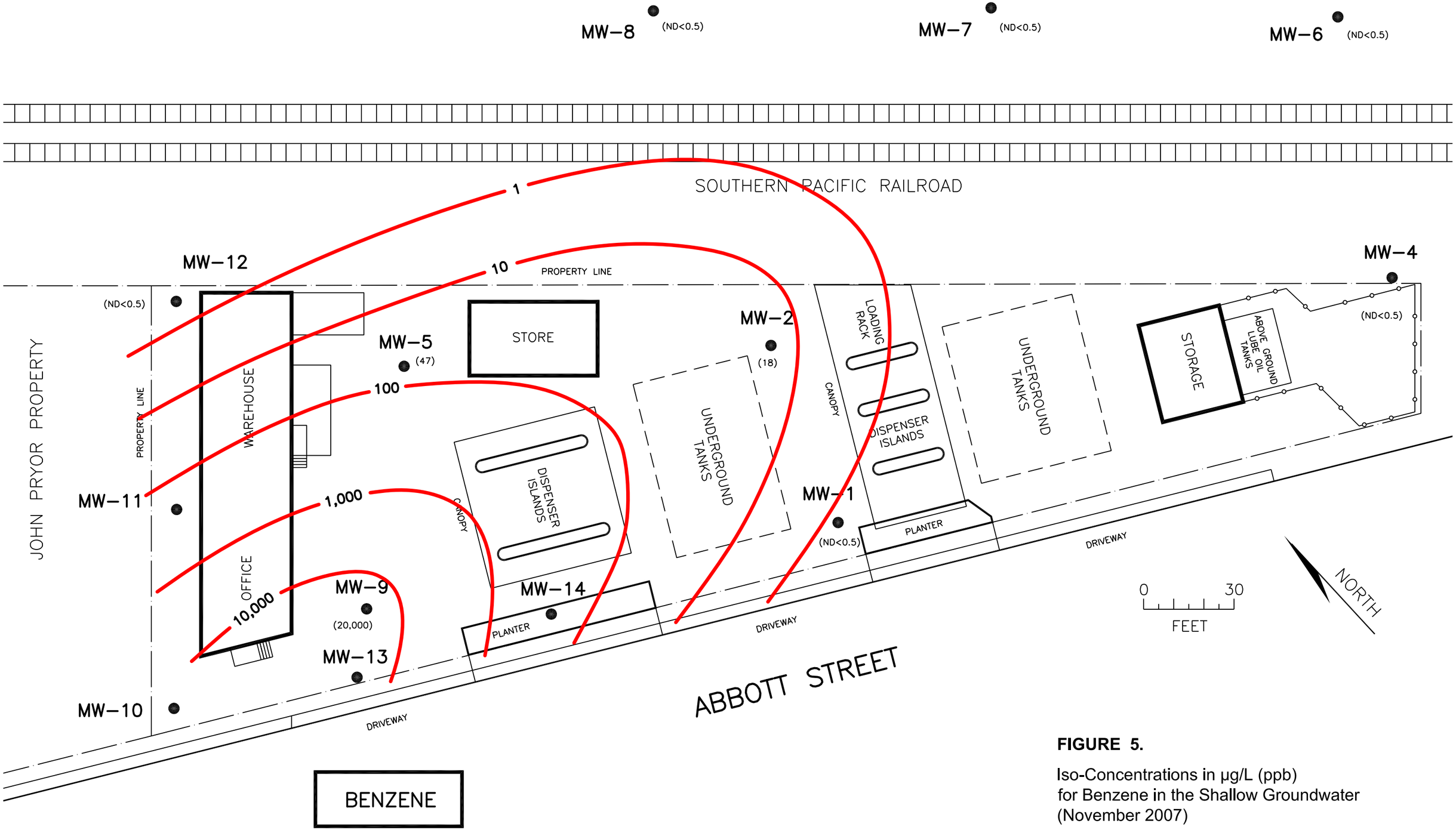


FIGURE 5.

Iso-Concentrations in µg/L (ppb)
for Benzene in the Shallow Groundwater
(November 2007)

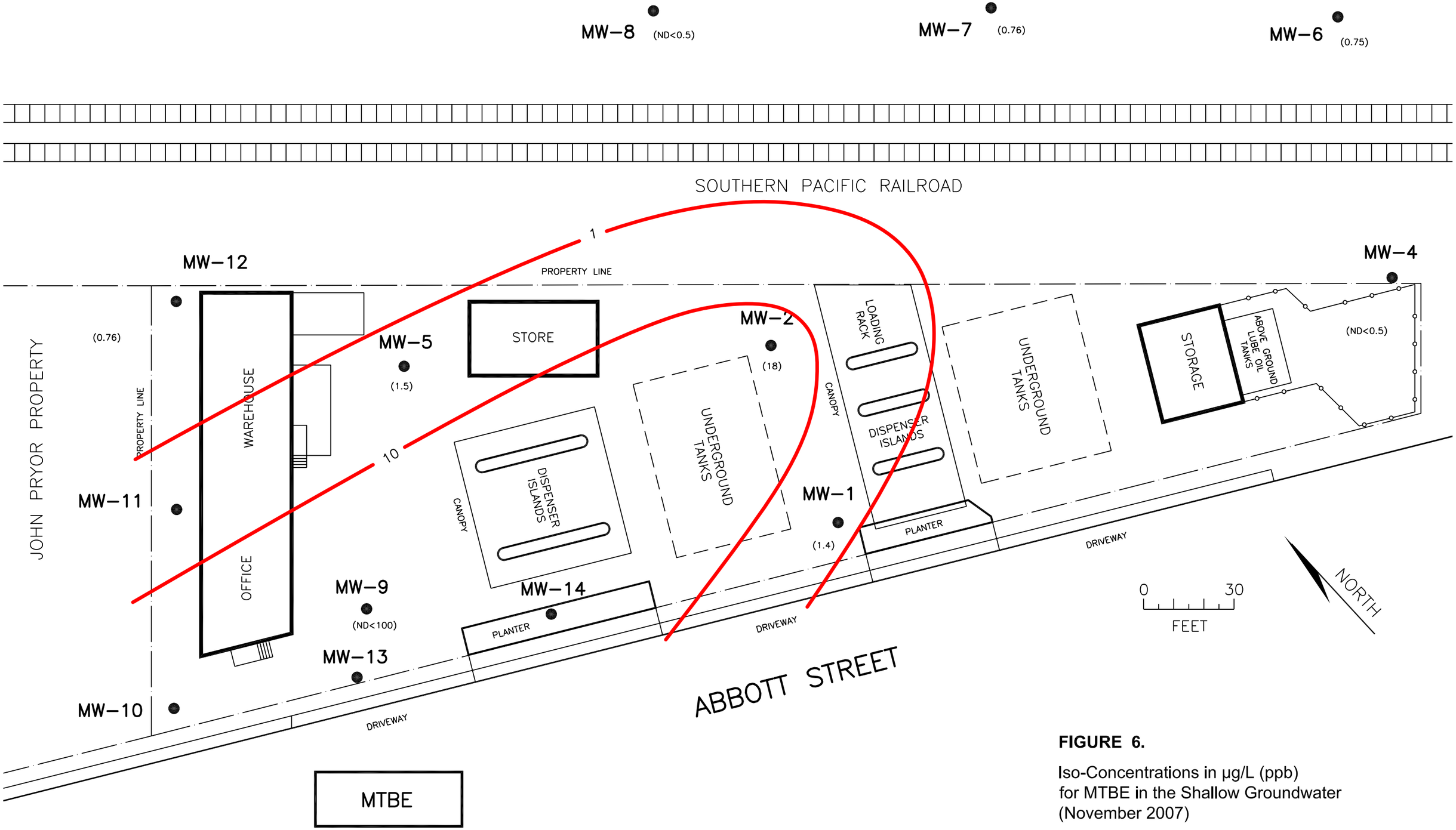


FIGURE 6.

Iso-Concentrations in µg/L (ppb)
for MTBE in the Shallow Groundwater
(November 2007)

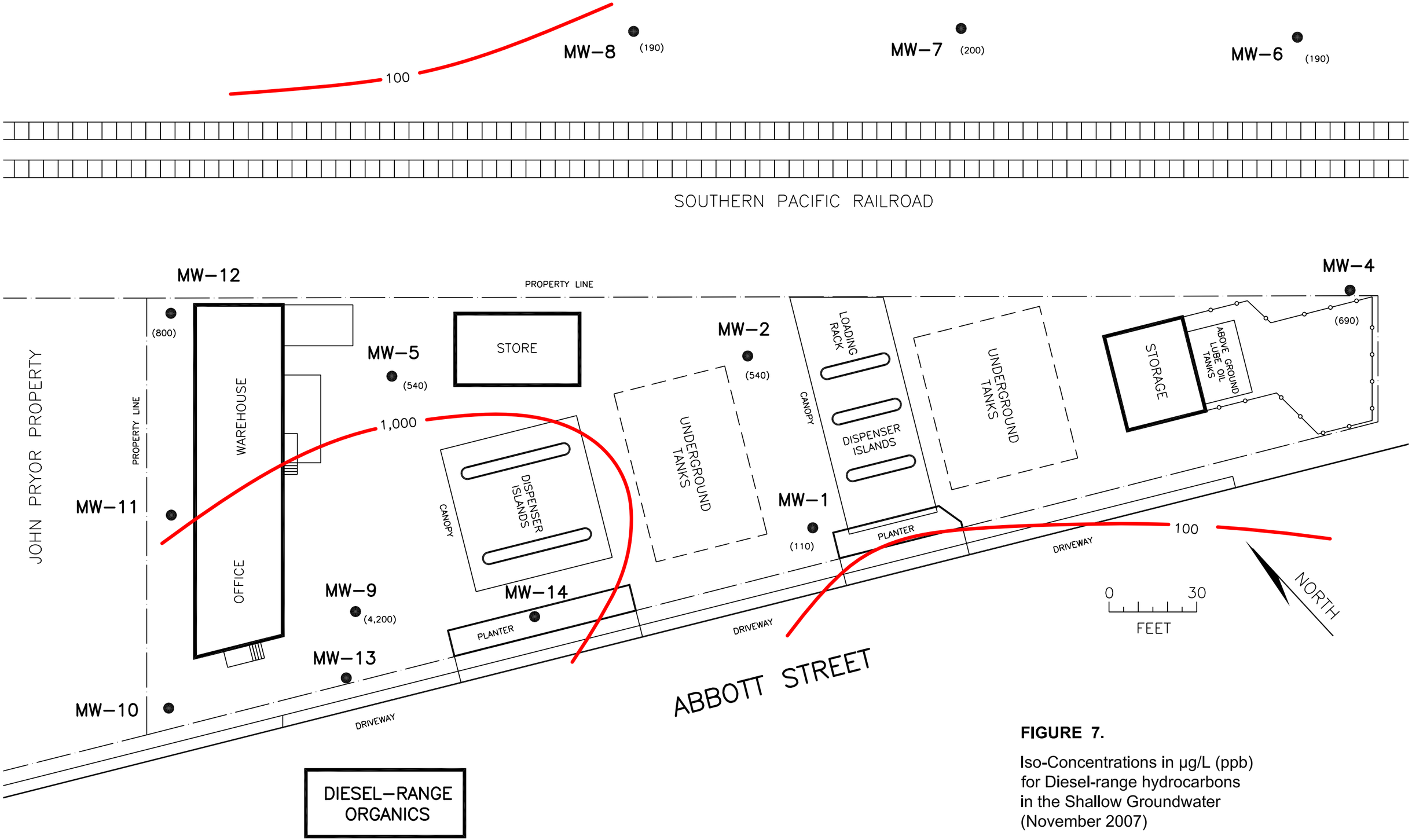


FIGURE 7.

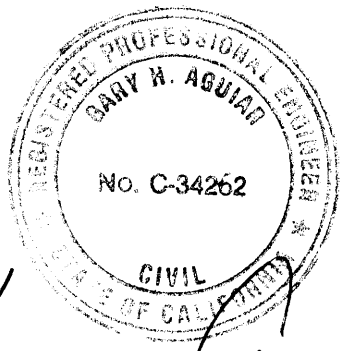
Iso-Concentrations in µg/L (ppb) for Diesel-range hydrocarbons in the Shallow Groundwater (November 2007)

QUARTERLY GROUNDWATER MONITORING REPORT

STURDY OIL BULK PETROLEUM DISTRIBUTION FACILITY

1511 Abbott Street, Salinas, California

December 11, 2007



EXP. 9-30-09

Gary Aguiar **RCE 34262**

ATTACHMENT A

Well Sampling Logs

HYDRO ANALYSIS, Inc.

WELL MONITORING DATA SHEET

Project: 0112 Sturdy Oil - Abbott St

Water Level Measurement Date: 11/07/2007

Sampling Dates: 11/7-8/2007

WELL #	DEPTH TO WATER (ft)	PRODUCT	WELL DEPTH (ft)	PRODUCT REMOVED	WATER REMOVED (gal)	RISER HEIGHTS
MW-1	19.64	None	28.68	- -	6	-0.28
MW-2	19.06	Film	29.54	- -	6	-0.89
MW-4	18.04	None	30.22	- -	6	-0.44
MW-5	19.77	Film	30.09	- -	6	-0.48
MW-6	16.79	None	29.38	- -	8	-0.41
MW-7	16.63	None	29.86	- -	8	-0.30
MW-8	16.40	None	28.99	- -	5	-0.61
MW-9	36.51	Film	40.40	- -	2	-0.59
MW-10	- -	None	64.73	- -	0	-0.46
MW-11	- -	None	56.83	- -	0	-0.41
MW-12	23.53	Sheen	30.09	- -	4	-0.45
MW-13	- -	None	58.53	- -	0	-0.46
MW-14	- -	None	61.49	- -	0	0.90

WELL SAMPLING LOG

Site Location: Sturdy Oil - Abbott St
Page: 1 of 13
Well Number: MW-1
Date: 11/08/2007
Weather: Overcast, Breezy, 50-60
Time Began: 15:33
Sampling Personnel: DPK, RKW
Completed: 15:52

EVACUATION DATA

Description of Measuring Point (MP): T.O.C.

Total Sounded Depth of Well Below MP	28.40' + 0.28'
- Depth to Water Below MP	19.64'
= Water Column in Well	9.04'
x Casing Diameter Multiplier	0.169
= Gallons in Casing	1.53
Gallons Pumped Prior to Sampling	6

Sample Collected

Volatile Organics (VOA's)	5
1 Liter Amber Glass	2
Polyethylene (plastic)	
Other	
Samples Filtered	No

Evacuation Method:

PVC Bailer	✘
Acrillyc Bailer	
Pump	
Other	

Sample Method:

Evacuation Bailer	✘
Disposable Bailer	
Pump	
Direct	

SAMPLING DATA / FIELD PARAMETERS

Inspection for Free Product: None , Clear
(thickness to 0.01 foot, if any)

Time	15:40	15:45	15:49	15:52			
Gals Removed	1.5	3	4.5	6			
Temperature	18.2	18.2	18.2	18.2			
Conductivity	2188	2092	2093	2073			
pH	6.95	7.17	7.16	7.17			
Color / Odor	Tan	Tan	Tan	Tan			
Turbidity	Medium	Medium	Medium	Medium			
Product	None	None	None	None			

Comments:

WELL SAMPLING LOG

Site Location: Sturdy Oil - Abbott St
Page: 2 of 13
Well Number: MW-2
Date: 11/08/2007
Weather: Overcast, Breezy, 50-60
Time Began: 17:01
Sampling Personnel: DPK, RKW
Completed: 17:16

EVACUATION DATA

Description of Measuring Point (MP): T.O.C.

Total Sounded Depth of Well Below MP	29.26' + 0.28'
- Depth to Water Below MP	19.06'
= Water Column in Well	10.48'
x Casing Diameter Multiplier	0.169
= Gallons in Casing	1.77
Gallons Pumped Prior to Sampling	6

Sample Collected

Volatile Organics (VOA's)	5
1 Liter Amber Glass	2
Polyethylene (plastic)	
Other	
Samples Filtered	No

Evacuation Method:

PVC Bailer	✘
Acrillyc Bailer	
Pump	
Other	

Sample Method:

Evacuation Bailer	✘
Disposable Bailer	
Pump	
Direct	

SAMPLING DATA / FIELD PARAMETERS

Inspection for Free Product: None , Clear
(thickness to 0.01 foot, if any)

Time	17:07	17:10	17:13	17:16			
Gals Removed	1.5	3	4.5	6			
Temperature	18.6	18.5	18.3	18.3			
Conductivity	2016	1979	1946	1942			
pH	7.04	7.09	7.11	7.13			
Color / Odor	Tan	Grey-Tan	Tan	Tan			
Turbidity	Medium	Medium	Medium	Medium			
Product	Film	Film	Sheen	Sheen			

Comments:

WELL SAMPLING LOG

Site Location: Sturdy Oil - Abbott St
Page: 3 of 13
Well Number: MW-4
Date: 11/07/2007
Weather: Overcast, Breezy, 50-60
Time Began: 13:50
Sampling Personnel: DPK, RKW
Completed: 14:18

EVACUATION DATA

Description of Measuring Point (MP): T.O.C.

Total Sounded Depth of Well Below MP	29.94' + 0.28'
- Depth to Water Below MP	18.04'
= Water Column in Well	12.18'
x Casing Diameter Multiplier	0.169
= Gallons in Casing	2.06
Gallons Pumped Prior to Sampling	6

Sample Collected

Volatile Organics (VOA's)	5
1 Liter Amber Glass	2
Polyethylene (plastic)	
Other	
Samples Filtered	No

Evacuation Method:

PVC Bailer	✘
Acrillyc Bailer	
Pump	
Other	

Sample Method:

Evacuation Bailer	✘
Disposable Bailer	
Pump	
Direct	

SAMPLING DATA / FIELD PARAMETERS

Inspection for Free Product: None, Clear
(thickness to 0.01 foot, if any)

Time	13:56	13:58	14:00	14:18			
Gals Removed	2	4	6	Sample			
Temperature	17.2	17.2	17.1	17.1			
Conductivity	999	1012	1027	1096			
pH	7.33	7.47	7.46	7.49			
Color / Odor	Tan	Tan	Tan	Tan			
Turbidity	Medium	Medium	Medium	Medium			
Product	None	None	None	None			

Comments: Dewatered after 3rd reading.

WELL SAMPLING LOG

Site Location: Sturdy Oil - Abbott St
Page: 4 of 13
Well Number: MW-5
Date: 11/07/2007
Weather: Overcast, Breezy, 50-60
Time Began: 16:33
Sampling Personnel: DPK, RKW
Completed: 16:47

EVACUATION DATA

Description of Measuring Point (MP): T.O.C.

Total Sounded Depth of Well Below MP	29.81' + 0.28'
- Depth to Water Below MP	19.77'
= Water Column in Well	10.32'
x Casing Diameter Multiplier	0.169
= Gallons in Casing	1.74
Gallons Pumped Prior to Sampling	6

Sample Collected

Volatile Organics (VOA's)	5
1 Liter Amber Glass	2
Polyethylene (plastic)	
Other	
Samples Filtered	No

Evacuation Method:

PVC Bailer	✘
Acrillyc Bailer	
Pump	
Other	

Sample Method:

Evacuation Bailer	✘
Disposable Bailer	
Pump	
Direct	

SAMPLING DATA / FIELD PARAMETERS

Inspection for Free Product: None, Clear
(thickness to 0.01 foot, if any)

Time	16:41	16:43	16:45	16:47			
Gals Removed	1.5	3	4.5	6			
Temperature	17.5	17.7	17.7	17.6			
Conductivity	2096	2086	2192	2041			
pH	7.02	7.05	7.06	7.10			
Color / Odor	Tan	Grey	Grey	Black-Grey			
Turbidity	Medium	Medium	Medium	Medium			
Product	Film	Film	Film	Film			

Comments:

WELL SAMPLING LOG

Site Location: Sturdy Oil - Abbott St
Page: 5 of 13
Well Number: MW-6
Date: 11/07/2007
Weather: Overcast, Breezy, 50-60
Time Began: 14:40
Sampling Personnel: DPK, RKW
Completed: 14:56

EVACUATION DATA

Description of Measuring Point (MP): T.O.C.

Total Sounded Depth of Well Below MP	29.10' + 0.28'
- Depth to Water Below MP	16.79'
= Water Column in Well	12.59'
x Casing Diameter Multiplier	0.169
= Gallons in Casing	2.13
Gallons Pumped Prior to Sampling	8

Sample Collected

Volatile Organics (VOA's)	5
1 Liter Amber Glass	2
Polyethylene (plastic)	
Other	
Samples Filtered	No

Evacuation Method:		Sample Method:	
PVC Bailer	✘	Evacuation Bailer	✘
Acrillyc Bailer		Disposable Bailer	
Pump		Pump	
Other		Direct	

SAMPLING DATA / FIELD PARAMETERS

Inspection for Free Product: None, Clear
(thickness to 0.01 foot, if any)

Time	14:49	14:52	14:54	14:56			
Gals Removed	2	4	6	8			
Temperature	16.7	17.0	16.9	16.9			
Conductivity	1263	1255	1246	1245			
pH	7.85	7.83	7.87	7.93			
Color / Odor	Tan	Tan	Tan	Grey-Tan			
Turbidity	Medium	High	High	High			
Product	None	None	None	None			

Comments:

WELL SAMPLING LOG

Site Location: Sturdy Oil - Abbott St
Page: 6 of 13
Well Number: MW-7
Date: 11/07/2007
Weather: Overcast, Breezy, 50-60
Time Began: 15:00
Sampling Personnel: DPK, RKW
Completed: 15:14

EVACUATION DATA

Description of Measuring Point (MP): T.O.C.

Total Sounded Depth of Well Below MP	29.58' + 0.28'
- Depth to Water Below MP	16.63'
= Water Column in Well	13.23'
x Casing Diameter Multiplier	0.169
= Gallons in Casing	2.24
Gallons Pumped Prior to Sampling	8

Sample Collected

Volatile Organics (VOA's)	5
1 Liter Amber Glass	2
Polyethylene (plastic)	
Other	
Samples Filtered	No

Evacuation Method:		Sample Method:	
PVC Bailer	✘	Evacuation Bailer	✘
Acrillyc Bailer		Disposable Bailer	
Pump		Pump	
Other		Direct	

SAMPLING DATA / FIELD PARAMETERS

Inspection for Free Product: None, Clear
(thickness to 0.01 foot, if any)

Time	15:07	15:10	15:12	15:14			
Gals Removed	2	4	6	8			
Temperature	17.1	17.2	17.2	17.2			
Conductivity	1449	1432	1430	1429			
pH	7.56	7.45	7.45	7.46			
Color / Odor	Tan	Tan	Tan	Tan			
Turbidity	Medium	High	High	High			
Product	None	None	None	None			

Comments:

WELL SAMPLING LOG

Site Location: Sturdy Oil - Abbott St
Page: 7 of 13
Well Number: MW-8
Date: 11/07/2007
Weather: Overcast, Breezy, 50-60
Time Began: 15:17
Sampling Personnel: DPK, RKW
Completed: 15:39

EVACUATION DATA

Description of Measuring Point (MP): T.O.C.

Total Sounded Depth of Well Below MP	28.71' + 0.28'
- Depth to Water Below MP	16.40'
= Water Column in Well	12.59'
x Casing Diameter Multiplier	0.169
= Gallons in Casing	2.13
Gallons Pumped Prior to Sampling	5

Sample Collected

Volatile Organics (VOA's)	5
1 Liter Amber Glass	2
Polyethylene (plastic)	
Other	
Samples Filtered	No

Evacuation Method:

PVC Bailer	✘
Acrillyc Bailer	
Pump	
Other	

Sample Method:

Evacuation Bailer	✘
Disposable Bailer	
Pump	
Direct	

SAMPLING DATA / FIELD PARAMETERS

Inspection for Free Product: None , Clear
(thickness to 0.01 foot, if any)

Time	15:23	15:26	15:28	15:39			
Gals Removed	2	4	5	Sample			
Temperature	17.1	17.0	17.1	16.9			
Conductivity	1520	1511	1385	1356			
pH	7.27	7.19	7.32	7.31			
Color / Odor	Tan	Grey-Tan	Grey-Tan	Grey-Tan			
Turbidity	Medium	High	High	Medium			
Product	None	None	None	None			

Comments: Dewatered after 3rd reading.

WELL SAMPLING LOG

Site Location: Sturdy Oil - Abbott St
Page: 8 of 13
Well Number: MW-9
Date: 11/07/2007
Weather: Overcast, Breezy, 50-60
Time Began: 16:00
Sampling Personnel: DPK, RKW
Completed: 16:16

EVACUATION DATA

Description of Measuring Point (MP): T.O.C.

Total Sounded Depth of Well Below MP	40.12' + 0.28'
- Depth to Water Below MP	36.51'
= Water Column in Well	3.89'
x Casing Diameter Multiplier	0.169
= Gallons in Casing	0.66
Gallons Pumped Prior to Sampling	2

Sample Collected

Volatile Organics (VOA's)	5
1 Liter Amber Glass	2
Polyethylene (plastic)	
Other	
Samples Filtered	No

Evacuation Method:

PVC Bailer	✘
Acrillyc Bailer	
Pump	
Other	

Sample Method:

Evacuation Bailer	✘
Disposable Bailer	
Pump	
Direct	

SAMPLING DATA / FIELD PARAMETERS

Inspection for Free Product: Sheen , Clear
(thickness to 0.01 foot, if any)

Time	16:08	16:10	16:13	16:16			
Gals Removed	0.5	1	1.5	2			
Temperature	18.1	18.2	18.1	17.9			
Conductivity	2099	2243	2281	2256			
pH	6.94	6.91	6.92	6.95			
Color / Odor	Tan	Grey	Grey	Grey			
Turbidity	Medium	Medium	Medium	Medium			
Product	Film	Film	Film	Film			

Comments:

WELL SAMPLING LOG

Site Location: Sturdy Oil - Abbott St
Page: 9 of 13

Well Number: MW-10
Date: 11/07/2007

Weather: Overcast, Breezy, 50-60
Time Began: 12:22

Sampling Personnel: RKW, DPK
Completed: 12:25

EVACUATION DATA

Description of Measuring Point (MP): T.O.C.

Total Sounded Depth of Well Below MP: 64.45' + 0.28'
- Depth to Water Below MP: 64.73'
= Water Column in Well: 0.00'
x Casing Diameter Multiplier: 0.169
= Gallons in Casing: 0.00
Gallons Pumped Prior to Sampling: 0

Sample Collected
- Volatile Organics (VOA's): _____
- 1 Liter Amber Glass: _____
- Polyethylene (plastic): _____
- Other: _____
- Samples Filtered: _____

Evacuation Method:
- PVC Bailer: _____
- Acrillyc Bailer: _____
- Pump: _____
- Other: _____

Sample Method:
- Evacuation Bailer: _____
- Disposable Bailer: _____
- Pump: _____
- Direct: _____

SAMPLING DATA / FIELD PARAMETERS

Inspection for Free Product: _____, _____
(thickness to 0.01 foot, if any)

Time							
Gals Removed							
Temperature							
Conductivity							
pH							
Color / Odor							
Turbidity							
Product							

Comments: No water detected.

WELL SAMPLING LOG

Site Location: Sturdy Oil - Abbott St
Page: 10 of 13

Well Number: MW-11
Date: 11/07/2007

Weather: Overcast, Breezy, 50-60
Time Began: 12:30

Sampling Personnel: RKW, DPK
Completed: 12:33

EVACUATION DATA

Description of Measuring Point (MP): T.O.C.

Total Sounded Depth of Well Below MP: 56.55' + 0.28'
- Depth to Water Below MP: 56.83'
= Water Column in Well: 0.00'
x Casing Diameter Multiplier: 0.169
= Gallons in Casing: 0.00
Gallons Pumped Prior to Sampling: 0

Sample Collected
- Volatile Organics (VOA's)
- 1 Liter Amber Glass
- Polyethylene (plastic)
- Other
- Samples Filtered

Evacuation Method:
- PVC Bailer
- Acrillyc Bailer
- Pump
- Other

Sample Method:
- Evacuation Bailer
- Disposable Bailer
- Pump
- Direct

SAMPLING DATA / FIELD PARAMETERS

Inspection for Free Product: _____, _____
(thickness to 0.01 foot, if any)

Time							
Gals Removed							
Temperature							
Conductivity							
pH							
Color / Odor							
Turbidity							
Product							

Comments: No water detected.

WELL SAMPLING LOG

Site Location: Sturdy Oil - Abbott St
Page: 11 of 13
Well Number: MW-12
Date: 11/08/2007
Weather: Overcast, Breezy, 50-60
Time Began: 16:15
Sampling Personnel: RKW, DPK
Completed: 16:32

EVACUATION DATA

Description of Measuring Point (MP): T.O.C.

Total Sounded Depth of Well Below MP	29.81' + 0.28'
- Depth to Water Below MP	23.53'
= Water Column in Well	6.56'
x Casing Diameter Multiplier	0.169
= Gallons in Casing	1.11
Gallons Pumped Prior to Sampling	4

Sample Collected

Volatile Organics (VOA's)	5
1 Liter Amber Glass	2
Polyethylene (plastic)	
Other	
Samples Filtered	No

Evacuation Method:		Sample Method:	
PVC Bailer	✘	Evacuation Bailer	✘
Acrillyc Bailer		Disposable Bailer	
Pump		Pump	
Other		Direct	

SAMPLING DATA / FIELD PARAMETERS

Inspection for Free Product: None , Clear
(thickness to 0.01 foot, if any)

Time	16:21	16:23	16:26	16:32			
Gals Removed	1	2	3	4			
Temperature	16.9	16.9	16.9	16.8			
Conductivity	1490	1479	1532	1473			
pH	7.19	7.24	7.27	7.24			
Color / Odor	Grey-Tan	Tan	Grey-Tan	Tan			
Turbidity	Medium	Medium	Medium	Medium			
Product	None	None	Sheen	None			

Comments:

WELL SAMPLING LOG

Site Location: Sturdy Oil - Abbott St
Page: 12 of 13
Well Number: MW-13
Date: 11/07/2007
Weather: Overcast, Breezy, 50-60
Time Began: 12:35
Sampling Personnel: RKW, DPK
Completed: 12:38

EVACUATION DATA

Description of Measuring Point (MP): T.O.C.

Total Sounded Depth of Well Below MP	58.25' + 0.28'	Sample Collected	
- Depth to Water Below MP	58.19'	Volatile Organics (VOA's)	
= Water Column in Well	0.34'	1 Liter Amber Glass	
x Casing Diameter Multiplier	0.169	Polyethylene (plastic)	
= Gallons in Casing	0.06	Other	
Gallons Pumped Prior to Sampling	0	Samples Filtered	

Evacuation Method:		Sample Method:	
PVC Bailer		Evacuation Bailer	
Acrillyc Bailer		Disposable Bailer	
Pump		Pump	
Other		Direct	

SAMPLING DATA / FIELD PARAMETERS

Inspection for Free Product: _____, _____
(thickness to 0.01 foot, if any)

Time							
Gals Removed							
Temperature							
Conductivity							
pH							
Color / Odor							
Turbidity							
Product							

Comments: Insufficient water for sampling.

WELL SAMPLING LOG

Site Location: Sturdy Oil - Abbott St
Page: 13 of 13

Well Number: MW-14
Date: 11/07/2007

Weather: Overcast, Breezy, 50-60
Time Began: 12:39

Sampling Personnel: RKW, DPK
Completed: 12:42

EVACUATION DATA

Description of Measuring Point (MP): T.O.C.

Total Sounded Depth of Well Below MP	61.21' + 0.28'	Sample Collected	
- Depth to Water Below MP	61.49'	Volatile Organics (VOA's)	
= Water Column in Well	0.00'	1 Liter Amber Glass	
x Casing Diameter Multiplier	0.169	Polyethylene (plastic)	
= Gallons in Casing	0.00	Other	
Gallons Pumped Prior to Sampling	0	Samples Filtered	

Evacuation Method:		Sample Method:	
PVC Bailer		Evacuation Bailer	
Acrillyc Bailer		Disposable Bailer	
Pump		Pump	
Other		Direct	

SAMPLING DATA / FIELD PARAMETERS

Inspection for Free Product: _____, _____
(thickness to 0.01 foot, if any)

Time							
Gals Removed							
Temperature							
Conductivity							
pH							
Color / Odor							
Turbidity							
Product							

Comments: No water detected.

ATTACHMENT B

Historical Water Table Elevations

Historical Water Table Elevations
(feet)

Well	Date of Measurement								
	2-1-93	4-12-93	7-30-93	11-16-93	2-9-94	5-10-94	9-7-94	11-16-94	3-1-95
MW-1	43.90	43.60	42.19	40.30	39.87	39.32	39.55	39.97	42.07
MW-2	43.64	43.50	42.01	40.21	39.86	39.26	39.50	39.99	42.01
MW-3	44.28	44.12	42.59	40.58	40.21	39.53	39.77	40.20	42.34
Flow Direction	NW	NW	NW	NW	NW	NW	NW	W	NW
Hydraulic Gradient	0.0066	0.0058	0.0055	0.0034	0.0034	0.0025	0.0026	0.0021	0.0031

Historical Water Table Elevations
(feet)

Well	Date of Measurement								
	7-6-95	11-9-95	3-19-96	6-11-96	9-11-96	12-19-96	4-8-97	6-24-97	10-1-97
MW-1	41.48	40.50	42.05	41.13	40.65	42.09	42.36	40.51	39.80
MW-2	41.44	40.54	41.62	41.10	40.61	41.89	42.32	40.38	39.69
MW-3	41.90	40.78	42.32	41.41	40.94	42.04	44.16	40.81	41.02
MW-4	42.17	41.2	42.94	41.79	41.35	42.87	43.12	41.22	40.39
MW-5	40.67	39.88	41.21	40.41	39.96	40.57	42.02	40.20	---
MW-6	42.11	41.11	42.71	41.77	41.32	42.56	43.12	41.07	40.30
MW-7	41.71	40.77	42.27	41.39	40.90	41.84	42.73	40.65	39.91
MW-8	41.23	40.44	41.60	41.04	40.53	41.68	42.24	40.24	39.43
Flow Direction	NW	NW	NW	NW	NW	NW	NW	NW	NW
Hydraulic Gradient	0.0058	0.0038	0.0054	0.0043	0.0043	0.0057	0.0037	0.0030	0.0037

Historical Water Table Elevations
(feet)

Well	Date of Measurement								
	1-20-98	4-28-98	4-23-04	9-15-04	4-13-05	6-6-05	8-24-05	5-17-06	7-18-06
MW-1	43.05	45.02	41.11	41.63	45.45	44.11	43.48	43.70	42.68
MW-2	42.87	44.96	41.07	41.62	45.30	43.83	43.48	43.62	42.59
MW-3	42.94	45.82	---	Well Destroyed March 2000				---	---
MW-4	44.25	46.04	41.64	42.20	46.38	44.68	44.19	44.42	43.34
MW-5	41.68	43.56	40.49	41.00	44.23	42.82	42.60	42.70	41.72
MW-6	43.62	45.77	41.67	42.28	46.17	44.63	44.33	44.42	43.30
MW-7	---	45.33	41.03	41.63	45.58	44.23	43.99	44.04	42.92
MW-8	42.55	44.68	40.73	41.35	45.05	43.70	43.44	43.56	42.53
MW-9	---	---	---	---	---	26.05	25.80	26.31	25.58
MW-10	---	---	---	---	---	---	---	4.70	-2.65
MW-11	---	---	---	---	---	22.86	22.51	5.59	5.33
MW-12	---	---	---	---	---	39.43	39.27	39.57	39.00
MW-13	---	---	---	---	---	---	---	4.79	3.59
MW-14	---	---	---	---	---	---	---	5.37	2.90
Flow Direction	NW	NW	NW	NW	NW	NW	W & NW	W & NW	W & NW
Hydraulic Gradient	0.0077	0.0052	0.0039	0.0039	0.0064	0.0056	0.32 & 0.013	0.40 & 0.015	0.32 & 0.011

Historical Water Table Elevations
(feet)

Well	Date of Measurement								
	10-04-06	03-14-07	06-13-07	08-29-07	11-07-07				
MW-1	42.49	42.05	41.54	42.76	43.10				
MW-2	42.45	42.00	41.49	42.67	42.93				
MW-4	43.15	43.04	42.96	43.45	44.17				
MW-5	41.58	41.26	40.72	41.77	41.93				
MW-6	43.14	42.92	42.56	43.48	43.90				
MW-7	42.78	42.30	41.87	43.02	43.22				
MW-8	42.38	41.91	41.47	42.61	42.72				
MW-9	25.47	26.05	24.96	25.35	25.46				
MW-10	---	9.24	-2.64	-3.29	---				
MW-11	---	8.88	5.60	4.91	---				
MW-12	38.65	38.31	38.66	39.01	38.65				
MW-13	---	9.32	3.44	3.44	---				
MW-14	---	9.60	2.28	2.27	---				
Flow Direction	W & NW	W & NW	W & NW	W & NW	W & NW				
Hydraulic Gradient	0.17 & 0.0043	0.38 & 0.016	0.36 & 0.0063	0.40 & 0.0059	0.22 & 0.0059				

ATTACHMENT C

Analytical Results

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 720-11725-1

Job Description: Sturdy OIL 1511 Abbott Street, Salinas

For:
Hydro Analysis
11100 San Pablo Avenue Suite 200-A
El Cerrito, CA 94530

Attention: Mr. Douglas Klingerman

Melissa Brewer
Project Manager I
melissa.brewer@testamericainc.com
11/16/2007

cc: Gary Aquiar
Randal Wilson

Comments
No additional comments.

Receipt
All samples were received in good condition within temperature requirements.

GC/MS VOA
No analytical or quality issues were noted.

GC Semi VOA
No analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

EXECUTIVE SUMMARY - Detections

Client: Hydro Analysis Job Number: 720-11725-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-11725-1	**MW-1**				
MTBE		1.4	0.50	ug/L	8260B
Diesel Range Organics [C10-C28]		110	50	ug/L	8015B
720-11725-2	**MW-2**				
1,2-Dichloroethane		2.6	0.50	ug/L	8260B
Benzene		18	0.50	ug/L	8260B
MTBE		18	0.50	ug/L	8260B
TBA		8.8	5.0	ug/L	8260B
Gasoline Range Organics (GRO)-C5-C12		170	50	ug/L	8260B
Diesel Range Organics [C10-C28]		540	50	ug/L	8015B
720-11725-3	**MW-4**				
Diesel Range Organics [C10-C28]		690	50	ug/L	8015B
720-11725-4	**MW-5**				
1,2-Dichloroethane		4.1	0.50	ug/L	8260B
Benzene		47	0.50	ug/L	8260B
Ethylbenzene		0.52	0.50	ug/L	8260B
MTBE		1.5	0.50	ug/L	8260B
Xylenes, Total		1.0	1.0	ug/L	8260B
DIPE		5.7	1.0	ug/L	8260B
EDB		0.57	0.50	ug/L	8260B
Gasoline Range Organics (GRO)-C5-C12		320	50	ug/L	8260B
Diesel Range Organics [C10-C28]		540	50	ug/L	8015B
720-11725-5	**MW-6**				
MTBE		0.75	0.50	ug/L	8260B
Diesel Range Organics [C10-C28]		190	50	ug/L	8015B
720-11725-6	**MW-7**				
MTBE		0.76	0.50	ug/L	8260B
Diesel Range Organics [C10-C28]		200	50	ug/L	8015B
720-11725-7	**MW-8**				
Diesel Range Organics [C10-C28]		190	50	ug/L	8015B

EXECUTIVE SUMMARY - Detections

Client: Hydro Analysis | Job Number: 720-11725-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-11725-8	**MW-9**				
Benzene		20000	100	ug/L	8260B
Ethylbenzene		4600	100	ug/L	8260B
Toluene		8300	100	ug/L	8260B
Xylenes, Total		13000	200	ug/L	8260B
TBA		1100	1000	ug/L	8260B
Gasoline Range Organics (GRO)-C5-C12		85000	10000	ug/L	8260B
Diesel Range Organics [C10-C28]		4200	50	ug/L	8015B
720-11725-9	**MW-12**				
1,2-Dichloroethane		4.6	0.50	ug/L	8260B
MTBE		0.76	0.50	ug/L	8260B
Diesel Range Organics [C10-C28]		800	50	ug/L	8015B

METHOD SUMMARY

Client: Hydro Analysis | Job Number: 720-11725-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds by GC/MS	TAL SF	SW846 8260B	
Purge-and-Trap	TAL SF		SW846 5030B
Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	TAL SF	SW846 8015B	
Separatory Funnel Liquid-Liquid Extraction	TAL SF		SW846 3510C

Lab References:

TAL SF = TestAmerica San Francisco

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

SAMPLE SUMMARY

Client: Hydro Analysis

Job Number: 720-11725-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
720-11725-1	MW-1	Water	11/08/2007 1552	11/09/2007 1200
720-11725-2	MW-2	Water	11/08/2007 1716	11/09/2007 1200
720-11725-3	MW-4	Water	11/07/2007 1418	11/09/2007 1200
720-11725-4	MW-5	Water	11/07/2007 1647	11/09/2007 1200
720-11725-5	MW-6	Water	11/07/2007 1456	11/09/2007 1200
720-11725-6	MW-7	Water	11/07/2007 1514	11/09/2007 1200
720-11725-7	MW-8	Water	11/07/2007 1539	11/09/2007 1200
720-11725-8	MW-9	Water	11/07/2007 1616	11/09/2007 1200
720-11725-9	MW-12	Water	11/08/2007 1632	11/09/2007 1200

Client: Hydro Analysis | Job Number: 720-11725-1

Client Sample ID: **MW-1**

Lab Sample ID: 720-11725-1
Client Matrix: Water

Date Sampled: 11/08/2007 1552
Date Received: 11/09/2007 1200

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 11/14/2007 1216
Date Prepared: 11/14/2007 1216

Analysis Batch: 720-28629

Instrument ID: Varian 3900E
Lab File ID: c:\varianws\data\200711\11
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result (ug/L)	Qualifier	RL
1,2-Dichloroethane	ND		0.50
Benzene	ND		0.50
Ethanol	ND		250
Ethylbenzene	ND		0.50
MTBE	1.4		0.50
TAME	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
TBA	ND		5.0
DIPE	ND		1.0
EDB	ND		0.50
Gasoline Range Organics (GRO)-C5-C12	ND		50
Ethyl tert-butyl ether	ND		0.50

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	96	77 - 121
1,2-Dichloroethane-d4 (Surr)	88	73 - 130

Client: Hydro Analysis | Job Number: 720-11725-1

Client Sample ID: **MW-2**

Lab Sample ID: 720-11725-2
Client Matrix: Water

Date Sampled: 11/08/2007 1716
Date Received: 11/09/2007 1200

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 11/14/2007 1240
Date Prepared: 11/14/2007 1240

Analysis Batch: 720-28629

Instrument ID: Varian 3900E
Lab File ID: c:\varianws\data\200711\11
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result (ug/L)	Qualifier	RL
1,2-Dichloroethane	2.6		0.50
Benzene	18		0.50
Ethanol	ND		250
Ethylbenzene	ND		0.50
MTBE	18		0.50
TAME	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
TBA	8.8		5.0
DIPE	ND		1.0
EDB	ND		0.50
Gasoline Range Organics (GRO)-C5-C12	170		50
Ethyl tert-butyl ether	ND		0.50

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	97	77 - 121
1,2-Dichloroethane-d4 (Surr)	91	73 - 130

Client: Hydro Analysis | Job Number: 720-11725-1

Client Sample ID: **MW-4**

Lab Sample ID: 720-11725-3
Client Matrix: Water

Date Sampled: 11/07/2007 1418
Date Received: 11/09/2007 1200

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 11/14/2007 1303
Date Prepared: 11/14/2007 1303

Analysis Batch: 720-28629

Instrument ID: Varian 3900E
Lab File ID: c:\varianws\data\200711\11
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result (ug/L)	Qualifier	RL
1,2-Dichloroethane	ND		0.50
Benzene	ND		0.50
Ethanol	ND		250
Ethylbenzene	ND		0.50
MTBE	ND		0.50
TAME	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
TBA	ND		5.0
DIPE	ND		1.0
EDB	ND		0.50
Gasoline Range Organics (GRO)-C5-C12	ND		50
Ethyl tert-butyl ether	ND		0.50

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	97	77 - 121
1,2-Dichloroethane-d4 (Surr)	87	73 - 130

Client: Hydro Analysis | Job Number: 720-11725-1

Client Sample ID: **MW-5**

Lab Sample ID: 720-11725-4
Client Matrix: Water

Date Sampled: 11/07/2007 1647
Date Received: 11/09/2007 1200

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 11/14/2007 1327
Date Prepared: 11/14/2007 1327

Analysis Batch: 720-28629

Instrument ID: Varian 3900E
Lab File ID: c:\varianws\data\200711\11
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result (ug/L)	Qualifier	RL
1,2-Dichloroethane	4.1		0.50
Benzene	47		0.50
Ethanol	ND		250
Ethylbenzene	0.52		0.50
MTBE	1.5		0.50
TAME	ND		0.50
Toluene	ND		0.50
Xylenes, Total	1.0		1.0
TBA	ND		5.0
DIPE	5.7		1.0
EDB	0.57		0.50
Gasoline Range Organics (GRO)-C5-C12	320		50
Ethyl tert-butyl ether	ND		0.50

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	96	77 - 121
1,2-Dichloroethane-d4 (Surr)	89	73 - 130

Client: Hydro Analysis | Job Number: 720-11725-1

Client Sample ID: **MW-6**

Lab Sample ID: 720-11725-5
Client Matrix: Water

Date Sampled: 11/07/2007 1456
Date Received: 11/09/2007 1200

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 11/14/2007 1350
Date Prepared: 11/14/2007 1350

Analysis Batch: 720-28629

Instrument ID: Varian 3900E
Lab File ID: c:\varianws\data\200711\11
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result (ug/L)	Qualifier	RL
1,2-Dichloroethane	ND		0.50
Benzene	ND		0.50
Ethanol	ND		250
Ethylbenzene	ND		0.50
MTBE	0.75		0.50
TAME	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
TBA	ND		5.0
DIPE	ND		1.0
EDB	ND		0.50
Gasoline Range Organics (GRO)-C5-C12	ND		50
Ethyl tert-butyl ether	ND		0.50

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	95	77 - 121
1,2-Dichloroethane-d4 (Surr)	91	73 - 130

Client: Hydro Analysis | Job Number: 720-11725-1

Client Sample ID: **MW-7**

Lab Sample ID: 720-11725-6
Client Matrix: Water

Date Sampled: 11/07/2007 1514
Date Received: 11/09/2007 1200

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 11/14/2007 1415
Date Prepared: 11/14/2007 1415

Analysis Batch: 720-28629

Instrument ID: Varian 3900E
Lab File ID: c:\varianws\data\200711\11
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result (ug/L)	Qualifier	RL
1,2-Dichloroethane	ND		0.50
Benzene	ND		0.50
Ethanol	ND		250
Ethylbenzene	ND		0.50
MTBE	0.76		0.50
TAME	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
TBA	ND		5.0
DIPE	ND		1.0
EDB	ND		0.50
Gasoline Range Organics (GRO)-C5-C12	ND		50
Ethyl tert-butyl ether	ND		0.50

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	96	77 - 121
1,2-Dichloroethane-d4 (Surr)	89	73 - 130

Client: Hydro Analysis

Job Number: 720-11725-1

Client Sample ID: **MW-8**

Lab Sample ID: 720-11725-7
Client Matrix: Water

Date Sampled: 11/07/2007 1539
Date Received: 11/09/2007 1200

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 11/14/2007 1438
Date Prepared: 11/14/2007 1438

Analysis Batch: 720-28629

Instrument ID: Varian 3900E
Lab File ID: c:\varianws\data\200711\11
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result (ug/L)	Qualifier	RL
1,2-Dichloroethane	ND		0.50
Benzene	ND		0.50
Ethanol	ND		250
Ethylbenzene	ND		0.50
MTBE	ND		0.50
TAME	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
TBA	ND		5.0
DIPE	ND		1.0
EDB	ND		0.50
Gasoline Range Organics (GRO)-C5-C12	ND		50
Ethyl tert-butyl ether	ND		0.50

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	97	77 - 121
1,2-Dichloroethane-d4 (Surr)	93	73 - 130

Client: Hydro Analysis | Job Number: 720-11725-1

Client Sample ID: **MW-9**

Lab Sample ID: 720-11725-8
Client Matrix: Water

Date Sampled: 11/07/2007 1616
Date Received: 11/09/2007 1200

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 200
Date Analyzed: 11/14/2007 1831
Date Prepared: 11/14/2007 1831

Analysis Batch: 720-28629

Instrument ID: Varian 3900E
Lab File ID: c:\varianws\data\200711\11
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result (ug/L)	Qualifier	RL
1,2-Dichloroethane	ND		100
Benzene	20000		100
Ethanol	ND		50000
Ethylbenzene	4600		100
MTBE	ND		100
TAME	ND		100
Toluene	8300		100
Xylenes, Total	13000		200
TBA	1100		1000
DIPE	ND		200
EDB	ND		100
Gasoline Range Organics (GRO)-C5-C12	85000		10000
Ethyl tert-butyl ether	ND		100

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	97	77 - 121
1,2-Dichloroethane-d4 (Surr)	104	73 - 130

Client: Hydro Analysis | Job Number: 720-11725-1

Client Sample ID: **MW-12**

Lab Sample ID: 720-11725-9
Client Matrix: Water

Date Sampled: 11/08/2007 1632
Date Received: 11/09/2007 1200

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 11/14/2007 1501
Date Prepared: 11/14/2007 1501

Analysis Batch: 720-28629

Instrument ID: Varian 3900E
Lab File ID: c:\varianws\data\200711\11
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result (ug/L)	Qualifier	RL
1,2-Dichloroethane	4.6		0.50
Benzene	ND		0.50
Ethanol	ND		250
Ethylbenzene	ND		0.50
MTBE	0.76		0.50
TAME	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
TBA	ND		5.0
DIPE	ND		1.0
EDB	ND		0.50
Gasoline Range Organics (GRO)-C5-C12	ND		50
Ethyl tert-butyl ether	ND		0.50

Surrogate	%Rec	Acceptance Limits
Toluene-d8 (Surr)	96	77 - 121
1,2-Dichloroethane-d4 (Surr)	89	73 - 130

Client: Hydro Analysis | Job Number: 720-11725-1

Client Sample ID: **MW-1**

Lab Sample ID: 720-11725-1
Client Matrix: Water

Date Sampled: 11/08/2007 1552
Date Received: 11/09/2007 1200

8015B Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Method: 8015B
Preparation: 3510C
Dilution: 1.0
Date Analyzed: 11/15/2007 1332
Date Prepared: 11/13/2007 1301

Analysis Batch: 720-28704
Prep Batch: 720-28552

Instrument ID: Varian DRO4
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	110		50

Surrogate	%Rec	Acceptance Limits
p-Terphenyl	64	50 - 150

Client: Hydro Analysis

Job Number: 720-11725-1

Client Sample ID: MW-2

Lab Sample ID: 720-11725-2
Client Matrix: Water

Date Sampled: 11/08/2007 1716
Date Received: 11/09/2007 1200

8015B Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Method: 8015B
Preparation: 3510C
Dilution: 1.0
Date Analyzed: 11/15/2007 1358
Date Prepared: 11/13/2007 1301

Analysis Batch: 720-28704
Prep Batch: 720-28552

Instrument ID: Varian DRO4
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	540		50

Surrogate	%Rec	Acceptance Limits
p-Terphenyl	61	50 - 150

Client: Hydro Analysis | Job Number: 720-11725-1

Client Sample ID: **MW-4**

Lab Sample ID: 720-11725-3
Client Matrix: Water

Date Sampled: 11/07/2007 1418
Date Received: 11/09/2007 1200

8015B Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Method: 8015B
Preparation: 3510C
Dilution: 1.0
Date Analyzed: 11/15/2007 1541
Date Prepared: 11/13/2007 1301

Analysis Batch: 720-28704
Prep Batch: 720-28552

Instrument ID: Varian DRO4
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	690		50

Surrogate	%Rec	Acceptance Limits
p-Terphenyl	74	50 - 150

Client: Hydro Analysis | Job Number: 720-11725-1

Client Sample ID: **MW-5**

Lab Sample ID: 720-11725-4
Client Matrix: Water

Date Sampled: 11/07/2007 1647
Date Received: 11/09/2007 1200

8015B Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Method: 8015B
Preparation: 3510C
Dilution: 1.0
Date Analyzed: 11/15/2007 1607
Date Prepared: 11/13/2007 1301

Analysis Batch: 720-28704
Prep Batch: 720-28552

Instrument ID: Varian DRO4
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	540		50

Surrogate	%Rec	Acceptance Limits
p-Terphenyl	69	50 - 150

Client: Hydro Analysis

Job Number: 720-11725-1

Client Sample ID: MW-6

Lab Sample ID: 720-11725-5
Client Matrix: Water

Date Sampled: 11/07/2007 1456
Date Received: 11/09/2007 1200

8015B Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Method: 8015B
Preparation: 3510C
Dilution: 1.0
Date Analyzed: 11/15/2007 1632
Date Prepared: 11/13/2007 1301

Analysis Batch: 720-28704
Prep Batch: 720-28552

Instrument ID: Varian DRO4
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	190		50

Surrogate	%Rec	Acceptance Limits
p-Terphenyl	79	50 - 150

Client: Hydro Analysis

Job Number: 720-11725-1

Client Sample ID: MW-7

Lab Sample ID: 720-11725-6
Client Matrix: Water

Date Sampled: 11/07/2007 1514
Date Received: 11/09/2007 1200

8015B Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Method: 8015B
Preparation: 3510C
Dilution: 1.0
Date Analyzed: 11/15/2007 1658
Date Prepared: 11/13/2007 1301

Analysis Batch: 720-28704
Prep Batch: 720-28552

Instrument ID: Varian DRO4
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	200		50

Surrogate	%Rec	Acceptance Limits
p-Terphenyl	77	50 - 150

Client: Hydro Analysis | Job Number: 720-11725-1

Client Sample ID: **MW-8**

Lab Sample ID: 720-11725-7
Client Matrix: Water

Date Sampled: 11/07/2007 1539
Date Received: 11/09/2007 1200

8015B Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Method: 8015B
Preparation: 3510C
Dilution: 1.0
Date Analyzed: 11/15/2007 1724
Date Prepared: 11/13/2007 1301

Analysis Batch: 720-28704
Prep Batch: 720-28552

Instrument ID: Varian DRO4
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	190		50

Surrogate	%Rec	Acceptance Limits
p-Terphenyl	76	50 - 150

Client: Hydro Analysis | Job Number: 720-11725-1

Client Sample ID: MW-9

Lab Sample ID: 720-11725-8
Client Matrix: Water

Date Sampled: 11/07/2007 1616
Date Received: 11/09/2007 1200

8015B Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Method: 8015B
Preparation: 3510C
Dilution: 1.0
Date Analyzed: 11/15/2007 1749
Date Prepared: 11/13/2007 1301

Analysis Batch: 720-28704
Prep Batch: 720-28552

Instrument ID: Varian DRO4
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	4200		50

Surrogate	%Rec	Acceptance Limits
p-Terphenyl	71	50 - 150

Client: Hydro Analysis | Job Number: 720-11725-1

Client Sample ID: **MW-12**

Lab Sample ID: 720-11725-9
Client Matrix: Water

Date Sampled: 11/08/2007 1632
Date Received: 11/09/2007 1200

8015B Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Method: 8015B
Preparation: 3510C
Dilution: 1.0
Date Analyzed: 11/15/2007 1815
Date Prepared: 11/13/2007 1301

Analysis Batch: 720-28704
Prep Batch: 720-28552

Instrument ID: Varian DRO4
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C10-C28]	800		50

Surrogate	%Rec	Acceptance Limits
p-Terphenyl	72	50 - 150

DATA REPORTING QUALIFIERS

Lab Section	Qualifier	Description

Client: Hydro Analysis

Job Number: 720-11725-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:720-28629					
LCS 720-28629/2	Lab Control Spike	T	Water	8260B	
LCSD 720-28629/1	Lab Control Spike Duplicate	T	Water	8260B	
MB 720-28629/4	Method Blank	T	Water	8260B	
720-11725-1	MW-1	T	Water	8260B	
720-11725-2	MW-2	T	Water	8260B	
720-11725-3	MW-4	T	Water	8260B	
720-11725-4	MW-5	T	Water	8260B	
720-11725-5	MW-6	T	Water	8260B	
720-11725-6	MW-7	T	Water	8260B	
720-11725-7	MW-8	T	Water	8260B	
720-11725-8	MW-9	T	Water	8260B	
720-11725-9	MW-12	T	Water	8260B	

Report Basis
T = Total

Client: Hydro Analysis Job Number: 720-11725-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 720-28552					
LCS 720-28552/2-A	Lab Control Spike	T	Water	3510C	
LCSD 720-28552/3-A	Lab Control Spike Duplicate	T	Water	3510C	
MB 720-28552/1-A	Method Blank	T	Water	3510C	
720-11725-1	MW-1	T	Water	3510C	
720-11725-2	MW-2	T	Water	3510C	
720-11725-3	MW-4	T	Water	3510C	
720-11725-4	MW-5	T	Water	3510C	
720-11725-5	MW-6	T	Water	3510C	
720-11725-6	MW-7	T	Water	3510C	
720-11725-7	MW-8	T	Water	3510C	
720-11725-8	MW-9	T	Water	3510C	
720-11725-9	MW-12	T	Water	3510C	
Analysis Batch:720-28704					
LCS 720-28552/2-A	Lab Control Spike	T	Water	8015B	720-28552
LCSD 720-28552/3-A	Lab Control Spike Duplicate	T	Water	8015B	720-28552
MB 720-28552/1-A	Method Blank	T	Water	8015B	720-28552
720-11725-1	MW-1	T	Water	8015B	720-28552
720-11725-2	MW-2	T	Water	8015B	720-28552
720-11725-3	MW-4	T	Water	8015B	720-28552
720-11725-4	MW-5	T	Water	8015B	720-28552
720-11725-5	MW-6	T	Water	8015B	720-28552
720-11725-6	MW-7	T	Water	8015B	720-28552
720-11725-7	MW-8	T	Water	8015B	720-28552
720-11725-8	MW-9	T	Water	8015B	720-28552
720-11725-9	MW-12	T	Water	8015B	720-28552

Report Basis
T = Total

Client: Hydro Analysis

Job Number: 720-11725-1

Method Blank - Batch: 720-28629

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 720-28629/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/14/2007 1145
Date Prepared: 11/14/2007 1145

Analysis Batch: 720-28629
Prep Batch: N/A
Units: ug/L

Instrument ID: Varian 3900E
Lab File ID: c:\varianws\data\200711\11
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
1,2-Dichloroethane	ND		0.50
Benzene	ND		0.50
Ethanol	ND		250
Ethylbenzene	ND		0.50
MTBE	ND		0.50
TAME	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
TBA	ND		5.0
DIPE	ND		1.0
EDB	ND		0.50
Gasoline Range Organics (GRO)-C5-C12	ND		50
Ethyl tert-butyl ether	ND		0.50

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	95	77 - 121
1,2-Dichloroethane-d4 (Surr)	84	73 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Hydro Analysis

Job Number: 720-11725-1

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-28629

Method: 8260B
Preparation: 5030B

LCS Lab Sample ID: LCS 720-28629/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/14/2007 1025
Date Prepared: 11/14/2007 1025

Analysis Batch: 720-28629
Prep Batch: N/A
Units: ug/L

Instrument ID: Varian 3900E
Lab File ID: c:\varianws\data\200711\1
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-28629/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/14/2007 1048
Date Prepared: 11/14/2007 1048

Analysis Batch: 720-28629
Prep Batch: N/A
Units: ug/L

Instrument ID: Varian 3900E
Lab File ID: c:\varianws\data\200711\111
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	95	106	69 - 129	11	20		
MTBE	94	99	65 - 165	5	20		
Toluene	102	108	70 - 130	6	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
Toluene-d8 (Surr)	97	99	77 - 121
1,2-Dichloroethane-d4 (Surr)	95	90	73 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Method Blank - Batch: 720-28552

Method: 8015B
Preparation: 3510C

Lab Sample ID: MB 720-28552/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/15/2007 1306
Date Prepared: 11/13/2007 1301

Analysis Batch: 720-28704
Prep Batch: 720-28552
Units: ug/L

Instrument ID: Varian DRO4
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result	Qual	RL
Diesel Range Organics [C10-C28]	ND		50

Surrogate	% Rec	Acceptance Limits
p-Terphenyl	84	50 - 150

Lab Control Spike/
Lab Control Spike Duplicate Recovery Report - Batch: 720-28552

Method: 8015B
Preparation: 3510C

LCS Lab Sample ID: LCS 720-28552/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/15/2007 1214
Date Prepared: 11/13/2007 1301

Analysis Batch: 720-28704
Prep Batch: 720-28552
Units: ug/L

Instrument ID: Varian DRO4
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

LCSD Lab Sample ID: LCSD 720-28552/3-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 11/15/2007 1240
Date Prepared: 11/13/2007 1301

Analysis Batch: 720-28704
Prep Batch: 720-28552
Units: ug/L

Instrument ID: Varian DRO4
Lab File ID: N/A
Initial Weight/Volume: 250 mL
Final Weight/Volume: 1 mL
Injection Volume:
Column ID: PRIMARY

Analyte	% Rec. LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Diesel Range Organics [C10-C28]	76	75	50 - 130	2	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
p-Terphenyl	91	84	50 - 150

Calculations are performed before rounding to avoid round-off errors in calculated results.

120-11725 CHAIN OF CUSTODY RECORD

108098

Page 1 of 1

PROJECT NAME AND ADDRESS:
Sturdy Oil - Abbott St
1511 Abbott St
Salinas
Global ID# T0608300091

SAMPLER: (Signature) Doug Klingenman

HYDRO ANALYSIS, INC.
11100 San Pablo Ave., Suite 200-A
El Cerrito, CA 94530
(510)620-0891 (510)620-0894 (FAX)

Log Code HAIE

	CROSS REFERENCE NUMBER	DATE	TIME	SOIL	WATER	SAMPLE LOCATION	TPH-Gas + BTEX & Fuel Oxygenates	1,2 DCA + EDB	Ethanol	TPH-Diesel	EDF / EDD Files	REMARKS
1	MW-1	11/08/07	15:52		X	Monitor well # MW-1	X	X	X	X	X	5 HCl VOAs, 2 HCl Liters
2	MW-2	11/08/07	17:16		X	" " # MW-2	X	X	X	X	X	
4	MW-4	11/07/07	14:18		X	" " # MW-4	X	X	X	X	X	
5	MW-5	11/07/07	16:47		X	" " # MW-5	X	X	X	X	X	
6	MW-6	11/07/07	14:56		X	" " # MW-6	X	X	X	X	X	
7	MW-7	11/07/07	15:14		X	" " # MW-7	X	X	X	X	X	
8	MW-8	11/07/07	15:39		X	" " # MW-8	X	X	X	X	X	
9	MW-9	11/07/07	16:16		X	" " # MW-9	X	X	X	X	X	
	MW-12	11/08/07	16:32		X	" " # MW-12	X	X	X	X	X	

ANALYSIS REQUESTED

5 day TAT

2°c

RELINQUISHED BY: (Signature) Doug Klingenman	DATE 11/09/07 TIME 2:06	RECEIVED BY: (Signature)	DATE TIME
RELINQUISHED BY: (Signature)	DATE TIME	RECEIVED BY: (Signature)	DATE TIME
RELINQUISHED BY: (Signature)	DATE TIME	RECEIVED BY: (Signature)	DATE TIME
RELINQUISHED BY: (Signature)	DATE TIME	RECEIVED FOR LABORATORY BY: (Signature) John Nuñez TALGF	DATE 11-07-07 TIME 1700

Login Sample Receipt Check List

Client: Hydro Analysis

Job Number: 720-11725-1

Login Number: 11725
List Source: TestAmerica San Francisco
Creator: Bullock, Tracy
List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

HYDRO ANALYSIS, INC.
Environmental & Water Resources Engineering
Groundwater Consultants

December 11, 2007

John Goni
California Regional Water Quality
Control Board - Central Coast Region
895 Aerovista Place, Suite 101
San Louis Obispo, California 93401-7906

Re: Sturdy Oil Company Bulk Distribution Facility
1511 Abbott Street
Salinas, California.

Dear Mr. Goni:

Please find enclosed a copy of the "*Quarterly Groundwater Monitoring Report, Sturdy Oil Company Bulk Petroleum Facility, 1511 Abbott Street, Salinas, California*" by Hydro Analysis, Inc., dated December 11, 2007.

If you have any questions, please call me at (510)620-0891

Sincerely,

Gary Aguiar
Principal Engineer

11100 SAN PABLO AVE., SUITE 200-A, EL CERRITO, CALIFORNIA 94530 • TEL 510-620-0891 • FAX 510-620-0894
www.HydroAnalysis.com

Appendix 13

Resumes of project personnel

Janelle T. Amendola

Senior Project Engineer

TECHNICAL EXPERTISE

- Geotechnical engineering
- Phase I and II Environmental Site Assessments
- Brownfields redevelopment
- Compliance audits
- Construction testing and inspections
- Storm water management
- Soil and Ground water contamination investigation and remediation
- NEPA evaluations
- Telecommunications

PROJECT ASSIGNMENT

YEARS OF EXPERIENCE

With O'Brien & Gere: 2
With Other Firms: 10

EDUCATION

BS/1994/Civil Engineering; University of Minnesota – Institute of Technology

PROFESSIONAL REGISTRATION

Professional Engineer: MN

Registered Environmental Assessor I: CA

PROFESSIONAL PROFILE

Ms. Amendola has more than 12 years of diverse environmental and engineering consulting experience, and extensive skills conducting and managing numerous concurrent and varied projects for diverse public and private sector clients. Ms. Amendola's specific areas of expertise include geotechnical engineering, environmental due diligence, soil and ground water contamination investigation and remediation, construction inspections, brownfields redevelopment, environmental regulatory compliance, storm water pollution prevention planning and sampling, hazardous materials compliance, air emissions permitting, underground storage tank removals, NEPA evaluations, and project management/coordination.

As a Senior Project Engineer with O'Brien & Gere, Ms. Amendola is responsible for planning, conducting, and documenting environmental assessments and investigations, geotechnical assessments, and construction testing and inspections. She also conducts research, develops recommendations, prepares written reports, and oversees and approves assessments and construction inspections conducted by others. In addition, Ms. Amendola maintains client contact during study, design, and construction, and is responsible for maintaining client contact following project completion.

REPRESENTATIVE PROJECTS

ENVIRONMENTAL COMPLIANCE AND REMEDIATION:

Robert [IS1]**Millavec, Phase I and II Environmental Site Assessment and Remediation Confirmation Soil Testing, San Jose, CA, Senior Project Engineer –** Conducted a Phase I and Phase II Environmental Site consisting of an ASTM Phase I with surface and near surface soil sampling in a former automotive storage yard. Subsequently directed the removal of impacted soil and conducted confirmation soil sampling.

Korean [IS2]**Presbyterian Church, Risk Assessment, San Jose, California, Senior Project Engineer –** Conducted a risk assessment to evaluate the conversion of a former industrial facility located in an industrial park to a youth center. Included gathering and analysis of information on the types and quantities of all hazardous materials stored and used within a ½-mile radius and consideration of potential exposure routes and threats.

A French [IS3]**Cleaners, Ground Water and Vapor Intrusion Investigation, Morgan Hill, CA, Senior Project Engineer –** Developed and implemented a work plan to assess vapor intrusion and ground water impacts at a former dry cleaner.

Victaulic [IS4]**Corporation, Phase I Environmental Site Assessment, Reno, NV, Senior Project Engineer –** Conducted a Phase I Environmental Site Assessment that included evaluating

operations of a current tenant who would continue to operate in a shared space.

Deerfield [IS5]**Realty, Hazardous Material Facility Closure, Santa Clara, CA, Senior Project Engineer –** Monitored facility closure for a former circuit board manufacturer in Santa Clara, CA. This included regular site visits to monitor progress of cleaning and removing equipment and piping, as well as interaction with the regulating agency, the client, and the contractor.

Numerous [IS6]**Clients, San Francisco Bay Area, CA, Senior Project Engineer –** Conducted Phase I Environmental Site Assessments in accordance with ASTM 1527 and/or client-specified requirements. Included conducting site inspections, compiling and analyzing historical documents and information, conducting interviews, evaluating surrounding properties, and preparing final reports.

GEOTECHNICAL AND CONSTRUCTION TESTING:

Confidential[IS7] **Client, Geotechnical Assessments, Monterey County, California, Senior Project Engineer** – Conducted numerous geotechnical assessments for various areas in a planned residential development. Developed and presented geotechnical engineering recommendations for features including retaining walls, roads, and building foundations.

Cypress [IS8]**Marina Heights, Geotechnical Assessment, Marina, California, Senior Project Engineer** – Conducted a geotechnical assessment to challenge and modify grading recommendations presented by others.

Cypress [IS9]**Marina Heights, Construction Testing and Inspections Coordination and Recommendations, Marina, California, Senior Project Engineer** – Conducted, approved, and documented compaction and other testing completed during the construction of a residential development and attended weekly project status meetings.

Carmel [IS10]**Development Company, Construction Testing and Inspections Coordination and Recommendations, Monterey, California, Senior Project Engineer** – Conducted, approved, and documented compaction and other testing completed during the construction of a residential development. Included conducting special inspections for foundations and other structural elements. Also presented recommendations for managing specific issues encountered during the construction including solutions for substandard soil, embankment construction, and slope stability.

Confidential [IS11]**Client, Evaluation of Interlocking Concrete Pavement Failure, Pebble Beach, CA, Senior Project Engineer** – Conducted an investigation to evaluate causes of failure for two

surfaces paved with interlocking concrete pavers. Developed subgrade, baserock, and paver installation recommendations to repair the interlocking concrete paver failed surfaces as well as designing alternatives to replace the paver surfaces with concrete or asphalt.

Confidential [IS12]**Client, Construction Testing and Inspections, Parking Ramp Entrances, Pebble Beach, CA, Senior Project Engineer** – Conducted construction testing and inspections for two parking lot entrances including subgrade, baserock, and drainage systems.

Prior to O'Brien & Gere

ATC Associates Inc., Monterey, CA, Project Manager:

- Managed multiple clients and numerous projects simultaneously within specified budgets and timeframes
- Developed proposals and prepared project budgets
- Directed and prepared Phase I and Phase II Environmental Site Assessments
- Conducted dry cleaner and industrial compliance audits
- Performed ground water monitoring
- Prepared storm water pollution prevention plans and conducted storm water sampling
- Planned, directed, and oversaw underground storage tank removals and reporting
- Conducted leaking underground storage tank investigations
- Completed National Environmental Policy Act (NEPA) environmental assessments
- Prepared Property Condition Assessments
- Conducted geotechnical assessments
- Coordinated with various regulatory agencies
- Prepared hazardous material business response plans and business response plans

Pinnacle Engineering, Inc., Maple Grove, MN, Project Manager, and Staff Engineer/Project Engineer:

- Prepared and managed Phase I Environmental Site Assessments, Phase II Assessments, site investigation, remedial action plan, and remedial action plan reports
- Conducted geotechnical assessments and provided oversight of construction testing services
- Directed NEPA preliminary assessments, Environmental Assessment (EA) reports, including conducting site visits, compiling and presenting information, interacting with local and state government agencies, planning and moderating public

comment meetings, and responding to submitted comments

- Led brownfields redevelopment projects including obtaining more than $1.6M in brownfields redevelopment grants, coordinating with various regulatory agencies, hiring and supervising subcontractors, and developing and implanting confirmation sampling plans
- Managed Pinnacle's telecommunications services including directing and tracking more than 80 telecommunications projects simultaneously
- Developed a radio-frequency radiation (RFR) model, sampling program, and tracking and reporting database for a nationwide wireless telecommunications provider
- Prepared dredging permits including simultaneous coordination with seven regulatory agencies and local governments
- Developed Phase I, Phase II, and NEPA report templates
- Prepared air emissions permit applications and monitoring reports
- Directed storm water permit and storm water pollution prevention plan preparation
- Conducted industrial wastewater permitting, monitoring, and reporting
- Performed industrial compliance audits and facility assessments
- Prepared spill prevention, control, and countermeasure (SPCC) and emergency response plans
- Presented annual right-to-know training seminars

SPECIAL TRAINING

40-hour HAZWOPER Certification
Licensed Nuclear Density Gauge Operator

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers
American Water Works Association
Groundwater Resources Association of California

Kendall W. Price, CEG, REA

Senior Managing Scientist

TECHNICAL EXPERTISE

- Soil and ground water contamination investigations
- Geotechnical feasibility / remedial investigation
- Environmental arbitration
- Project management
- Operations management

PROJECT ASSIGNMENT

YEARS OF EXPERIENCE

With O'Brien & Gere: 2
With Other Firms: 35

EDUCATION

BS/1970/Geology;
San Jose State University

PROFESSIONAL REGISTRATIONS

Registered Geologist: CA, OR

Certified Engineering Geologist: CA, OR

Registered Environmental Assessor: CA

PROFESSIONAL PROFILE

Mr. Price has more than 37 years of professional experience. As a Senior Managing Scientist with O'Brien & Gere he establishes technical criteria, provides technical guidance, and directs the activities of large or unique project teams including regional office groups. He is responsible for preparing project authorizations, establishing budget costs and schedules for each project under supervision, maintaining and updating all CIS system reports, and periodically reviewing the fiscal status and schedule of projects. Mr. Price assumes a project management role in leading major multi-disciplinary project teams of staff members from other sections and/or offices within the Firm, and offers significant contributions in the areas of technical development and quality improvement. He also provides continuous follow-up on client relations by maintaining personal contact with the client throughout the duration of a project and following project completion.

REPRESENTATIVE PROJECTS

Prior to O'Brien & Gere

E2C, Inc., Project Management, Santa Clara, CA, President – Provided technical direction of the company, client contact, client support and the day-to-day scheduling of projects and field assignments. Met with local agencies regarding the implementation of technical directives issued by the various local agencies. Served in the capacity of expert witness on over 20 projects in both the environmental and geological fields. Served as court appointed consultant by the Special Master regarding the remediation of a hydrocarbon-impacted site. Worked directly with the local implementing agency and the counsels for both the property owner and the responsible party. Directed projects that included environmental studies ranging from Phase I Environmental Site Assessments to ground water investigations for both hydrocarbon and volatile organic compounds contamination, as well as geotechnical and geological investigation for commercial and residential development.

Environmental Geotechnical Consultants, Inc., Phase I Environmental Site Assessments, Hayward, CA, Associate – Prepared Phase I Environmental Site Assessments, working with lenders and their specific environmental requirements. Studies included investigation of leaking underground fuel tanks and completion of the associated reports. Performed field studies on sanitary landfill to investigate leachate migration. Performed studies and quarterly monitoring events to comply with the owner's reporting requirements to the State of California.

United Soil Engineering, Inc., Geotechnical and Geological Experience, Santa Clara, CA, Vice President – Performed oversight of projects related to geotechnical and geological

reporting. Scheduled field activities both pre and post studies that included field drilling, grading testing, and inspections. Responsible for field work and report preparations for landslide and fault related investigations.

International Engineering Co., Inc., Field Investigations, San Francisco, CA, Associate Engineering Geologist – Assisted in the establishment of a field investigation for the Inga-Shaba, D.C. Transmission Line in Zaire, Africa.

W.A. Wahler & Associates, Field Explorations, Palo Alto, CA, Staff Geologist – Conducted field explorations related to new commercial, industrial, residential and earth dam projects. Performed engineering property testing in the laboratory for final design evaluation. Performed extensive field investigation in Buffalo Creek, WV regarding a coal tailings dam failure, as well as similar studies in the southwest on copper tailings' impoundments.

PROFESSIONAL AFFILIATIONS

Association of Engineering Geologists
San Jose Engineers Club
SABER Society, San Jose State University
American Institute of Architects
California Groundwater Association

RBF CONSULTING

MEMORANDUM

To: Carl Niizawa, P.E., DEE City of Salinas

From: Harvey Oslick, P.E., CFM, CPSWQ, RBF Consulting

Date: July 13, 2009

Subject: Ag-Industrial Center Analysis of Drainage Impacts (JN 60-100253)

This memorandum provides an evaluation of hydrologic and water quality impacts related to the proposed Salinas Ag-Industrial Center.

HYDROLOGY AND WATER QUALITY

This section addresses impacts related to hydrology, storm drainage, flood control, and storm water quality associated with the proposed Salinas Ag-Industrial Center. It includes a discussion of existing hydrologic conditions in the project vicinity, an analysis of the potential impacts of the project on these conditions, and mitigation measures, if feasible, to reduce any identified significant impacts. The analyses of surface water runoff impacts on the local storm drainage system and the function of the proposed storm water quality treatment systems are based on analysis prepared by RJA as documented in the Preliminary Hydrology & Hydraulics Study, revised June 8, 2009, and the Preliminary Stormwater Control Plan, revised June 9, 2009, and supplemental analyses described in this section. Analysis of potential downstream drainage impacts on 100-year peak flow and flood level conditions at key locations along the Reclamation Ditch that could result from the proposed Salinas Ag-Industrial Center was performed by RBF Consulting and described in this section.

Standards of Significance

In accordance with the California Environmental Quality Act (CEQA), State CEQA Guidelines, and agency and professional standards, a project impact would be considered significant if the project would:

- violate any water quality standards or waste discharge requirements;
- substantially alter the existing drainage pattern of the site or area, including through the alteration of a stream or river;

- substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site;
- create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff;
- exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or
- place within a 100-year flood hazard area structures that would impede or redirect flood flows.

Policy and Regulatory Issues

Federal Clean Water Act
Water quality objectives for all waters in the State are established under applicable provisions of Section 303 of the Federal Clean Water Act (CWA) and the State Porter-Cologne Water Quality Control Act. The State Water Resources Control Board (SWRCB) and the Central Coast Regional Water Quality Control Board (RWQCB) are responsible for assuring implementation and compliance with the provisions of the CWA and the Porter-Cologne Water Quality Control Act.

Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. Section 304(a) requires the U.S. Environmental Protection Agency (EPA) to publish water quality criteria that accurately reflect the latest scientific knowledge on the kind and extent of all effects on health and welfare that may be expected from the presence of pollutants in the water.

State Water Resources Control Board
The California State Water Resources Control Board (State Board) and the nine Regional Water Quality Control Boards (RWQCB) have the authority in California to protect and enhance water quality, both through their designation as the lead agencies in implementing the Section 319 non-point source program of the federal Clean Water Act, and through the state's primary water pollution control legislation, the Porter-Cologne Act. The Central Coast (Region 3) office of the RWQCB guides and regulates water quality in streams and aquifers throughout the central coast of California and the Monterey Bay region through designation of beneficial uses, establishment of water quality objectives, and administration of the NPDES permit program for storm water and construction site runoff. The RWQCB is also responsible for providing permits under Section 401 of the CWA.

NPDES Storm Water Permit Program

The 1987 amendments to the Clean Water Act (Section 402[p]) provided for the U.S. EPA regulation of several new categories of non-point pollution sources within the existing NPDES. In Phase 1, NPDES permits were issued for urban runoff discharges from municipalities of over 100,000 people, from plants in industries recognized by the EPA as being likely sources of stormwater pollutants, and from construction activities that disturbed more than five acres. Phase 2 implementation, effective March 10, 2003, extended NPDES urban runoff discharge permitting to cities of 50,000 to 100,000, and to construction sites that disturb between 1 and 5 acres.

The EPA has delegated management of California's NPDES storm water permit program to the State Board and the nine RWQCB offices. The City is a Phase 1 municipality and has coverage under Order No. R3-2004-0135.

Construction activity on projects that disturb one or more acres of soil, or less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, must obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit, 99-08-DWQ). Construction activity subject to this permit includes clearing, grading, and disturbances to the ground such as stockpiling or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of a facility.

The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Program (SWPPP). The SWPPP should contain a site map(s) that shows the construction site perimeter, existing and proposed buildings, lots, roadways, storm water collection and discharge points, general topography (both before and after construction), and drainage patterns across the project. The SWPPP must list best management practices (BMPs) that the discharger will use to protect storm water runoff and the placement of those BMPs.

A new Construction General Permit may be adopted before the Salinas Ag-Industrial Center is constructed. The Salinas Ag-Industrial Center will be required to meet the requirements for construction activities that are effective at the time that coverage is obtained.

Industrial Permit requirements that apply to future projects on the parcels created within the *Plan Area* are not addressed in this document and would need to be addressed in the planning studies for the future projects, as needed.

City of Salinas General Plan

Regarding drainage, the 2002 City of Salinas General Plan states: "The City of Salinas Sewage and Drainage Master Plan estimates future demand for City sewage and drainage. Based on an evaluation of both systems, an improvement plan is outlined in the plan to meet future demand. The City will continue to implement the Sewage and Drainage Master Plan to ensure that adequate service is provided."

The General Plan includes Public Services and Facilities Services Standards which states: "New development to detain 100-year post-development flows while limiting discharge to 10-year pre-development flow, and new development to be consistent with the Storm Drain Master Plan and with City Code Flood Damage Prevention requirements."

Goal LU-8: Work with Monterey County Water Resources Agency (MCWRA) to provide a level of flood control protection that meets the needs of the community.

Policy LU-8.1: Actively coordinate and work with MCWRA to provide and maintain necessary flood control facilities.

Policy LU-8.2: Apply appropriate development standards and fees to improve present drainage systems and provide adequate stormwater detention basins and sedimentation ponds with new construction.

Policy LU-8.3: Require new development, to the extent feasible, to provide flood control facilities that are visually attractive and ecologically beneficial, and require on-going maintenance of the facilities by the development through a maintenance district.

Policy LU-8.4: Continue the use of Carr Lake as a reclamation/flood control facility in addition to its other functions in addressing water quality, enhancing traffic/circulation, and creating recreational opportunities.

City of Salinas Municipal Code

Chapter 29 of the Salinas Municipal Code, *Stormwater Management and Discharge Control*, is known as the "City of Salinas Stormwater Management and Discharge Control Ordinance" and states:

> The purpose and intent of this chapter is to ensure the health, safety and general welfare of citizens, and protect the water quality of watercourses and water bodies in a manner pursuant to and consistent with the requirements of the NPDES permit issued to the city of Salinas by the California Regional Water Quality Control Board and the Federal Clean Water Act (33 U.S.C. Section 1251 et seq.) by reducing pollutants in urban stormwater discharges to the maximum extent practicable and by effectively prohibiting nonstormwater discharges to the storm sewer drain system. The provisions of this chapter shall be implemented and enforced in such a manner as to prevent or reduce downstream erosion, to protect stream habitat and to implement controls for the post-development runoff and discharges. To that end, development within the jurisdictional authority of the city of Salinas shall be done in a manner consistent with low impact development guidance set forth in the stormwater development standards document established by the city of Salinas.

Chapter 31 of the Salinas Municipal Code, *Subdivisions*, requires:

> Stormwater runoff from the subdivision shall be collected and conveyed by an approved storm drain system. The storm drain system shall be designed for ultimate development of the watershed. The storm drain system shall provide for the protection of abutting and off-site properties that would be adversely affected by any increase in runoff attributed to the development. On-site and/or off-site storm drain improvements may be required to satisfy this requirement.

City of Salinas Stormwater Development Standards

The purpose of the Stormwater Development Standards (SWDS) is to assist project applicants with new stormwater management requirements set forth by the Central Coast Regional Water Quality Control Board (Regional Board) and the associated City of Salinas storm drainage and flood control requirements.

The Regional Board requires Low Impact Development (LID) to be applied to certain new and redevelopment projects to the maximum extent practicable (MEP) as a way to minimize the

impacts of urban runoff on receiving waters and to promote healthy watersheds. LID means the application of planning principles and design techniques that mimic natural predevelopment hydrology, promote healthy watersheds, promote infiltration where feasible, protect groundwater quality, and minimize impacts to receiving surface water bodies. LID practices are designed to capture and treat runoff from relatively frequent small storm events. LID designs and conventional storm drainage system infrastructure are needed to protect surface water quality, riparian and aquatic habitat and public health and safety during large storm events.

Section 1.4.1 identifies new development applicability. The proposed project applicability is covered by the inclusion of street, roads, highways, and freeways. The category includes any paved surfaces 5 acres or greater used by automobiles, trucks, motorcycles, and other vehicles.

The Regional Board passed a motion on December 5, 2008 which approved the SWDS with the following required numeric criteria:

> All applicable projects per the criteria listed in Section 1.4.1 shall be required to meet the following numeric requirements:
>
> 1. All new development projects shall direct runoff from 100% of the area of new impervious surfaces into BMPs meeting the requirements of these standards. This is equivalent to 0% Effective Impervious Area. Exceptions may be allowed for driveways when grade breaks are located to minimize the area draining to the street. Plans for new development projects not meeting this requirement will only be approved if the applicant demonstrates, to the satisfaction of the City Engineer, that the full achievement of such is impracticable.
>
> 2. All redevelopment projects shall direct runoff fro a minimum of 95% of the area of new impervious surface area into BMPs meeting the requirements of these standards. This is equivalent to 5% or less Effective Impervious Area. Plans for redevelopment projects not meeting this requirement will only be approved if the applicant demonstrates, to the satisfaction of the City Engineer, that the full achievement of such is impracticable.
>
> 3. The project applicant shall prepare an exhibit showing the entire site divided into discrete drainage areas and demonstrate in submitted site stormwater control plans (SWCPs) that for each discrete drainage area the following numeric criteria are met:
>
> > A. Volume Reduction Requirements: Runoff from impervious areas produced by the first-24-hour 85th percentile storm (currently 0.6 inches of rainfall for the City of Salinas) is either (1) retained, or (2) detained and allowed to infiltrate and/or seep away slowly, as occurs in a bioretention facility designed with a minimum 18 inches of soil, a design surface loading rate not exceeding 5 inches/hour, and a total volume (including surface detention, soil interstices, and subsurface storage) equal to the volume of runoff produced by the first 0.6 inches of rainfall on the drainage area tributary to the facility.
> >
> > B. Water Quality Treatment Requirements: All treatment BMPs must be adequately sized to treat runoff from the designated drainage area per the following numeric criteria:
> >
> > > 1) All flow based BMPs shall be sized, at minimum, to the maximum flow rate of runoff from the designated drainage area using the 85th percentile hourly rainfall intensity multiplied by two. For the City of Salinas, this equates to 0.22 inches per hour.

2) All volume based BMPs shall be sized, at minimum, for the volume of runoff produced by the drainage area from a 24-hour 85th percentile storm event. For the City of Salinas, this equates to a rainfall depth of 0.6 inches.

C. Project applicants must comply with 3., 3.A. and 3.B. above by following and applying the BMP design methodologies, guidelines and considerations in Section 4, Stormwater Design Considerations.

4. In addition, for all new development and redevelopment projects creating or replacing one acre or more of impervious surfaces, the project applicant shall either:

A. Demonstrate post-project runoff peaks and durations do not exceed pre-project runoff peaks and durations for storm events up to and including the 10-year 24-hour event with a continuous simulation computer model of runoff in the pre-project and post-project condition using 30 years or more of local hourly rainfall data, or

B. Conduct an assessment incorporating sediment transport modeling across the range of channel-forming flows that demonstrates to the City Engineer's satisfaction that the project flows and sediment reductions will not detrimentally affect the receiving water. Channel-forming flows include up to the 10-year event unless the assessment demonstrates otherwise.

Section 2 of the SWDS describes LID and stormwater management concepts and provides general information related to selecting appropriate stormwater management features for specific project types.

Section 3 of the SWDS provides guidance related to configuring many different types of BMPs.

Section 4 of the SWDS provides guidance on typical stormwater pollutants and meeting numeric criteria using specific design practices.

Section 5 of the SWDS provides criteria for the design of conventional stormwater infrastructure and supercedes the 2004 City Design Standards. This section points out:

> The Reclamation Ditch system is very complex and is generally deficient in capacity. Extensive flooding occurred in February 1998 during what has been estimated to be approximately a 25-year storm event. The City and Monterey County Water Resources Agency (MCWRA) are working together to develop funding programs and projects to correct existing deficiencies and accommodate future development. The complexities of the system make it challenging to identify appropriate flood control mitigation and corrective measures.

Section 5.2 of the SWDS states: "In some situations, development may not be required to include detention to release post development 100-year runoff at no more than the peak pre-project 10-year discharge. Requirements to obtain a waiver are listed in Section 5.6, *Computer Simulation Methods*." Section 5.6.3 of the SWDS states:

> Under special circumstances, applicants may chose to perform analysis to demonstrate the appropriateness of alternative criteria to design facilities to mitigate high flow impacts on receiving waters. The model developed for the MCWRA Zone 9 and Reclamation

Ditch Drainage System Operations Study (Schaaf & Wheeler 1999) shall be used as a basis for evaluating impacts on receiving waters.

Monterey County Water Resources Agency Reclamation Ditch Watershed Impact Fee/Nexus Study Summary Report (Final Draft, August 2006)

The MCWRA Reclamation Ditch Watershed Impact Fee/Nexus Study Summary Report (*Draft Nexus Study*), while not adopted, provides useful background information related to the current state of the Reclamation Ditch System. The *Nexus Study* provides a history of the Reclamation Ditch and provides a summary of studies related to it. The *Nexus Study* includes information about Zone 9 (the Benefit-Assessment District for the Reclamation Ditch drainage area, though not coincident with its watershed boundary) revenues and expenses. Ultimately, the Nexus Study proposes a basis for system-wide improvement costs and proposes an allocation of these costs to anticipated new users based on future impervious area.

The *Draft Nexus Study* states that the Reclamation Ditch System currently does not meet the public's demand for flood control to protect lives and property. The February 1998 storms and flooding demonstrated the weaknesses of the Reclamation Ditch System and the importance of upstream lakes, particularly Carr Lake, for attenuating storm flows. The peak floodwater surface elevation in Carr Lake was estimated to have come within 0.5 feet of the roadway surface for Highway 101 near Sherwood Drive. Flooding occurred inside of the Sherwood Mobile Home Park (lasting about 11 days), at Kern Street and East Market, and on the west side of Highway 101 in the Merced/Neil Street area. Severe bank erosion occurred throughout the Reclamation Ditch System, including area within the City (at Alisal/Griffin Street and a North Main Street) and downstream of Boronda Road. The resulting sedimentation settled in channel inverts and dry lakes, such as Carr Lake, reducing capacity even further.

The February 1998 flooding resulted in a renewed and concerted effort by the MCWRA, the City of Salinas, and representatives of the agricultural and environmental communities to improve the Reclamation Ditch System. The effort has focused on public safety and flood protection, improved operations and maintenance, better access to the channel, NPDES permitting and water quality issues, watershed assessment and management programs, mitigation of impacts of future development tributary to the Ditch, and increased funding for basic operations, maintenance and repairs, and for a comprehensive long-term system improvement program.

The *Draft Nexus Study* states: "To mitigate the impact of increased runoff from new development activities, percolation of increased volume in retention basins is necessary. The retention basin should empty, by local percolation, two day after the 3-day 100-year storm."

The *Draft Nexus Study* included an estimate of $126 million for Reclamation Ditch System improvement costs. This estimate was based on updating the reconnaissance level cost estimate from the Zone 9 and Reclamation Ditch Drainage System Operations Study (*1999 Operations Study*) and includes planning, land acquisition (based on the 2005 *Right-of-Way Analysis Report* for the Ditch within the City of Salinas), mitigation, addition of a sedimentation basin on Gabilan Creek, and more stringent permitting and environmental clearancec costs. The method proposed to apportion the costs of capital improvements is to divide 75% of the projected cost by the anticipated new impervious area to be constructed within the Reclamation Ditch watershed. The *Draft Nexus Study* calculated the Impact Fee to be $0.40 per square-foot of new impervious surface within the Reclamation Ditch watershed area.

Environmental Setting

Surface Water Hydrology

Regional Setting

The *Plan Area* is tributary to the Monterey County Water Resources Agency (MWCRA) Reclamation Ditch, which flows through the City from the southeast to the northwest. The Reclamation Ditch is a man-made drainage canal that was primarily constructed in the late 1910s to drain lands for agricultural purposes; but, urban areas of Salinas have, and continue to become increasingly, dependent on the Reclamation Ditch System for flood protection.

The upstream end of the Reclamation Ditch is in Smith Lake southeast of the *Plan Area*, and the Reclamation Ditch drains through Heinz Lake immediately east of the *Plan Area*, and then through Carr Lake in the center of the City of Salinas. At Carr Lake, the tributary area of the Reclamation Ditch is approximately 101 square-miles and includes the watersheds of Alisal, Natividad and Gabilan Creeks. The Reclamation Ditch then follows a path to the northeast of Highway 183 as it flows out from Carr Lake and past a number of other historic lakes and swamp areas before reaching its terminus at Tembladero Slough near Castroville. Tembladero Slough drains Merritt Lake past Castroville into the Old Salinas River. The Old Salinas River drains into Moss Landing Harbor through the Potrero Road Tide Gates. The total tributary area of the drainage system tributary to the Potrero Road Tide Gates is approximately 157 square-miles. Runoff travels nearly 19 miles from the *Plan Area* to Moss Landing Harbor.

Project Setting

Drainage Areas

The topography of the *Plan Area* is generally flat with an average slope of 0.2% from west to east and essentially the entire *Plan Area* drains to an existing 24-inch diameter culvert under Abbott Street to the northeast toward the Reclamation Ditch. There is also approximately 78 acres of crop land south of the *Plan Area* that drains across the *Plan Area* toward this culvert. Another 24-inch diameter culvert conveys runoff from the northeast side of Abbott Street to the northeast side of the adjacent Union Pacific Railroad tracks. Record drawings from the City show a field inlet on the east side of the Union Pacific Railroad tracks connecting to an existing 72-inch storm drain via a 15-inch line. The 72-inch line discharges into the Reclamation Ditch at a bend that is approximately 1,300 feet from the entrance to the culvert at the *Plan Area*.

Additional adjacent areas were included in the drainage studies for the proposed project to evaluate potential impacts. Approximately 192 acres to the northwest of the *Plan Area* tributary to the 72-inch diameter outfall to the Reclamation Ditch to which the *Plan Area* is proposed to drain was evaluated to assess impacts to the primary storm drainage pipe system to which the *Plan Area* plans to connect. Approximately 42 acres to the south of the intersection of Abbott Street and Harris Road that drains to a storm drain that connects to a 48-inch diameter outfall to the Reclamation Ditch was also evaluated because the proposed plan includes draining about six acres of the *Plan Area* to it.

Soil Conditions

The site is predominantly covered in soils with high runoff potential. The *Plan Area* covers approximately 257 acres, essentially all of which is in straight row truck crop production, except for two small structures. An assessment of site soil runoff potential was obtained from the

USDA Natural Resources Conservation Service Web Soil Survey 2.1 and is included in Attachment 1. Approximately 83 percent of the site is rated as hydrologic soil group D with areas of both Clear Lake clay and Cropley silty clay. The remainder of the site is rated as hydrologic soil group C with Salinas clay loam. Group C soils generally impede the downward movement of water and have a slow rate of water transmission. Group D soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. Therefore, a relatively large portion of rainfall landing on the existing site can be expected to become runoff, especially during large storm events when the soil would become saturated during the initial period of the storm.

LandSet Engineers performed percolation testing on site to investigate potential capacity to infiltrate stormwater runoff on the project site. This investigation is documented in Results of Percolation Testing for Salinas Ag-Industrial Business Park, dated February 2009. The conclusions of this investigation include:

1. Historically, the site was an area of impoundment where naturally occurring runoff accumulated, as opposed to infiltrated.
2. The percolation rates obtained during this study are very slow and insufficient to appreciably manage the volume of storm water runoff based on the anticipated areas of proposed impervious surface.
3. The soils underlying the site have a moderate to high susceptibility for liquefaction. The infiltration and injection of surface waters into the subsurface strata would likely result in the unintended consequence creating additional geotechnical hazards where they do not currently exist.

Existing Storm Drainage System

The *Plan Area* and surrounding developments drain into existing City of Salinas owned and maintained storm drain facilities located in Abbott Street and Harris Road. Existing storm drain lines ultimately converge into two conveyance lines: a 72-inch main and a 48-inch main that convey flows underneath the Union Pacific Railroad tracks and Highway 101 and outfall into two separate locations along the Reclamation Ditch.

Along Abbott Street, where the project proposes to connect to the existing storm drain tributary to the 72-inch outfall, the pipeline has a diameter of 60 inches. The proposed project includes extending the storm drain along Harris Road by installing a 24-inch diameter pipeline to the southwest of an existing 36-inch diameter pipeline.

The City of Salinas Storm Water Master Plan (CDM, May 2004) indicates that storm drains along Burton Avenue, Harkins Road and Dayton Street, and an area between Highway 101 and the Union Pacific Railroad tracks, are impacted by Reclamation Ditch backwater. These storm drains are tributary to the same 72-inch storm drain outfall to which the *Plan Area* drains. From page 5-8 of the Master Plan:

> …there are some industrial areas draining to the Reclamation Ditch where the hydraulic model predicts overflows for the 20-year design storm. At these locations, there is adequate pipe capacity to convey the design flows. The overflows are due to high backwater conditions in the Reclamation Ditch. If Reclamation Ditch water surface elevations were lower by 3 to 5 feet, then no overflows would occur.
>
> The backwater conditions affecting the industrial area have not been a major impact, since many are food processing related industries that conduct their winter operations at other locations, e.g., southern California and Arizona, or have reduced winter operations.

However, it may become more of an issue in the future if more industries locate in the area and continue operations through the winter season.

Analysis of potential impacts of the proposed project indicates that under some circumstances peak flood levels at some key locations in the vicinity of the project may be controlled by pipe capacity and not tailwater conditions. It was determined that additional flows from the project site could impede discharge from adjacent areas along Burton Avenue and could cause water surface elevations in these adjacent areas to increase. RJA calculated that there would be no impact in a 20-year storm. RBF calculated that the 100-year water surface at the west end of Dayton Street could increase by 0.05 feet as a result of the project.

Existing FEMA Flood Insurance Rate Map Zones

The entire project site area is designated as a FEMA Zone X (shaded). Zone X (shaded) areas are areas of moderate flood hazard, usually the area between the limits of the 100-year and 500-year floods. The effective Flood Insurance Rate Map (FIRM) showing the site and its surrounding area identifies a corridor along the Reclamation Ditch and an area over Heinz Lake as being within an approximate Zone A, with no base flood elevations being identified. A FIRMette (partial FIRM) of the proposed project location is included in Attachment 2.

Though FEMA does not provide regulatory flood elevations along the Reclamation Ditch in the vicinity of the proposed project, the Zone 9 and Reclamation Ditch Drainage System Operations Study, prepared by Schaaf & Wheeler for MCWRA in 1999 lists a 100-year water surface elevation of 56.8 feet (NGVD29) for Heinz Lake. The most recent Reclamation Ditch system model provided to the City by MCWRA indicates a slightly lower elevation. This is likely due to computational differences between the outdated UNET computer program and HEC-RAS. Site drainage analysis for the 100-year storm based on appropriate tailwater conditions from the latest available information from MCWRA would be appropriate to establish acceptable building elevations relative to the 100-year flood.

Project Analysis

Analysis of Potential Impacts on Off-Site 100-year Flood Conditions

Pre-project Conditions

The project site includes approximately 263 acres of agricultural land with approximately 78 additional acres of agricultural land tributary to it. These on-site and off-site areas currently drain toward a low point along Abbott Street. RJA provided survey information that shows a 24-inch culvert at this location that discharges toward a 24-inch culvert under the railroad tracks to the northeast (see existing culvert information in Attachment 3). Though these culverts may currently be partially clogged, this analysis is based on them being at full capacity because no environmental analysis would be required to perform maintenance on the culverts. The off-site and on-site areas make-up approximately 341 acres of primarily crop land that combines with runoff from approximately 192 acres of adjacent areas for a total of about 533 acres that ultimately drains into the Reclamation Ditch through a 78-inch outfall on the northeast side of Highway 101.

Based on topographic mapping with 2-foot contours provided by the City, the existing site would detain significant volumes of runoff from large storm events while it is routed through the 24-inch culvert. This storage is included in the pre-project runoff model using an area versus elevation

curve, estimated as presented in Table 1. The low point of the storage curve corresponds to the upstream invert of the culvert. The analysis indicated a maximum on-site water surface elevation of 57.4 feet and a peak discharge through the existing culvert of 27.4 cubic feet per second (cfs) during a 72-hour, 100-year storm.

Table 1: Existing Site Storage

Elevation (feet – NGVD)	**Area (acres)**
53.65	0.01
55.30	0.1
57.30	16.8
59.30	65.9

Post-project Conditions

Proposed site hydrology and hydraulic conditions are described in the Preliminary Hydrology & Hydraulics Study for the Salinas Ag-Industrial Center, revised June 8, 2009, prepared by RJA. RBF Consulting used existing condition off-site drainage system information (including drainage area delineations and existing storm drain configuration) developed by RJA as a basis for modeling the existing storm drainage system to which the proposed development would connect.

RJA performed detailed hydrologic analysis of the proposed system, including the proposed detention facilities, and calculated a 100-year runoff hydrograph (based on the 72-hour storm developed by Schaaf & Wheeler for the *1999 Operation Study*) from the site into the proposed connection point to the City's storm drainage system. Approximately 258 acres of the proposed 263 acre development will drain through the connection point for which the hydrograph was provided. RBF Consulting used the post-project 100-year site discharge hydrograph provided by RJA to evaluate potential impacts of the project on receiving waters. The peak discharge from the site into the City's system as indicated by the site outflow hydrograph provided by RJA is 44.2 cfs. Though this may be considered to be a 61 percent increase over the existing condition 100-year peak discharge from the site of 27.4 cfs, this increase is not as significant as it appears because it does not coincide with peak flows in the regional system that are more volume dependent. Analysis by RBF using XPSWMM shows the 100-year peak discharge into the Reclamation Ditch increasing from 126 cfs to 130 cfs (only a 3 percent increase) about 35 hours before the peak stage in Heinz Lake occurs.

RBF Consulting used two computer modeling programs to evaluate the proposed project. The computer program XPSWMM was used to evaluate the proposed project impacts on the local storm drainage system and the computer program HEC-RAS was used to evaluate the proposed project impacts on the regional drainage system. The results of the XPSWMM analysis are presented in the "Local Drainage System" section. The results of the HEC-RAS analysis at key locations within the regional drainage system are summarized in Table 2. .

Table 2: Potential Impacts of the Proposed Project on Regional 100-Year Flood Conditions

Location	Ex. Cond.	Increase	Unit
Carr Lake Stage	45.308	0.001	feet
Heinz Lake Stage	56.612	-0.002	feet
John St Flow (RM 15.888)	869.6	-0.17	cfs
Main St Flow (RM 13.975)	1219.4	0.1	cfs
San Jon Rd Flow (RM 9.869)	1153.5	0.2	cfs

Note: The existing condition values indicated are provided for comparative analysis based on baseline hydraulic models and are not intended to infer an absolute accuracy in 100-year flow or stage conditions.

Site Runoff Volume Analysis

Calculations were performed as part of this evaluation to provide an assessment of the potential impact of the proposed project on site runoff volume. An assessment of site runoff volume is appropriate because impacts to flooding along Reclamation Ditch are sensitive to discharge volumes, not peak discharge rates. Sensitivity to runoff volume is due to the location of Salinas within the Reclamation Ditch watershed and the system of lake beds that provide effective regional detention of floodwaters. This system configuration makes it so that peak flood conditions along the Reclamation Ditch from major storm events are generally expected to occur more than a day after local peak inflows.

Site runoff was calculated using SCS methodology to determine that portion of rainfall that becomes runoff. RJA opted to use composite curve numbers – one curve number intended to reflect the net effect of various soil and cover conditions within each drainage area – for their analysis. The values selected by RJA appear to be reasonable for the purposes of the downstream impact analysis.

Curve numbers vary depending on antecedent moisture conditions (AMC) and are typically based on AMC II, unless data dictates otherwise. For this study, AMC 1.5 was used based on calibration appropriate for the 72-hour storm that was performed as part of the Zone 9 Study. For the pre-project condition, RJA calculated a composite curve number of 76.0 for the site. Based on the values in Appendix D of the RJA report, the proposed project composite curve number for the 258 acres tributary to the location for which RJA provided the 100-year hydrograph was determined to be 93.4.

Curve numbers (*CNs*) are used to calculate effective rainfall (R_e, in inches), which is that portion of incident rainfall (R_i, in inches) that becomes runoff according to the formula:

$$R_e = \frac{(R_i - 0.2S)^2}{R_i + 0.8S}, \text{ where } S = \frac{1000}{CN} - 10$$

The incident rainfall for the 100-year, 72-hour storm is 5.2 inches. Based on a curve number of 76.0, the effective rainfall would be 2.7 inches. Based on a curve number of 93.4, the effective rainfall would be 4.4 inches. Therefore, the runoff volume from the proposed development can be expected to increase by approximately 1.7 inches, or about 37 acre-feet over the entire project during a 100-year, 72-hour event.

Local Drainage System

The proposed project includes directing runoff into the City's storm drainage system upstream from where the area currently drains, and increasing the rate and volume of discharges into the system. Though the City's Stormwater Master Plan does not indicate any existing deficiencies between the proposed point of connection to the outfall into the Reclamation Ditch, there are noted deficiencies in the area that could be made more severe by the proposed project.

Flood levels at three locations, based on the 72-hour, 100-year computer simulations performed by RBF Consulting, are compared in Table 3 to assess the potential significance of the proposed project on the local flooding, aside from any rise in flood levels at Heinz Lake. (Both the existing and the proposed local storm drain analyses were performed using the same existing condition downstream stage hydrograph at the 72-inch outfall to the Reclamation Ditch.)

Table 3: 100-Year Water Surface Elevations at Selected Off-Site Locations

Node Name (from RJA)	Ground Elevation (feet)	100-Year Water Surface Elevation (feet)	
		Existing Conditions	Proposed Conditions
PO-9610-004	53.6	56.49	56.49
PO-9620-020	56.8	58.10	58.15
PO-9630-004	56.3	57.07	57.08

A review of the flow and stage hydrographs indicates that the discharge rate from the project would have a small impact on the local peak flood levels at nodes PO-9620-020 (Harkins Road) and PO-9630-004 (Dayton Street). Though the Stormwater Master Plan indicates that deficiencies at these locations result from Reclamation Ditch backwater conditions, this current analysis indicates that peak stage at these locations can occur well in advance of, and significantly higher than the ultimate peak stage in the Reclamation Ditch that would occur later. These peak stages are above round at the nodes and indicate a degree of flooding. The peak stage at PO-9610-004 is impacted by Reclamation Ditch backwater and the 100-year peak water surface elevation at that location (near Eden Street) would not rise as a result of the subject project based on the events analyzed.

Analysis of Potential Impacts on Stormwater Quality

Negative impacts on stormwater quality can be caused by new pollutants originating on the project site, or by increased discharge rates inducing downstream erosion, thereby increasing sediment loads. Additionally, changing geomorphologic characteristics of streams can also induce downstream erosion such as can occur when detention basins are added which can cause sediment deposition and a subsequent sediment deficit in receiving waters that can induce erosion. The City's SWDS address these issues and identify means to mitigate for these potential water quality impacts.

The Preliminary Stormwater Control Plan (P-SWCP), for the Salinas Ag-Industrial Center (RJA, March 2009) was evaluated to determine if its implementation would result in the subject project complying with the SWDS, as revised by the revisions required by the Regional Water Quality Control Board at the RWQCB meeting on December 5, 2008. This section explains the evaluation that was performed.

The P-SWCP shows all areas of the proposed project draining through BMPs, thereby meeting the condition to have 0% Effective Impervious Area for new development as required by Numeric Criteria 1. Numeric Criteria 2 applies to redevelopment projects and does not apply to the *Plan Area*.

The applicant identified typical discrete drainage areas tributary to typical bioretention areas and calculated the number of areas that will be used to satisfy the requirement of Numeric Criteria 3. These areas can be refined, and each should be delineated as part of the design process. The discrete drainage areas include portions of the parcels that will develop in the future. Detailed design of these parcels will require verification that any variation from the assumptions included in the SWCP are appropriately addressed.

The applicant satisfied Numeric Criteria 3.A. by providing storage for 1.582 times the runoff resulting from a 24-hour 85th percentile storm depth of 0.6 inches. Because the selected bioretention system configuration provides water quality treatment by filtration and provides sufficient filter area to meet the loading rate criteria of 5 inches per hour with a 24-hour drawdown time, application of the multiplier of 1.582 for a 24-hour volume is appropriate. (Note: The SWDS indicate that a minimum drawdown time of 48-hours and corresponding multiplier of 1.963 should be used. However, the longer drawdown time requirement is appropriate when the primary treatment method is by extended detention; however, the shorter drawdown time and correspondingly smaller volumes should be acceptable because treatment is being provided by filtration, not settling.)

By meeting Numeric Criteria 3.A. with a filtering bioretention system, the requirements of Numeric Criteria 3.B have been met. Therefore, as required by Numeric Criteria 3.C, the applicant's plan complies with Numeric Criteria 3., 3.A. and 3.B.

The proposed project must either satisfy Numeric Criteria 4.A., demonstration of peak flow and duration mitigation using long duration simulation, or Numeric Criteria 4.B., provide a sediment transport assessment that demonstrates that the project flows and sediment reductions will not detrimentally affect the receiving water. The applicant addressed 4.B by performing an assessment (Sediment Transport Assessment and Evaluation, Engeo, February 27, 2009) that concluded:

> "Because stormwater discharge is transmitted to the Monterey Bay by means of an engineered flood control channel with an extremely low gradient, a cumulative impact from the new development on the net rate of downstream erosion is considered to be highly unlikely and the project should therefore be exempt from the hydromodification standard, and related mitigation requirements."

As indicated by the Engeo report, and confirmed by a long history of sediment removal from Carr Lake for maintenance, including portions of Carr Lake downstream from the subject project such as within the Highway 101 culvert upstream from the Main Street culvert, sediment deposition in the Reclamation Ditch is a significant issue. Furthermore, MCWRA has evaluated multiple locations for potential sedimentation basins to reduce the sediment load within the Reclamation Ditch system, both upstream and downstream from Carr Lake. Therefore, sediment reduction (reduced erosion) from the site, which is expected with the site's conversion from agricultural land to industrial use with the implementation of stormwater quality BMPs, would not significantly impact sediment transport in the Reclamation Ditch. The City may consider that this evaluation meets the intent of Numeric Criteria 4.B., even though sediment transport modeling over a range of channel forming flows was not actually performed.

Considering the option to perform long duration simulations of detention for evaluation of peak flows and durations (to meet Numeric Criteria 4.A. instead of 4.B.), a review of readily available rainfall datasets and correspondence with MCWRA identified only fragmented hourly rainfall

data and concluded that performance of Salinas-specific long duration flow-duration analysis would require synthesis of an appropriate rainfall data set from various available and synthesized records. RBF completed a task to synthesize an appropriate 30-year hourly rainfall data set for the City of Salinas in June 2009. A synthetic rainfall year that includes the 100-year 72-hour design storm was also developed. However, this data set was not available for the preliminary studies for the Ag-Industrial Center, and it may not be appropriate to apply Numeric Criteria 4.A to the project site based on the hydromodification potential of the receiving waters.

As indicated in Appendix F of the Preliminary Hydrology and Hydraulics Study, revised June 2009, the plan includes approximately 55 acre-feet of total detention capacity for the 257 acre plan area. This volume would provide more than 0.24 acre-feet per proposed impervious acre. This volume is adequate to meet the site water quality treatment requirements and can limit potential impacts to the regional drainage system to the degree indicated based on the assumptions made.

Impacts and Mitigation Measures

This section is a summary of the impacts and mitigation measures discussed in the prior Analysis section. The impact evaluation is based on a review of drainage analyses provided by RJA and supplemental analyses performed by RBF Consulting.

Less Than Significant Impact – Changes in Surface Water Runoff or Drainage Patterns that Cause Off-Site Flooding in Heinz Lake, Carr Lake and/or the Reclamation Ditch.

The proposed project would convert approximately 257 acres of agricultural fields to an agriculture-industrial complex that is anticipated to become between 85 and 90 percent impervious. With the proposed detention that has been planned for the project, the increased volume of runoff from the site would not be expected to cause a significant increase in 100-year flood conditions over that which would have occurred with the site in its existing condition. It is estimated that runoff from the *Plan Area* will increase by 37 acre-feet for the 72-hour, 100-year design storm event as a result of the proposed project. The site plan includes 55 acre-feet of detention to meet water quality objectives and mitigate for this increased volume of runoff. The analysis of potential impacts indicated the proposed project could cause the 72-hour, 100-year design storm event peak flood level at Carr Lake to increase by 0.001 feet.

To ensure that future individual project improvements are designed and function consistent with the Preliminary Hydrology & Hydraulics Study for The Salinas Ag-Industrial Center (June 2009) the following measure should be included as a condition of approval for all subsequent projects proposed within the Plan Area:

> Prior to final site plan approval for individual on-site parcels, individual project applicants shall demonstrate to the satisfaction of the City Engineer that recommended on-site drainage improvements identified in the Preliminary Hydrology & Hydraulics Study for The Salinas Ag-Industrial Center (June 2009) are included on final approval plans. Final verification of the proposed on-site collection system shall include, but not be limited to, additional hydrologic modeling of the site and the regional system to ensure that the design configuration of flow controls and detention volume function in a manner consistent with the identified improvements.

Less than Significant Impact – Soil Disturbance and Erosion.

Delivery, handling and storage of construction materials and wastes, as well as use of construction equipment on-site during the construction phase of the project, would introduce a risk for stormwater contamination that could negatively impact water quality. Refueling and the parking of construction equipment and other vehicles on-site during construction may result in spills of oil, grease or related pollutants that may discharge into on-site drainages. Improper handling, storage or disposal of fuels and materials or improper cleaning of machinery could also cause water quality degradation. Gross pollutants such as trash, debris, and organic matter are additional potential pollutants associated with the construction phases of the proposed project. Potential impacts include health hazards and aquatic ecosystem damage associated with bacteria, viruses and vectors, which can be harbored by pollutants.

Development of the proposed project would involve construction activities on the entire 257 acre site, such as site clearing, mass grading, excavation and trenching, which can adversely affect water quality by increasing soil erosion rates in the area of the proposed project. The exposure of raw soil to the natural elements (e.g. wind, rain) during grading operations may affect surface runoff by increasing the amount of silt and debris carried by stormwater runoff.

Project implementation would require compliance with the National Pollution Discharge Elimination System (NPDES) requirements for construction of site storm water discharges. This would include preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP) that specifies how the discharger will protect water quality during construction activities. These measures are to include but are not limited to the following: design and construction of cut and fill slopes in a manner that will minimize erosion, protection of exposed slope areas, control of surface water flows over exposed soils, use of wetting and/or sealing agents and/or sedimentation ponds, limiting soil excavation in high winds, construction of berms and runoff diversion ditches, and use of sediment traps, and other construction site BMPs as may be considered to be appropriate in accordance with the latest version of the California Stormwater Quality Association Stormwater Best Management Practice Handbook. By complying with the NPDES requirements, A would be assured through the City's standard development review process, potential soil erosion impacts associated with the proposed project would be less than significant.

Potentially Significant Impact – Operational Urban Non-Point Source Contaminants.

Roadways and industrial activities can generate a wide range of potential pollutants that can enter the storm drainage system and be conveyed to receiving waters. Pollutants of concern associated with the proposed development include silt and sediment, oil and grease, floatable trash, nutrients (including fertilizers), heavy metals, pathogens (such as coliform bacteria), and other substances. Discharge of these substances, referred to as "controlled pollutants," into waters of the United States is prohibited.

Implementation of storm water control plans for each phase of the project that include use of Low Impact Development (LID) techniques, such as swales with bioretention elements and other BMPs to treat essentially all runoff from the project site, based on detailed final design (including discrete drainage areas and flow control calculations) and including any applicable Industrial Stormwater Permit requirements, would ensure that the proposed project would have a less than significant impact on long-term urban non-point source pollution.

References

California Regional Water Quality Control Board Central Coast Region, "Attachment to Resolution R3-2008-0068," as adopted December 5, 208.

CDM City of Salinas Storm Water Master Plan. May 2004.

Engeo Sediment Transport Assessment and Evaluation. February 27, 2009.

Kennedy/Jenks Consultants The City Of Salinas Stormwater Development Standards For New Development and Significant Redevelopment Projects. October 2008

LandSet Engineers, Inc. Results of Percolation Testing for Salinas Ag-Industrial Business Park. February 2009.

RJA Preliminary Hydrology & Hydraulics Study for The Salinas Ag-Industrial Center. February 2009.

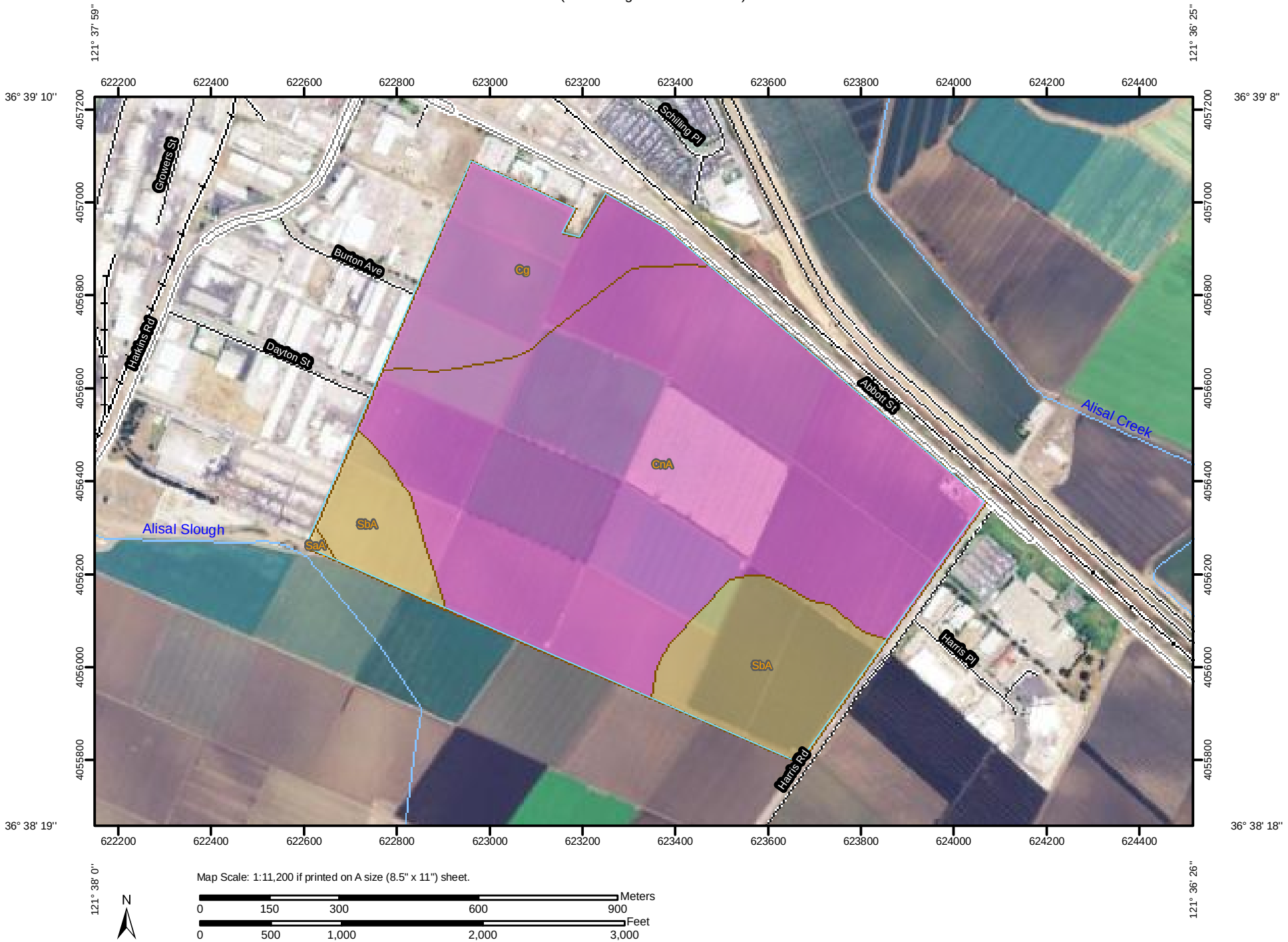
RJA Preliminary Stormwater Control Plan for The Salinas Ag-Industrial Center. March 2009.

Schaaf & Wheeler Zone 9 and Reclamation Ditch Drainage System Operations Study. May 1999.

Schaaf & Wheeler Monterey County Water Resources Agency Reclamation Ditch Watershed Impact Fee/Nexus Study Summary Report. Final Draft, August 2006.

ATTACHMENT 1

Hydrologic Soil Group—Monterey County, California
(Salinas Ag-Industrial Center)



MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Units

Soil Ratings

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Political Features

- Cities

Water Features

- Oceans
- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

MAP INFORMATION

Map Scale: 1:11,200 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 10N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Monterey County, California
Survey Area Data: Version 8, Sep 26, 2008

Date(s) aerial images were photographed: 6/13/2005

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Hydrologic Soil Group— Summary by Map Unit — Monterey County, California				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
Cg	Clear Lake clay, moderately wet	D	37.3	14.4%
CnA	Cropley silty clay, 0 to 2 percent slopes	D	178.8	68.8%
SaA	Salinas loam, 0 to 2 percent slopes	C	0.4	0.2%
SbA	Salinas clay loam, 0 to 2 percent slopes	C	43.4	16.7%
Xc	Xerorthents, loamy	B	0.0	0.0%
Totals for Area of Interest			**260.0**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

ATTACHMENT 2

121°37'30"
36°39'22.5"

2130000 FT

ZONE X

5795000 FT

JOINS PANEL 0236

City of Salinas 060202

SCHILLING PL

EDEN ST

ZONE X

ABBOTT ST

GU2217

LIMIT OF STUDY

MONTEREY COUNTY
CITY OF SALINAS

ZONE A

Reclamation Ditch

ZONE X

ZONE A

ZONE X

GU2219

SOUTHERN PACIFIC RAILROAD

101

ZONE A

ZONE X

ZONE X

GU2216

HARRIS RD

ZONE A

MAP SCALE 1" = 500'

250 0 500 1000

FEET

METER

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0238G

FIRM

FLOOD INSURANCE RATE MAP

MONTEREY COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 238 OF 2050
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
MONTEREY COUNTY	060195	0238	G
SALINAS, CITY OF	060202	0238	G

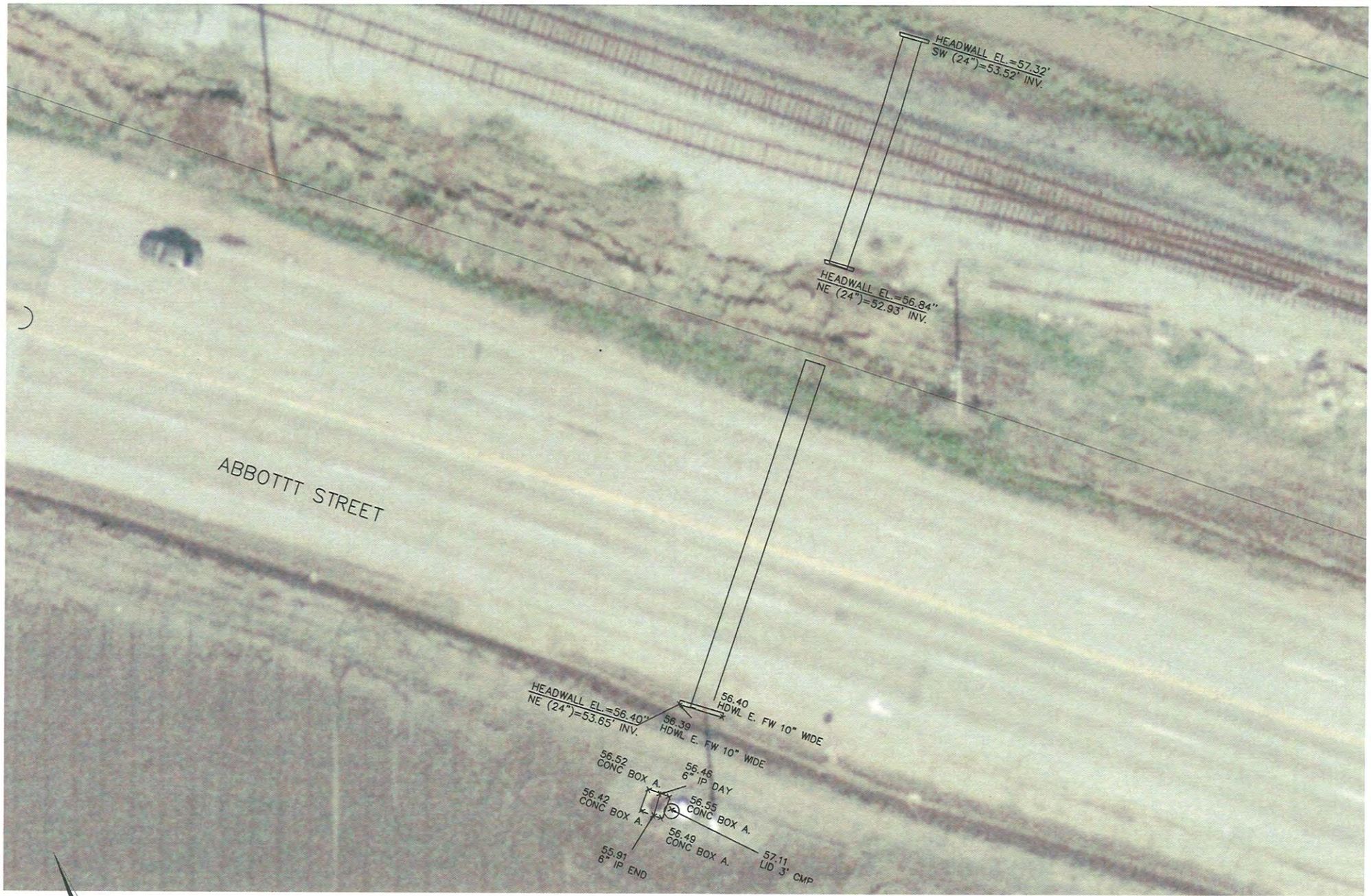
Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06053C0238G

EFFECTIVE DATE
APRIL 2, 2009

Federal Emergency Management Agency

ATTACHMENT 3



N

0 30 60

SCALE IN FEET: 1"= 30'

RJA
RUGGERI-JENSEN-AZAR
ENGINEERS ■ PLANNERS ■ SURVEYORS
8055 CAMINO ARROYO GILROY, CA 95020
PHONE: (408) 848-0300 FAX: (408) 848-0302

CULVERT LOCATION

SALINAS AG-INDUSTRIAL CENTER

SALINAS, CALIFORNIA

PRELIMINARY HYDROLOGY & HYDRAULICS STUDY

For

The Salinas Ag-Industrial Center

City of Salinas,
Monterey County, California
Revised: June 8, 2009

Prepared for:

The Uni-Kool Partners
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References

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2. CDM, "City of Salinas Stormwater Master Plan". May 2004
3. Schaaf & Wheeler, "Monterey County Water Resources Agency Zone 9 and Reclamation Ditch Drainage System Operations Study". May 1999
4. Natural Resources Conservation Service, "Web Soil Survey 2.0", websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx
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List of Tables

1.0 Executive Summary

This report has been prepared for the Salinas Ag-Industrial Center (*Plan Area*) to provide technical information on the proposed development and to assist planning documents prepared by others, including the City and City's consultant. This report analyzed and provides information on the following areas: 1) proposed on-site stormwater conveyance system, 2) proposed on-site detention system, 3) impacts to existing offsite city storm drain system, and 4) information for downstream impact study by the City and it's consultants to evaluate any potential downstream impacts to receiving waters. Design criteria used was based on the City of Salinas *Stormwater Development Standards* (SDS) requirements, and Monterey County Water Resources Agency, Zone 9, Reclamation Ditch design criteria.

2.0 Background

The *Plan Area* and surrounding developments drain into existing City of Salinas owned and maintained storm drain facilities located in Abbott Street and Harris Road. Existing storm drain lines ultimately converge into two conveyance lines: a 72-inch main and a 48-inch main, flowing east underneath the Union Pacific Railroad tracks and U.S. Highway 101. The 72-inch and 48-inch lines ultimately outfall into the Monterey County Water Resources Agency (MCWRA) owned and maintained Reclamation Ditch just south of Heinz Lake. The Reclamation Ditch flows through the City from the southeast to the northwest and is part of a larger city-wide drainage network. The channel drains into the Tembladero Slough near Castroville and ultimately discharges into Moss Landing Harbor through tide gates at Potrero Road.

The Reclamation Ditch drainage system is complex and receives runoff from undeveloped, agricultural, and urban lands. It is comprised of engineered channels, historical lakes including Heinz Lake and Carr Lake, pumps, bridges and culverts. The historical lakes act as regional detention facilities metered by the channels cross-section.

Camp Dresser & McKee, Inc. (CDM) conducted a hydraulic analysis of the City of Salinas existing stormwater conveyance system (City of Salinas *Storm Water Master Plan*, 2004). The *Storm Water Master Plan* identifies backwater conditions for portions of the existing storm drain system upstream of the 72-inch outfall (existing surrounding storm drain facilities on or near Harkins Road). The *Plan Area* connects in the lower downstream portion of the existing backwater condition system. Per the *Storm Water Master Plan*, portions of Harkins Road and Dayton Road experience flooding during the 20-year,6 hour design storm. The *Storm Water Master Plan concludes this flooding* is not a significant impact to the affected areas because of the existing industrial land use and seasonal operations of the food processing related industries.

3.0 Design Criteria

Development of the Salinas Ag-Industrial Center will result in an increase to stormwater runoff volume, peak flows, and velocities from increased impervious surfaces. Impacts to downstream systems will be analyzed as part of this report and mitigated through various flood control measures, if necessary.

The following design criteria outlined in the City's Stormwater Development Standards (SDS) was used for analysis of flood control and stormwater conveyance systems:

1. Limit the 100-year, 24 hour post-project peak discharge rate to that of the 10-year, 24 hour pre-project discharge rate.
2. Use a 20-year, 6 hour design storm with a total depth of 1.6 inches for design of conduits and inlets in commercial and industrial areas and for main trunks having a tributary area greater than 25 acres.
3. Storm drains sized with adequate capacity to convey the peak design flow with the hydraulic grade line below ground surface level.
4. Use of a computerized hydrograph model for the conveyance system for all projects with a drainage area greater than 10 acres

The proposed storm drain system was also modeled with a 100-year, 72 hour design storm, per County Reclamation Ditch criteria, for assistance in downstream impact studies of the Reclamation Ditch by the City's consultants.

4.0 Methodology

The Soil Conservation Service (SCS) unit hydrograph procedure was used to determine peak flows and runoff volumes for the existing and developed site conditions. This methodology is based on a dimensionless hydrograph relating the variables of lag time and peak flow rate. The *CivilStorm V8i* computer model was used to generate the runoff hydrographs and conduct the hydraulic analysis. *CivilStorm* uses a dynamic stormwater modeling engine to calculate runoff hydrographs and analyze the hydraulic response through interdependent systems of inlets, manholes, pipes, channels, culverts, and ponds. The model is able to account for variable tailwater conditions and the effects of backwater on the various system elements. The analysis used the *CivilStorm* Implicit Engine, based on the solver in the National Weather Service FLDWAN model, to dynamically solve the one-dimensional St Venant unsteady flow equations. Additional information regarding model data requirements and analysis procedures is presented in the following sections.

5.0 Hydrologic Data Requirements

5.1 Rainfall

The SCS Type 1A rainfall distribution was used for the 24 hour storm events as specified in the Salinas SDS and *Storm Water Master Plan*. *CivilStorm* has the SCS storm type rainfall distributions built into the computer model for ease of use. The built-in Type 1A distribution, as opposed to the 1 hour rainfall intensities published in the Salinas SDS, was used for the 24 hour analysis to model the rainfall more precisely. The 24 hour design storm is used for the detention facility design and analysis. The 20-year, 6 hour storm with 15 minute rainfall intensities as provided in the Salinas SDS, were used for the existing and proposed conveyance system analysis. The 100-year, 72 hour rainfall distribution and depth were received from the City's consultant for the downstream impact study and verified with the *Zone 9 and Reclamation Ditch Drainage System Operations Study* report. The design storm rainfall depths are provided in Table 5.1.

Table 5.1: Average Total Precipitation Values Used in Hydrology Study

Design Storm	Rainfall Depth (in)
20-year, 6 hour	1.6
10-year, 24 hour	2.5
100-year, 24 hour	3.7
100-year, 72 hour	5.2

5.2 Drainage Area

Approximately 263 acres is tributary to the *Plan Area* and used in the detention facility design. This includes the on-site *Plan Area,* approximately 257 acres, and portions of offsite Abbott Street and Harris Road, approximately 6 acres. Approximately 78 acres of offsite drainage area passes through the site and is accounted for in the conveyance system design. Under the developed condition, the offsite 78 acres runoff is assumed to be routed and conveyed through the proposed onsite Street A storm drain. Both the on-site and off-site drainage areas are currently used for row crop farming operations and have an average slope from west to east of less than 0.002 feet/feet. An additional 25 acres of offsite drainage area to the west is not tributary to the *Plan Area* and releases to the northwest along the historical Alisal Slough drainage path, crossing Harkins Road at a low point approximately 1,500 feet to the west of the site's western boundary.

The *Plan Area* is proposed to be developed as an ag-industrial center, with multiple future parcels connected by a network of backbone public streets. It is assumed that future parcel areas will have a 90% maximum developed impervious cover.

Approximately 192 acres and 42 acres are tributary to the existing 72-inch and 48-inch outfalls storm drain systems, respectively. These existing surrounding areas are currently developed industrial or commercial land uses. The existing drainage area information used in the existing system analysis of this report and found in the City's *Storm Water Master Plan* was provided by CDM on February 2009. Drainage area information for the 48-inch outfall tributary area was determined from aerial topography, aerial images, and site visits. Appendix D contains a summary of the hydrologic data and calculations for the drainage areas used in this analysis.

5.3 Watershed Loss Rates

Watershed soil loss rates were based upon National Resources Conservation Service (NRCS) hydrologic soils mapping for the City of Salinas. It was determined that approximately 83% of the site was covered with Hydraulic Soil Group D soils with the remainder at Group C. Pervious soil Curve Numbers were selected from Appendix B-3 of the *Zone 9 and Reclamation Ditch Drainage System Operations Study*. Antecedent moisture Condition (AMC) II was assumed for both the 6 hour and 24 hour storm event analyses. The pervious and impervious areas of the existing industrial complexes were modeled separately and the hydrographs combined at the system loading points to account for the directly connectedness of the impervious surfaces. The Salinas SDS encourages new and re-development projects to direct all impervious surface runoff to pervious landscaping areas for treatment. The developed on-site impervious and pervious areas were combined and modeled with composite Curve Numbers to account for the affects of this condition.

Initial abstraction represents the rainfall that is absorbed by tree cover, depressions, and soil at the beginning of a storm. No runoff is calculated until the initial abstraction has been satisfied. The initial abstraction for pervious areas is set equal to 0.2S, where S = (1000/CN) – 10. Initial abstraction and Curve Number assumptions are summarized in Appendix D.

5.4 Transform

Drainage area time of concentration was calculated in the existing and developed conditions using the U.S. Department of Transportation *Urban Drainage Design Manual* methodology. Time of concentration is made up of sheet flow, shallow concentrated flow, and pipe/channel flow. Initial roof flow time and storage delay time as a result of upstream treatment facilities were also taken into account for the on-site developed drainage areas. The time of concentration calculations are summarized in Appendix D.

5.5 Reclamation Ditch Tailwater

The 72-inch and 48-inch outfalls experience tailwater from the Reclamation Ditch. The tailwater was considered in the dynamic hydrologic and hydraulic studies of the proposed on-site stormwater facilities. The 20-year static tailwater was used in the existing and proposed conveyance system analysis to be consistent with the City's *Storm Water Master Plan* requirements. A variable tailwater stage hydrograph was used for the 100-year, 24 hour detention analysis. A 100-year, 72 hour stage hydrograph for the 72-inch and 48-inch outfalls was received from the City's downstream impact study consultant. The stage hydrographs were then truncated for use in the 24 hour event by matching the times of peak precipitation. A summary of the peak stage assumptions are shown in Table 5.2. The 100-year, 24 hour variable tailwater stage hydrographs for the 72-inch and 48-inch outfalls are provided in Appendix G.

Table 5.2: Reclamation Ditch Peak Tailwater Conditions (NGVD 29)

Storm Event	72-inch Outfall		48-inch Outfall	
	Elev (ft)	Time (hr)	Elev (ft)	Time (hr)
20-year, 6 hour	53.4	Static	54.3	Static
100-year, 24 hour	56.51	43.5	56.56	43.5
100-year, 72 hour	56.51	75.0	56.56	75.0

6.0 System Information

6.1 Existing Off-Site Conveyance System

The existing 72-inch outfall storm drain network consists of 18-inch to 72-inch reinforced concrete pipes (RCP). The pipes are located in easements through existing agricultural fields and on existing public streets near the northwest *Plan Area* boundary. Connections to private industrial complexes exist throughout the length of the storm drain network. Existing pipe information was compiled from the following sources: 1) City *Storm Water Master Plan* model information provided by CDM, 2) RJA field survey, and 3) as-built drawings. The elevations from the *Storm Water Master Plan* model were adjusted from vertical datum NAVD 88 to NGVD 29 with a conversion factor of -2.8 feet. Some discrepancies were found in invert and ground elevations between the City's *Storm Water Master Plan* model information, project aerial topography, and field survey information. Where these discrepancies were found, the project aerial topographic and field survey elevations were used.

Existing runoff from the *Plan Area* and upstream off-site areas is currently picked up in agricultural ditches and conveyed to a low point along Abbott Street. From here, runoff is conveyed under Abbott Street and Union Pacific Railroad through 24-inch culverts, which discharge into vacant open space between the railroad and U.S. Highway 101. Record drawings from the City show a field inlet on the east side of the Union Pacific

Railroad tracks connected to the existing 72-inch storm drain via a 15-inch line. The location of the inlet was not verified during field surveys because of limiting field conditions.

The existing 48-inch outfall storm drain network consist of 24-inch to 48-inch RCP. The pipes are located in easements through existing agricultural fields and Harris Road and Harris Place with connections to existing private industrial developments. A Manning's roughness coefficient of 0.013 was used for all existing storm drain pipes.

The City's *Storm Water Master Plan* concludes that portions of the existing 72-inch storm drain network are subject to flooding due to high backwater from the Reclamation Ditch. These low lying areas are located along Shilling Place (node RD-9610-004), Harkins Road at Dayton Street (node RD-9620-020), and all of Dayton Street (nodes RD-9600-032 and RD-9630-004). Surface storage at these locations were modeled as detention facilities to determine the flooding limits under existing and developed conditions during the 20-year, 6 hour design storm analysis. Results are discussed in detail in Section 7.3. Refer to Figure 1 for existing system and node locations.

6.2 Proposed Conveyance System

The proposed conveyance system will consist of 18-inch to 48-inch High Density Polyethylene Pipe (HDPE) or Polyethylene Vinyl Pipe (PVC) located in the backbone public street right-of-way. 15-inch laterals will extend from the street right-of-way to private parcel areas. A Manning's roughness coefficient of 0.012 was used for all proposed HDPE storm drain pipes. Connections to the City's existing storm drain system will be made to the existing 72-inch storm drain pipe in Abbott Street at manhole RD-9600-012, and the existing 36-inch storm drain in Harris Road at various manholes. In addition to the on-site system, approximately 3,000 linear feet of 18-inch to 24-inch and 1,300 linear feet of 24-inch storm drain will be installed in Abbott Street and Harris Road respectively. Refer to Figure 2 for the proposed storm drain system layout.

6.3 Proposed Detention Facilities

Detention facilities will be designed to meter the 100-year, 24 hour peak discharge to the 10-year, 24 hour peak runoff rate. This will be accomplished through two types of facilities,

1. 22' landscaped swales along the public streets (backbone streets), and
2. Combination of above ground and below ground detention facilities within future private parcels.

The swales along the public streets will be located in a 22 foot Landscape Buffer Easement area located parallel and on both sides of the streets. This analysis assumed a total depth of approximately 2.5 feet from the bottom of swale to the top of curb, a bottom width of approximately 8 feet, and 2:1 maximum side slopes. The swale will function as 1) a landscape buffer between parcels and streets, 2) a detention area collecting and detaining runoff from backbone streets and an approximate 100 foot impervious equivalent parcel frontage area, and 3) a BMP water quality treatment area using biotreatment applications. Generally, detention depths in the landscape buffers are 2 feet with temporary 100 yr-24 hr storm levels reaching approximately 2.5 ft. The maximum expected detention water depths would be approximately 2.5 feet, or to the street top of curb elevation. For this study, the swale volume was calculated assuming 250 foot long lengths waffling with a longitudinal slope of 0.004 feet/feet. It was also

assumed that an outlet structure would be provided every 250 feet for a total of 94 structures. Each outlet structure was modeled with a 24-inch overflow riser, a 0.75-inch subdrain orifice 2 feet below the swale bottom for draining the water treatment volume in 24 hours, and three 1-inch orifices distributed along the height of the riser. The streets and corresponding swale and 100 foot impervious equivalent parcel frontage areas were divided into 3 separate tributary drainage areas and detention facilities for the purpose of this analysis. The volume and number of outlet structures for each facility were then determined based on the total length of swale within the drainage area. The complete swale volume and outlet structure assumptions are provided in Appendix E.

The detention facilities for the remainder parcel areas may involve a combination of underground storage (oversized pipes, arch systems, vaults, etc.) and above ground storage (inundating of landscaping or parking lot areas). Drainage areas for future parcels were modeled as 40 acre-feet of total detention volume and 10 cubic feet per second (cfs) of peak discharge. These design values were based on iterative downstream alternative analyses and results. Above ground detention was assumed to occur on future paved parking areas, and underground detention was assumed as oversized pipes with a single release orifice for each facility. The complete parcel detention facility assumptions are provided in Appendix F. Refer to Figure 2 for the proposed swale and parcel drainage area locations.

7.0 Results

7.1 Detention Analysis

The total on-site pre-project 10-year, 24 hour discharge rate was calculated to be 27.4 cfs (see Appendix A for calculation results). The post developed 100-year, 24 hour storm discharge rates for the combined public street swales and remaining future parcels will also be required to release at this rate. The *CivilStorm* computer model was run with the existing City 72-inch and 48-inch storm drain networks, the proposed on-site conveyance system and detention facilities, and variable tailwater stage hydrographs at the outfalls. The detention facility results are summarized in Table 7.1 and 7.2 below.

Table 7.1: Swale Detention Facility – 100-year, 24 hour Storm Results

Swale	Max HGL (ft)	Max Depth (ft)	Max Storage (acre-ft)	Peak Flow (cfs)	Time (hr)
PO-72-S	57.22	2.22	11.40	7.21	20.50
PO-48-S1	61.27	2.27	0.51	0.34	19.92
PO-48-S2	64.08	2.08	0.46	0.31	19.83
Total/Ave		**2.22**	**12.4**	**7.9**	

Table 7.2: Parcel Detention Facility – 100-year, 24 hour Storm Results

Remainder Parcel Area	Max HGL (ft)	Max Depth (ft)	Max Storage (acre-ft)	Peak Flow (cfs)	Time (hr)
PO-72-P	57.23	4.23	33.85	7.13	16.08
Total/Ave		**4.23**	**33.9**	**7.1**	

The total on-site post-development 100-year, 24 hour peak discharge is approximately 15.0 cfs with a total detention volume of 46.3 acre-ft. Therefore, the peak flow is successfully reduced below the 10-year, 24 hour peak flow rate. See Appendix B for the complete *CivilStorm* 100-year, 24 hour storm model results and hydrographs.

7.2 Conveyance System Analysis

The proposed conveyance system shall be designed to convey the 20-year, 6 hour design storm while maintaining the hydraulic grade line (HGL) below the ground surface. The proposed conveyance system and on-site detention facilities were modeled in *CivilStorm* with the 20-year, 6 hour design storm and a static 20-year Reclamation Ditch tailwater condition as required by the Salinas *Storm Water Master Plan*. The HGL results are summarized in Table 7.3 below. The conveyance system successfully maintained the HGL below the ground surface at all proposed structures. See Appendix C for the complete *CivilStorm* 20-year, 6 hour storm model results and hydrographs.

Table 7.3: Proposed Conveyance System – 20-year, 6 hour Storm HGL Results

Manhole	Rim (ft)	HGL (ft)	Diff (ft)	Manhole	Rim (ft)	HGL (ft)	Diff (ft)
MH-48-1	62.1	55.40	-6.70	MH-72-1	58.1	54.11	-3.99
MH-48-2	64.8	55.43	-9.37	MH-72-2	60.6	54.65	-5.95

7.3 Existing System Analysis

The existing City storm drain network that receives the proposed site conveyance system was analyzed because the City *Storm Water Master Plan* determined certain low lying areas were subject flooding due to high backwater affects from the Reclamation Ditch. The 20-year, 6 hour design storm and a static 20-year Reclamation Ditch tailwater was used to be consistent with the City's *Storm Water Master Plan* study. The areas that currently experience flooding were modeled with a pond to represent the available surface storage. The existing system was analyzed with and without the *Plan Area* flows and the results compared to determine if flooding conditions were increased. The results are summarized in Table 7.4 below.

Table 7.4: Existing Conveyance System – 20-year, 6 hour Storm Flooding Results

Manhole	Rim (ft)	Existing Condition		Developed Condition		HGL Diff (ft)
		HGL (ft)	Storage (ac-ft)	HGL (ft)	Storage (ac-ft)	
RD-9610-004	53.6	54.33	1.61	54.33	1.61	0
RD-9620-020	56.8	57.93	3.80	57.92	3.75	-0.02
RD-9630-004 & RD-9600-032	56.3	57.09	0.89	57.08	0.89	0

The model results indicate the HGL at the nodes experiencing inundating under existing conditions do not increase under the developed condition. In reality, the actual height of inundating along Dayton Road may decrease under the developed condition because the overall storage volume in the public right-of-way will increase when Dayton Street is extended into the *Plan Area*. See Appendix C for the complete *CivilStorm* 20-year, 6 hour storm model results and hydrographs.

7.4 Results for Downstream Impact Study

Results as presented in the report were developed through an iterative process in which site design refinements were made and outcomes confirmed through revised model

results. Ultimately, results of the 100-year, 72 hour analysis using the site's final design scenario, achieved less-than-significant levels of impact to the downstream system.

The City's consultant will use the revised model results to verify the total impact reduction, and ultimate less-than-significant impact to the downstream reclamation ditch system. Table 7.5 below summarizes the final results. See Appendix D for 100-year 72-hour hydrographs and the proposed detention facilities.

Table 7.5: On-Site Detention Facility – 100-year, 72 hour Storm Results

ID	Max HGL (ft)	Max Depth (ft)	Max Storage (acre-ft)	Peak Flow (cfs)	Time (hr)
PO-72-S	57.53	2.53	14.7	8.41	41.92
PO-48-S1	61.53	2.53	39.6	0.85	41.25
PO-48-S2	64.43	2.43	0.6	0.37	41.83
PO-72-P	57.95	4.95	0.6	8.72	44.17
Total			**55.5**	**18.4**	

8.0 Conclusion

The post-development 100-year peak discharge can be reduced to below the 10-year, pre-project discharge rate of 27.5 cfs through the use of above ground and below ground detention facilities. The backbone streets tributary areas will provide approximately 16.0 acre-ft of detention storage through the use of roadside swales. Future parcel areas will provide approximately 40 acre-ft of detention storage through the use of above ground and below ground detention.

There are no impacts to the surrounding existing City storm drain system as a result of the *Plan Area* development. Model results confirm that existing deficiencies and inundating areas identified in the City's *Storm Water Master Plan* continue to pond after connecting *Plan Area* flows. There are no additional ponding areas created. The HGL at three existing ponding areas do not increase (nodes RD-9610-004, RD-9630-004, and RD-9600-032) as a result of new project storm water flows.

Finally, results in this report will be used by the City and the City's consultant in the assessment that downstream impacts to the reclamation ditch are considered to be less-than-significant.

PRELIMINARY
STORMWATER CONTROL PLAN

For

The Salinas Ag-Industrial Center

City of Salinas,
Monterey County, California

Revised June 30, 2009

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4. LandSet Engineers, Inc. Preliminary Soil Engineering Investigation and Asphalt Pavement Design (April 2008) and Results of Percolation Testing (February 2009)

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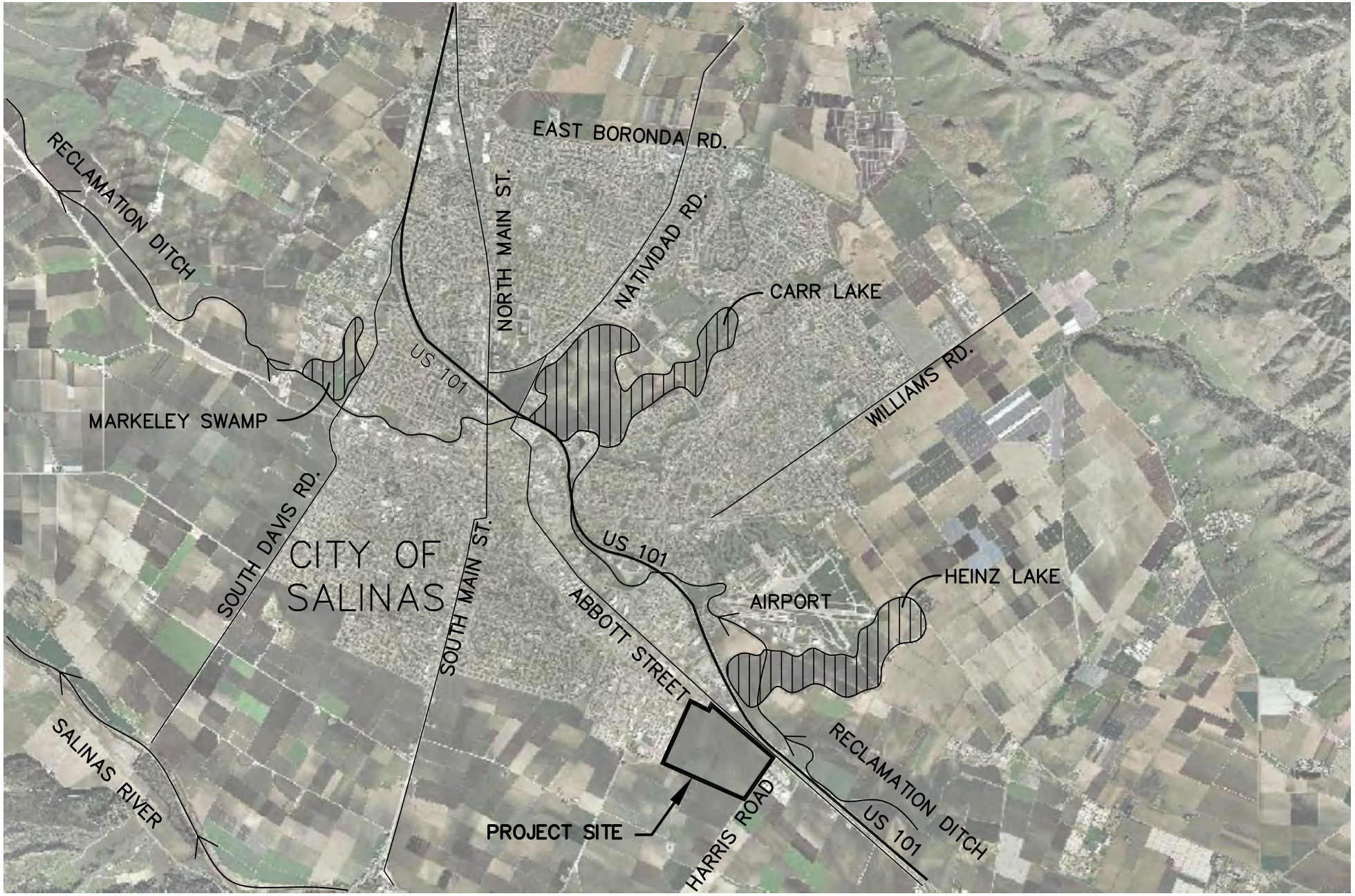

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VICINITY MAP

SALINAS AG-INDUSTRIAL CENTER

SALINAS, CALIFORNIA

UNI-KOOL PARTNERS

JUNE 2009

JOB NUMBER: 072067

FIGURE 1

1.0 Project Information

1.1 Purpose of the Report

The City of Salinas requires all new projects, major developments, and redevelopment projects to comply with the City's *Stormwater Development Standards* (SWDS). The SWDS have been developed to comply with the City's current *National Pollutant Discharge Elimination System* (NPDES) *Stormwater Discharge Permit* (Permit) as issued by the Central Coast Regional Water Quality Control Board.

The SWDS requires qualifying developments to apply Low Impact Development (LID) techniques to the maximum extent practicable to minimize the impacts of urban runoff on receiving waters and to promote healthy watersheds. In addition, qualifying developments are required to prepare a Stormwater Control Plan (SWCP) to detail in concept how runoff and associated water quality impacts will be controlled or managed. The Salinas Ag-Industrial Center (*Plan Area*) is considered a "priority project" under the City's SWDS, which requires the development and implementation of a SWCP. This Preliminary SWCP has been developed to comply with the City's SWDS, and has been completed per City guidelines and Section 1.6 of the SWDS. A final SWCP will be submitted at final design.

This Preliminary SWCP is prepared for the proposed backbone street infrastructure and the portions of Abbott Street and Harris Road that front the site. This report also establishes stormwater control guidelines for future developers who are required to comply with the *Plan Area* Specific Plan documents. All Individual developers of the *Plan Area* parcels will be required to prepare separate site specific SWCPs for City review and approval. The future site specific SWCPs shall adhere to the guidelines presented in this report and the latest City of Salinas SWDS.

1.2 Existing Site Description

The *Plan Area* (APN's 177-133-004, -005, and -007) is located in the southern part of the City of Salinas, southwest of the Salinas Municipal Airport, and approximately 3-miles from the downtown area. The *Plan Area* is bounded by existing industrial businesses to the north, agricultural land to the west and south, and Abbott Street, Union Pacific Railroad, and U.S. Highway 101 to the east (see Figure 1). The *Plan Area* is comprised of 257 acres of open farm land, except for two (2) small structures located within the southeast portion of the site. The topography is generally level with an average slope of 0.2% from west to east. There is no significant natural vegetation on-site due to repeated soil cultivation and disking. Additional drainage areas tributary to the site include: Abbott Street and Harris Road (approximately 6 acres) and existing farm land upstream of the plan area (approximately 78 acres), see Figure 2. All existing public utilities appear to be located within Abbott Street and Harris Road right of ways. The existing and proposed storm drain system has been included as Figure 4 in this Preliminary SWCP.

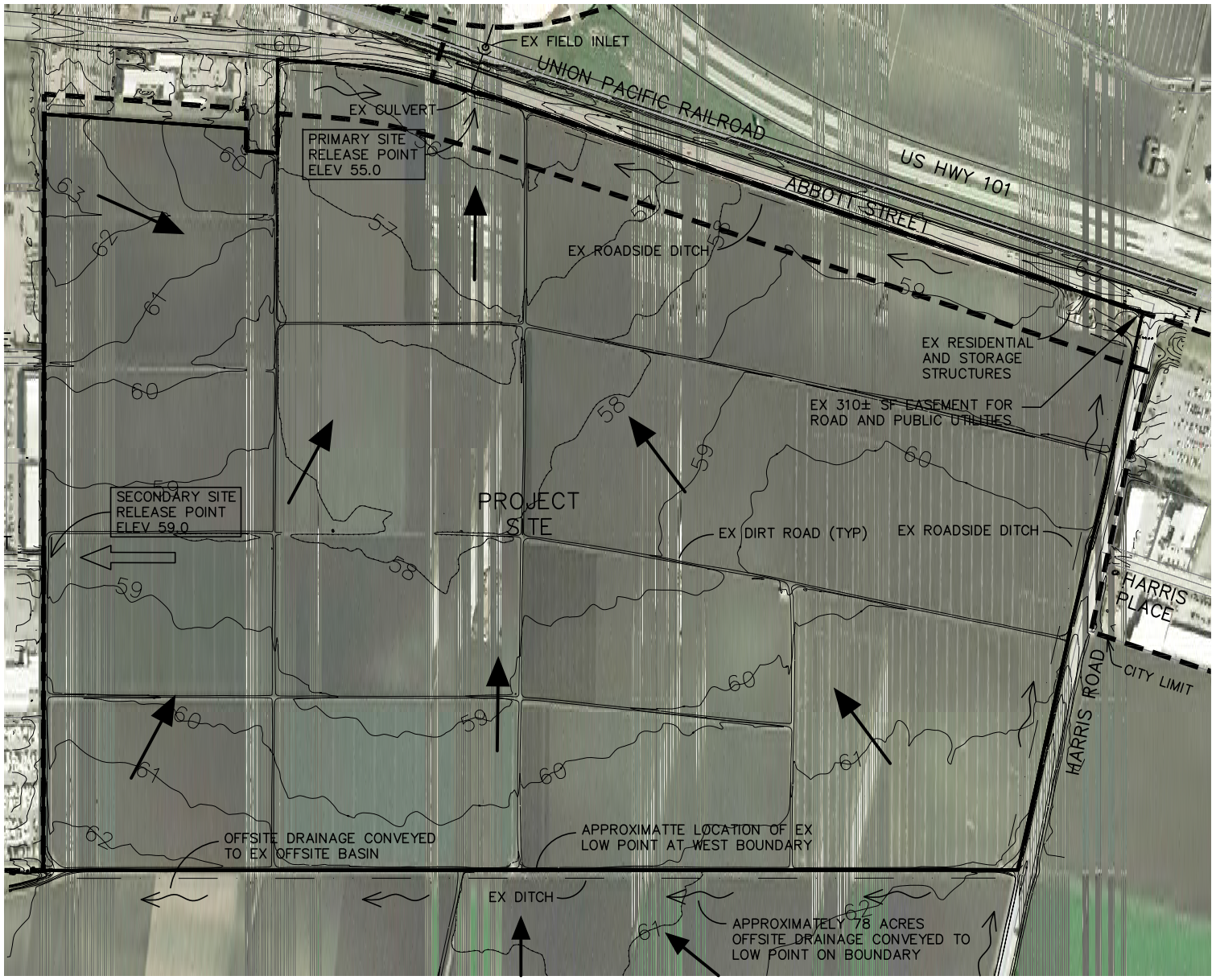
The *Plan Area* is tributary to the Monterey County Water Resources Agency (MCWRA) Reclamation Ditch, which flows through the City from the southeast to the northwest and is part of a larger city-wide stormwater drainage network. The Reclamation Ditch ultimately discharges into the Tembladero Slough, which is a tributary of the old Salinas River Channel (see Figure 1).

The *Plan Area* and surrounding developments drain into existing City of Salinas owned and maintained 72-inch and 48-inch storm drain lines located in Abbott Street and Harris Road, respectively. The existing 72-inch and 48-inch storm drain lines flow by gravity in a northeasterly direction under the Union Pacific Railroad tracks and U.S. Highway 101, and outfall into the Reclamation Ditch just south of Heinz Lake (see Figure 4). The *Plan Area* stormwater infrastructure will connect to these storm drain lines at existing manholes on Abbott Street and Harris Road.

1.3 New Site Description

The Salinas Ag-Industrial Center is being developed to serve agricultural-oriented businesses and industries. The *Plan Area* will consist of mostly paved surfaces to service a range of demanding land uses typical of the agricultural-industrial activity. The proposed land uses include but are not limited to servicing raw produce from the field, cooling facilities, processing facilities, warehouses, sales, and offices. The *Plan Area* expects to have a combination of large paved staging and parking areas, large building footprints, and heavy truck use. The potential pollutants that are of concern typically with an industrial development are the following: Total Petroleum Hydrocarbons, Polycyclic aromatic hydrocarbons (PAHs), Polychlorinated biphenyls (PCBs), pH, sediment, metals, nutrients, pesticides, Oil and grease and trash.

The *Plan Area* will be served by four (4) new backbone streets connected to the surrounding City streets. The backbone street network will bisect the site into five (5) parcels of varying size and shape. These parcels will be further subdivided by future developers. This Preliminary SWCP has been developed for the backbone street infrastructure and the portions of Abbott Street and Harris Road that front the site. A master overview of the entire *Plan Area* has been analyzed and considered for the feasibility and study of supporting infrastructure and compliance with Specific Plan documents. A Conceptual Site Plan and Grading Plan is included as Figure 3 in this Preliminary SWCP.



LEGEND

- PROJECT BOUNDARY
- CITY LIMIT
- EX DITCH
- FLOW DIRECTION OF EX DITCH
- GENERAL FLOW DIRECTION OF SURFACE RUNOFF

PROJECT TRIBUTARY AREAS

- 257 ACRES (PROJECT BOUNDARY)
- 6 ACRES OFFSITE ABBOTT STREET AND HARRIS ROAD
- 78 ACRES OFF SITE AG LAND UPSTREAM(WEST) OF PLAN AREA

0 600 1200

SCALE IN FEET: 1"= 600'

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EXISTING TOPOGRAPHY AND DRAINAGE

SALINAS AG-INDUSTRIAL CENTER

SALINAS, CALIFORNIA
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JUNE 2009
JOB NUMBER: 072067

FIGURE 2

TYPICAL STREET GRADING (SEE FIGURE 6)

- TYPICAL 0.4% STREET SLOPE
- LOW POINT – HIGH POINT @ EVERY 125'
- LOW POINT – LOW POINT @ EVERY 250'

0 500 1000

SCALE IN FEET: 1"= 500'

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SITE AND CONCEPTUAL GRADING PLAN

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JUNE 2009
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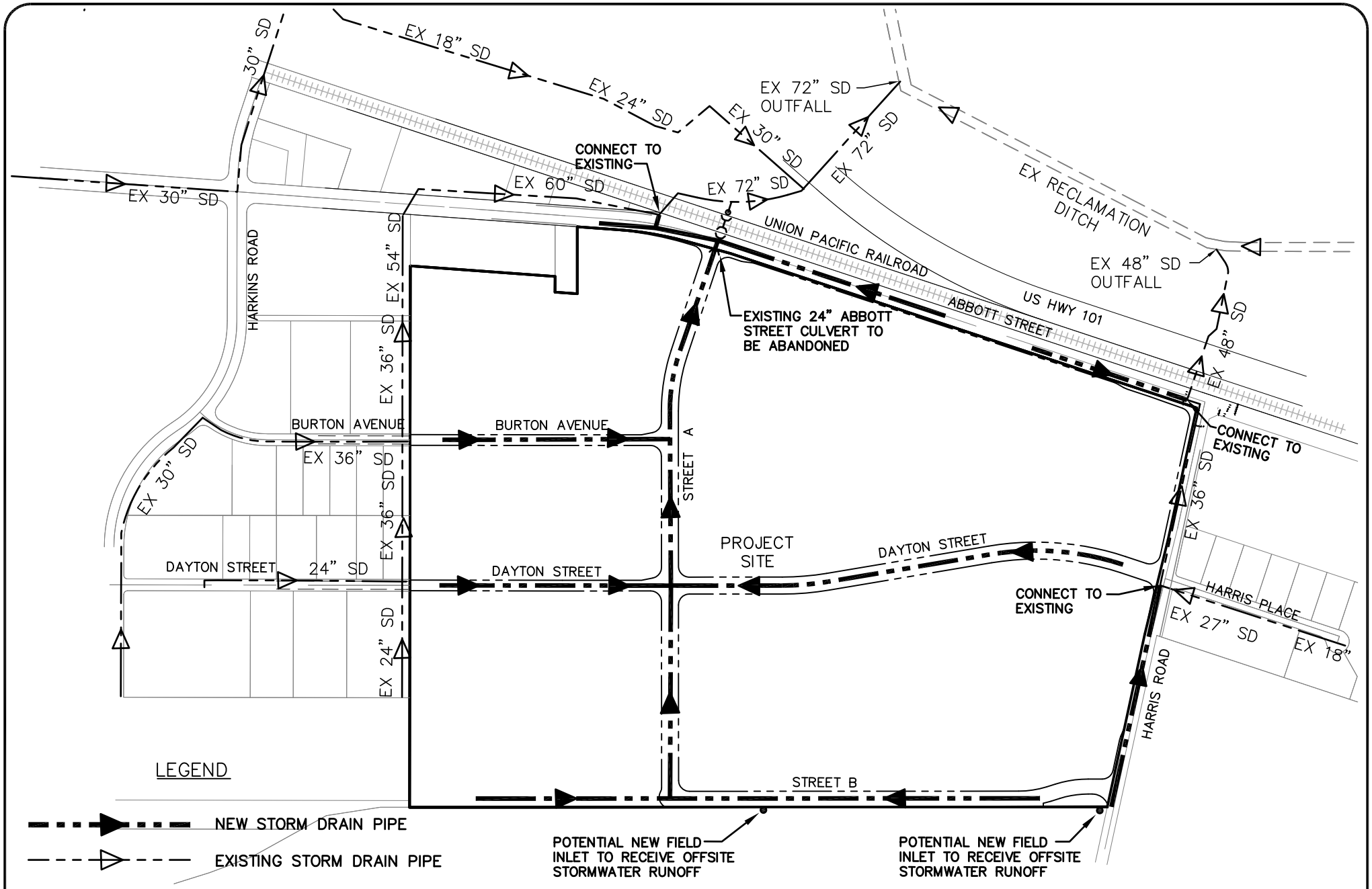
FIGURE 3



EXISTING AND PROPOSED STORM DRAIN SYSTEM

SALINAS AG-INDUSTRIAL CENTER

SALINAS, CALIFORNIA

UNI-KOOL PARTNERS

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FIGURE 4

2.0 Stormwater Control Evaluation

Development within the *Plan Area* will increase impervious surfaces from predevelopment conditions. This has the potential to increase the rate and volume of stormwater runoff, downstream erosion potential and impact water quality by increasing the concentration or total load of pollutants.

The *Plan Area* will mitigate for increases in peak stormwater runoff through above and below ground detention areas. Stormwater quality will be accomplished using various Best Management Practices (BMPs), Low Impact Development (LID) applications, and Integrated Management Practices (IMPs). All BMP, LID, and IMP applications shall comply with the City's SWDS.

2.1 Site Considerations

The following are site specific considerations in the development of the site:

1. Long-term regional and sustainable retention within the Plan area will not be feasible due to soil strata characteristics. However, the site will be utilizing any available opportunities for percolation at some localized areas per the geotechnical investigation (such as running some roof leaders to underground infiltrators near buildings). .

2. Future development of the *Plan Area* will result in large building footprints and high amounts of pavement coverage for parking, loading docks, and storage areas. This type of land use makes it a challenge to limit the impervious coverage of the site. However, all impervious surface runoff will be directed to available open space and landscaped areas to maximize any available percolation in the surface clay soils before the flows enter the designed treatment areas.

3. The site will be subdivided and developed by future businesses. Site specific information was not available at the time of preparing this report. Reasonable assumptions are made in this Preliminary SWCP based on land uses described in the Specific Plan documents. Additional technical studies provide estimates for future on-site stormwater drainage areas, detention volumes, and peak flow rates that will need to be accounted for by future developers. Future development sites within the *Plan Area* will be required to complete individual site-specific SWCPs in compliance with the latest City of Salinas SWDS.

2.2 BMP and LID Applications

The *Plan Area* will implement to the maximum extent practicable (MEP) site planning and design techniques to comply with storm water quality, LID, and BMPs. The following LID and BMP goals will provide aesthetic qualities and practical stormwater management benefits.

- The post-development stormwater runoff peak discharge rate will not exceed the predevelopment discharge rate for the 10-year storm through the installation of detention areas.

- Stormwater Quality: The Master Developer and Individual Developer within the Plan Area will apply BMP and LID goals in their designs to the maximum extent practicable per the City's SWDS to capture and treat stormwater runoff from the relatively small and frequent storm events.

- Work with the City to apply site planning principles early in the development process; identify site plan stormwater quality management constraints and opportunities through a pre-application Stormwater Control Plan.

- Implement a "start at the source" site design. The *Plan Area* is expected to consist of future sites of varying lot sizes. Individual Developers will be required to provide stormwater detention and water quality measures. The net effect at *Plan Area* buildout will be the advantage of many small areas distributed throughout the *Plan Area* versus traditional large regional detention and treatment facilities.

- Limit impervious surface to the MEP by incorporating landscaping features around buildings and parking areas, reducing drive aisle and parking space size in parking areas, and incorporating pervious pavement where feasible, such as along walkways.

- Implement a grading design that will direct runoff from impervious areas to pretreatment areas to reduce pollutants by disconnecting impervious areas before the flows enter the public stormwater conveyance system.

- Capture and treat stormwater runoff from relatively small and frequent storm events where most of the runoff pollutants are generated.

- Apply selective BMP and LID applications to maximize effectiveness in removing pollutants by prioritizing "bioretention" applications with minimum eighteen (18) inches of soil and a design surface loading rate not exceeding five (5) inches per hour and fed by gravity.

- Maintain the natural topography to the maximum extent practicable with grading and site plan design. The *Plan Area* proposed site and grading plans are maintaining the predevelopment flow pattern and overland release points. The site and grading plans are attached with this report.

- Redirect street runoff to swales along the public streets with bioretention treatment areas. Stormwater runoff from the new backbone public streets and sidewalks will be directed to a swale along the public streets. The runoff will be captured and detained during high storm events and treated for low-flow events. The roadside landscape/detention area will be sloped at 0.4% to provide low velocities. Gentle slopes along with well-planned landscape planting will provide superior opportunities for water contact time with biological treatment measures within the swale.

- Promote infiltration where feasible in areas outlined in the geotechnical investigation. Top surface soils offer little to insignificant percolation opportunities. The site, however, will direct all impervious area flows to available open space and landscaped areas to benefit from what percolation is available before the flows enter the designed treatment areas.

- Reduce pollutants by disconnecting of impervious areas before the flows enter the public stormwater conveyance system.

- Redirect rooftops to underground infiltration facilities where feasible as determined by the geotechnical engineer at specific locations.

- Protect groundwater quality through implementation of various Integrated Management Practices (IMP) to the maximum extent practicable.

- Reduce contact between runoff water and pollutants through use of Source Control measures (see Section 4.0)

- Use site landscaping as prime opportunity sites for stormwater treatment and detention.

- Incorporate efficient irrigation methods including use of drought resistant plants.

- Minimize significant runoff impact to receiving surface water bodies due to post development peak runoff rates through the use of detention facilities as described in Section 2.3.

- Direct water from vehicle wash areas, waste handling areas, loading areas, fueling areas, or wastewater management areas to industrial waste and sanitary sewer systems per the requirements and regulations contained in the Zoning Code Chapter 36, "Industrial Waste, Wastewater Collection, and Discharge."

2.3 Description of Treatment Areas

This Preliminary SWCP identifies two areas of treatment within the site: 1) the swale along public streets and 2) the future parcels by individual developers.

Swales along Public Streets – The Swales along Public Streets consist of new a 22-foot wide landscape area around the perimeter of the backbone streets. The swale will have a depth of approximately 2.5-feet from the top of curb elevation and will be located within a multi-functional area used for: 1) landscape or landscape buffer between parcels and streets, 2) detention area to collect and detain runoff from backbone streets and an approximate 100-foot impervious equivalent parcel frontage area, and 3) a BMP water quality treatment area using flow based swale and volume based bioretention treatment applications. Expected detention water depths would be approximately 2.5-feet. Stormwater runoff from the backbone public streets will drain into the swale at the low points and be treated by flowing through bioretention

filtration cell. Runoff from the 100-foot impervious equivalent parcel frontage area will drain into the swale near the high points to take advantage of stormwater treatment by flowing slowly through the vegetated swale. High flow storm events would be detained and eventually released at predevelopment rates into the street storm drain conveyance system using flow control devices. Table 2.1 shows the common pollutants of concern. The Swales along Public Streets make up approximately 4.7% of the total site and will treat approximately 33.0% of the site, see Figure 5. Figures 6 and 7 illustrate a typical Swale along a Public Street.

Future Parcels by Individual Developers (Parcels A-E) – The remainder Parcels will be developed by Individual Developers and will be required to comply with the City's SWDS. The remainder parcels make up approximately 67.0% of the site, of which 10% is estimated to be pervious area. The pervious area will be designed to treat all impervious area within the parcel. Refer to section 2.3 for a description of detention options and Figures 9 and 10 for treatment and detention methods available to Individual Developers. Table 2.1 shows the common pollutants for typical commercial/industrial development, to be removed by the treatment areas.

Table 2.1 – Targeted Pollutants at Stormwater Treatment Facilities

Treatment Area	Pollutants of Concern
Swales Along Public Street	Total Petroleum Hydrocarbons, Metals, Sediment, PAHs, PCB, pH, Surfactant, Oil, Trash
Remainder Parcels	Total Petroleum Hydrocarbons, Metals, Sediment, PAHs, PCB, pH, Surfactant, Oil, Trash, Nutrients, Pesticides

2.4 Stormwater Peak Flow and Volume

Detention – Development of the *Plan Area* will utilize stormwater detention facilities to mitigate for increases in post-development runoff by limiting the 100-year, 24-hour post-development discharge to the 10-year, 24-hour pre-development rate, as outlined in the City of Salinas Stormwater Development Standards (SWDS) (October 2008). The facilities will also mitigate for impacts to the downstream regional drainage system (Reclamation Ditch) as a result of *Plan Area* development under the 100-year, 72-hour design stormper the City's design criteria in studying impact to downstream receiving waters. Several detention options will be available to mitigate for this requirement, including above ground and below ground detention. Runoff from the backbone and off-site streets and an impervious surface area equivalent to 100-feet of parcel frontage shall be detained using the 22-foot dual use detention/landscape vegetated area on both sides of the new backbone streets and the project site side of the off-site streets. Detention for the remainder of the parcel drainage areas will be the responsibility of the Individual Developer as described below:

- *Underground Detention* - This method involves using oversized large pipes or exposed bottom chambers available through various manufacturers. Low flow-surface water will be treated prior to entering the below-ground detention areas. Potential application of below-ground facilities will be determined by Individual Developers based on final site design and conditions.

- *Above-Ground Detention in Paved Areas* - Above-ground detention in paved areas involves allowing paved or parking lot areas to pond during large storm events to acceptable limits. Drain inlets or outlet pipes will be used as the metering devices to limit discharge flows to 10-year storm predevelopment rates.

- *Above-Ground Detention in Depressed Landscape Areas* – Similar to detention in paved areas, detention in depressed landscape areas involves an acceptable level of ponding in landscape areas where flows would also be metered within these areas.

The swales along public streets provide approximately 16-acre feet of detention storage. The remainder parcel areas need to provide an additional 40-acre feet of detention volume with a maximum release rate of 10-cubic feet per second in order to meet the City's design criteria and mitigate for impacts to the Reclamation Ditch. Refer to the separate "Preliminary Hydrology & Hydraulics Study for the Salinas Ag-Industrial Center" for more information.

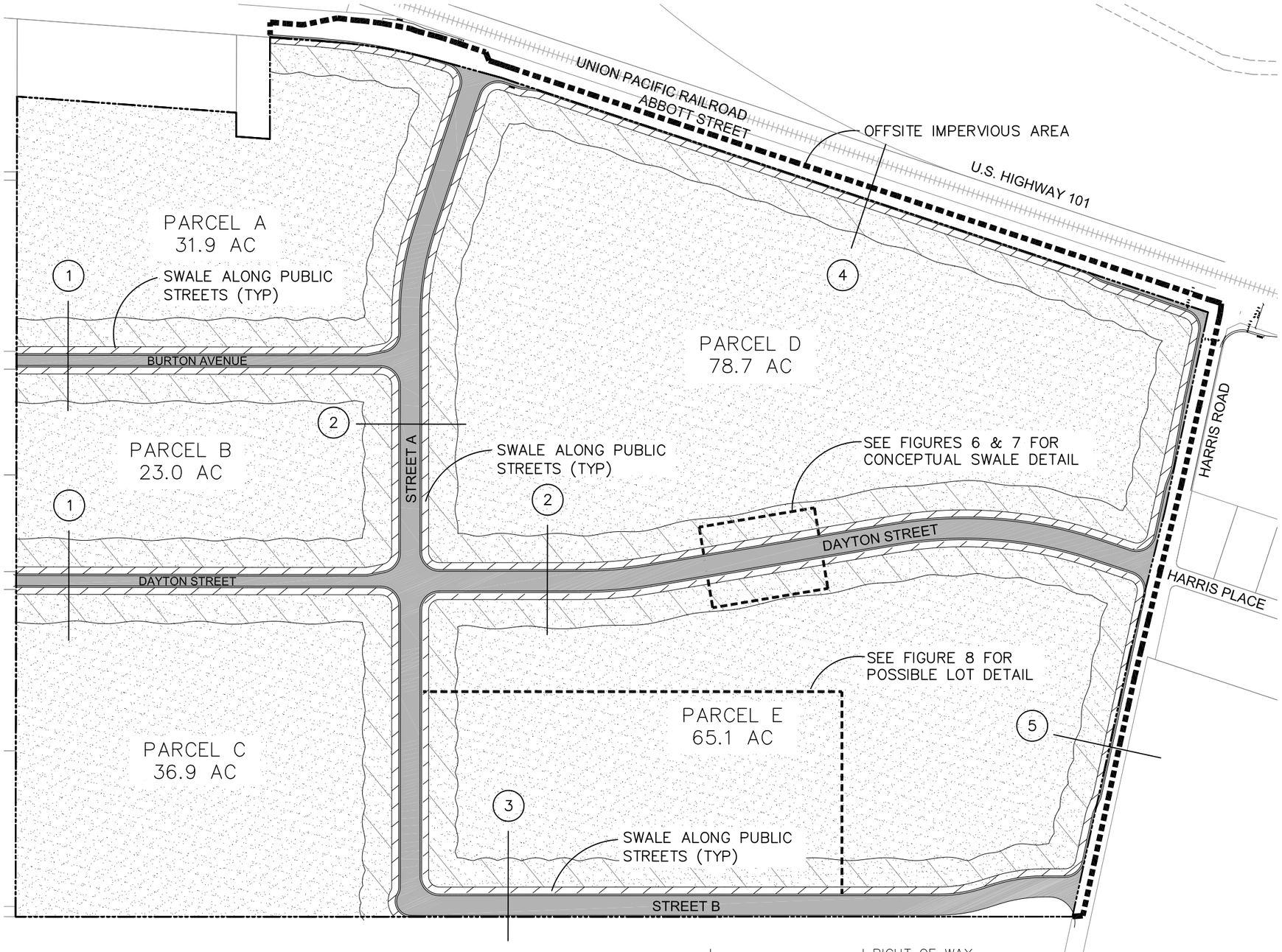
Retention – Stormwater retention is not a feasible flood control method for the *Plan Area*. A *Preliminary Soil Engineering Investigation of the Plan Area* by LandSet Engineers was completed in the summer of 2008. Percolation tests at specific locations appear to have significant percolation rates. However, the percolation test data is not able to support long term sustainable retention design because of the wide range and inconsistent layers of silt, clays, and dense sands at depths of 10-feet to 50-feet. The geotechnical report additionally concluded that the below ground soil profile consisted of localized and disconnected "pockets" of sand that cannot support reliable and sustainable retention facilities. The localized percolation areas showing high percolation rates are areas with a limited "volume" and no connectivity to deep pervious soil.

2.5 Implementation of Stormwater Control Facilities

The buildout of the *Plan Area* will occur over time and with multiple future users. This Preliminary SWCP includes stormwater detention and quality treatment area calculations in order to evaluate the overall impact of the *Plan Area*. The calculations section of this report provides information for the following two major phases of construction.

First, the Master Developer will install the backbone public streets and grade a swale in the 22-foot Landscape Buffer Easement area on both sides of the streets. The swale will collect and detain runoff from two tributary areas: 1) the backbone streets runoff, and 2) approximately 100-feet of equivalent impervious area along the portions of individual parcels that front on the Landscape Buffer Easement. The swale will also be used as a Best Management Practice (BMP) for stormwater treatment of the two tributary areas through the use of vegetated swale flow treatment and bioretention volume treatment.

Second, the Individual Developers will be required to detain and treat runoff from their sites. The detention and conveyance study by RJA completed for the overall analysis of the *Plan Area* shows approximately what Individual Developers will be required to detain and release. This will provide a guide for ultimate buildout, and Individual Developers will be required to comply with the City's Stormwater Development Standards (SWDS) and the Preliminary Stormwater Detention study for the Salinas Ag-Industrial Center.



LEGEND

BACKBONE STREET/SIDEWALK/PARCEL F

–IMPERVIOUS SURFACE=18.1 AC (BACK OF WALK TO BACK OF WALK)
–PERVIOUS SURFACE=3.5 AC (5' LANDSCAPING, BACK OF WALK TO RW)
–TOTAL AREA=21.6 AC

–METHODS FOR TREATMENT AND DETENTION:
- BIORETENTION TREATMENT AREAS WITHIN PORTIONS OF THE 22' LANDSCAPE BUFFER
- DETENTION WITHIN ENTIRE 22' LANDSCAPE BUFFER

100' EQUIVILENT IMPERVIOUS PARCEL FRONTAGE AREA

–IMPERVIOUS AREA=51.3 AC (MEASURED FROM INSIDE EDGE OF SWALE)
–PERVIOUS AREA=0
–TOTAL AREA= 51.3 AC

–METHODS FOR TREATMENT AND DETENTION:
- FLOW TREATMENT WITH 70' MIN FLOW PATH WITHIN THE 22' LANDSCAPE BUFFER
- DETENTION WITHIN ENTIRE 22' LANDSCAPE BUFFER

REMAINDER PARCELS BY INDIVIDUAL DEVELOPERS

–IMPERVIOUS AREA=155.2 AC
–PERVIOUS AREA=17.2 AC (ESTIMATED 10% OF REMAINDER AREA)
–TOTAL AREA=172.4 AC

–METHODS FOR TREATMENT AND DETENTION:
THE FOLLOWING IS A LIST OF OPTIONS OF WHICH ALL OR A PORTION MAY BE USED.
- DEPRESSED LANDSCAPE AREAS WITH BIORETENTION TREATMENT AREAS
- RAISED BIOSWALE PLANTERS AROUND OFFICE PORTION OF BUILDING
- REDIRECT ROOF LEADERS TO DEPRESSED LANDSCAPE AREAS
- DETENTION IN DEPRESSED LANDSCAPE AREAS
- UNDERGROUND DETENTION
- SURFACE DETENTION IN PARKING/STAGING AREAS

LANDSCAPE/DETENTION SWALE AREA

–IMPERVIOUS AREA=0
–PERVIOUS AREA=12.0 AC
–TOTAL AREA=12.0 AC

–METHODS FOR TREATMENT AND DETENTION:
- SELF TREATED AREA
- BIORETENTION TREATMENT AREAS

TOTAL POST–DEVELOPMENT
IMPERVIOUS SURFACE=224.6 AC
PERCENT OF SITE=87.3%

TOTAL POST–DEVELOPMENT
PERVIOUS SURFACE=32.7 AC
PERCENT OF SITE=12.7%

APPROXIMATELY 6.1 AC OF OFFSITE IMPERVIOUS SURFACE IS TRIBUTARY TO THE SITE

0 400 800
SCALE IN FEET: 1"= 400'

STREET	RIGHT OF WAY	RIGHT OF WAY TRIBUTARY TO SWALE
① DAYTON & BURTON	55' R/W	27.5'
② DAYTON & STREET A	88' R/W	44'
③ STREET B	84' R/W	84'
④ ABBOTT STREET	100'–127'± R/W	54'–94'±
⑤ HARRIS ROAD	94'–102'± R/W	36'–66'±

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STORMWATER TREATMENT AREAS

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JUNE 2009
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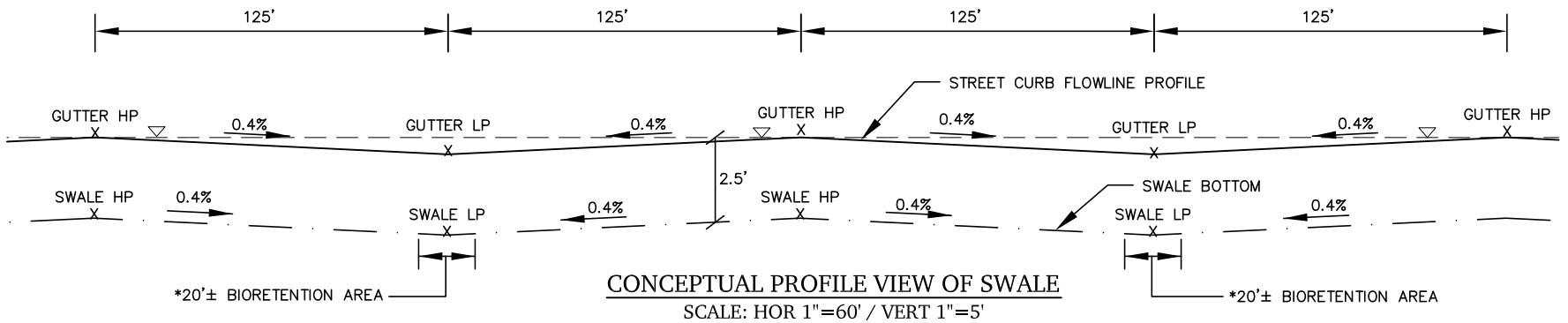
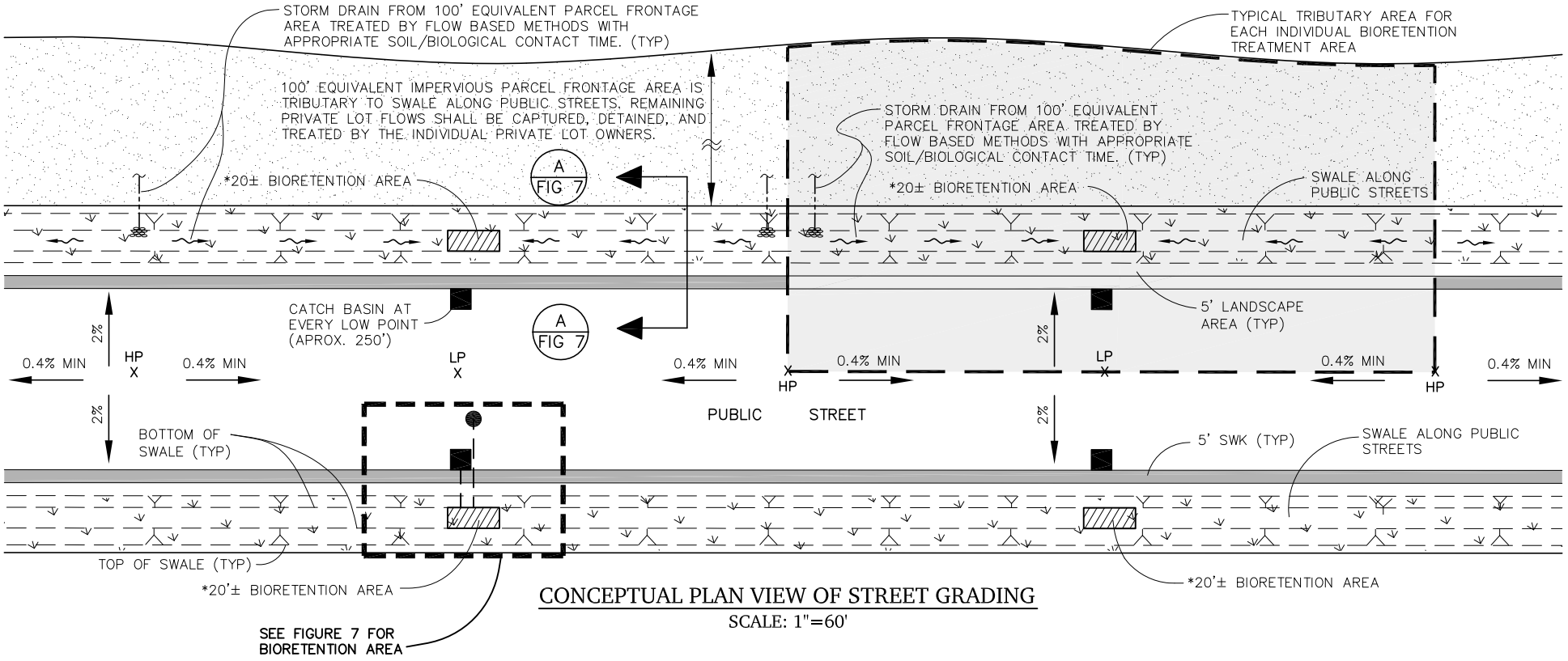
FIGURE 5



CONCEPTUAL PROFILE VIEW OF SWALE

SCALE: HOR 1"=60' / VERT 1"=5'



CONCEPTUAL PLAN VIEW OF STREET GRADING

SCALE: 1"=60'

* SIZE OF BIORENTION AREA MAY VARY BASED ON RIGHT OF WAY WIDTH

0 60 120

SCALE IN FEET: 1"= 60'

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SWALE ALONG PUBLIC STREETS PLAN AND PROFILE

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SALINAS, CALIFORNIA

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JUNE 2009

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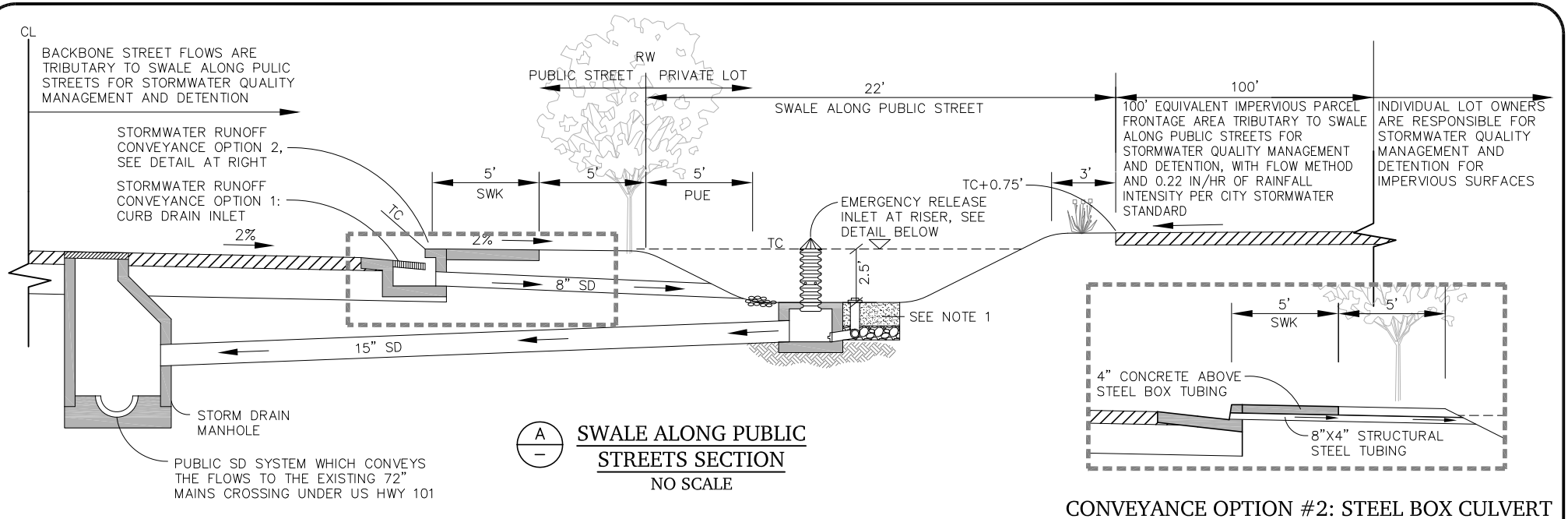
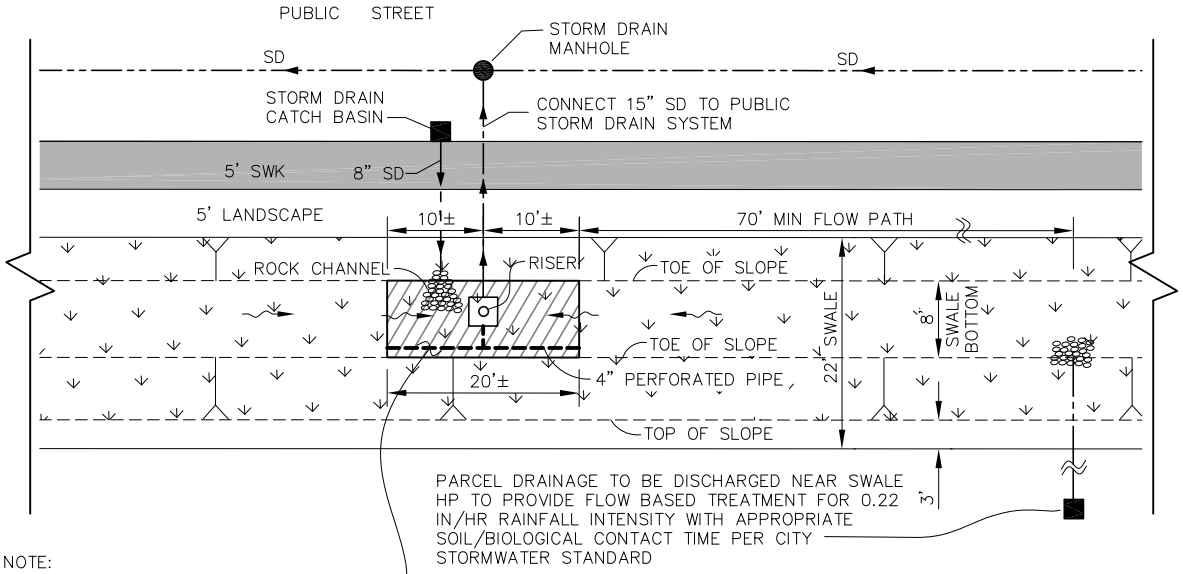
FIGURE 6



A — SWALE ALONG PUBLIC STREETS SECTION
NO SCALE

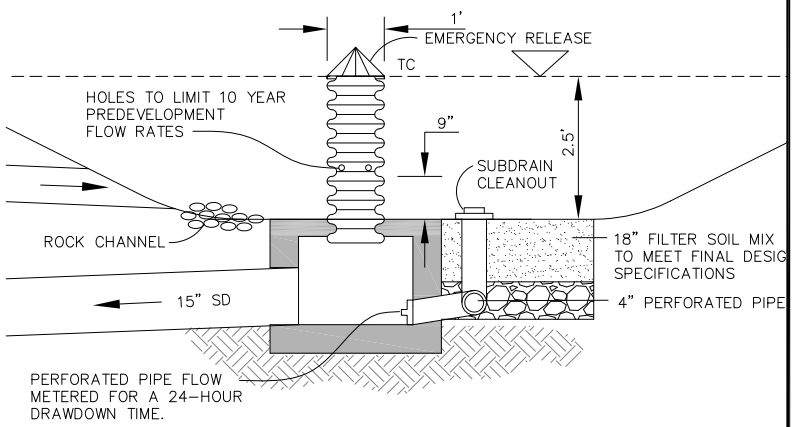
CONVEYANCE OPTION #2: STEEL BOX CULVERT
NO SCALE



NOTE:

1. BIORETENTION TREATMENT AREA FOR STORMWATER QUALITY MANAGEMENT OF BACKBONE STREET FLOWS, WITH VOLUMETRIC METHOD AND 0.6 INCH OF RAINFALL DEPTH (THE 24-HOUR, 85TH PERCENTILE RAINFALL DEPTH) PER CITY STORMWATER STANDARDS AND A 24-HOUR DRAWDOWN TIME.

BIORETENTION TREATMENT AREA
NO SCALE



CONCEPTUAL DESILTING RISER DETAIL
NO SCALE

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CONCEPTUAL SWALE ALONG PUBLIC STREETS DETAILS

SALINAS AG-INDUSTRIAL CENTER

SALINAS, CALIFORNIA
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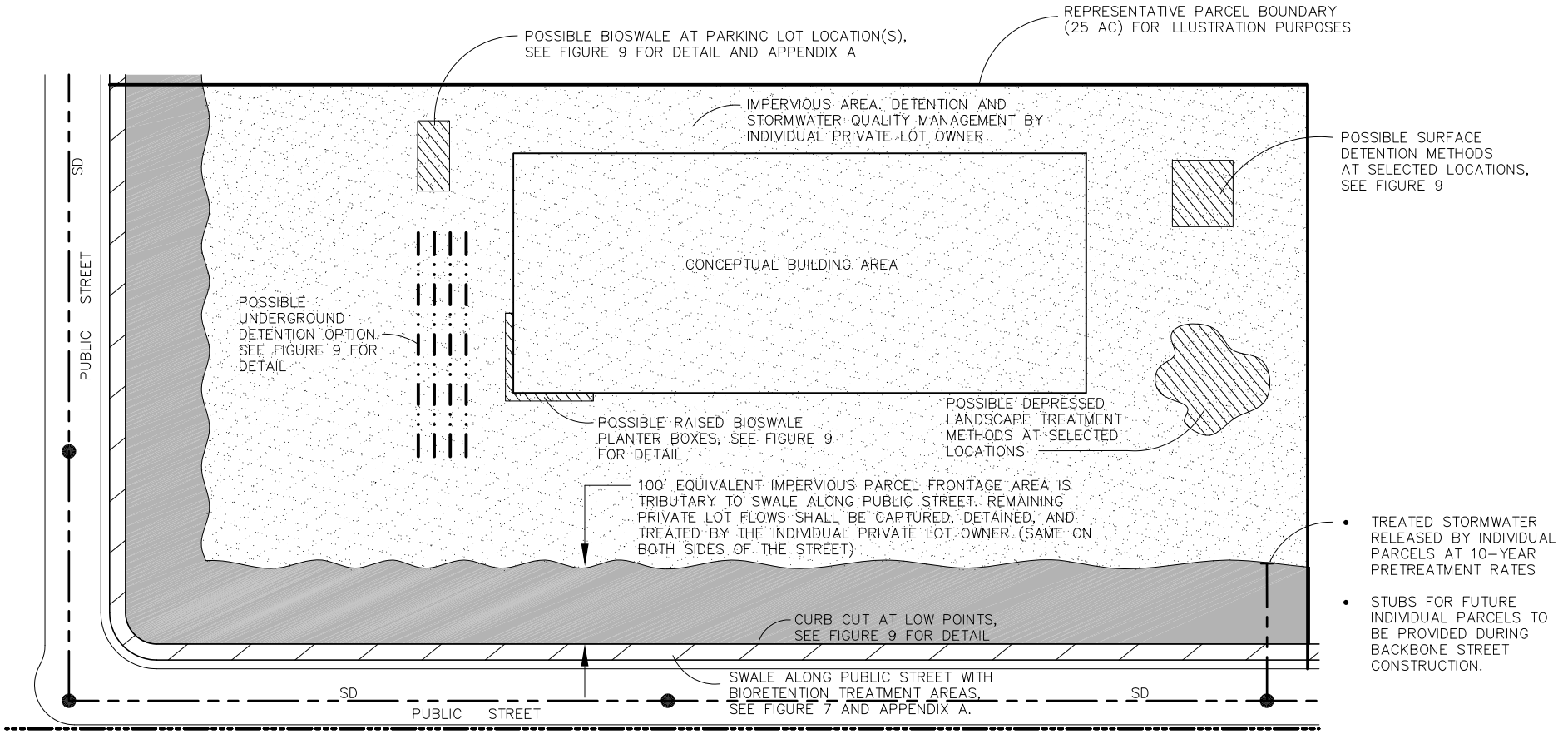
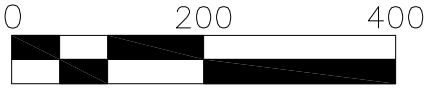
FIGURE 7

NOTES:

1. THIS LOT SIZE AND LAYOUT IS FOR SCHEMATIC PURPOSES AND ONLY TO CONCEPTUALLY SHOW THE MENU OF POSSIBLE DETENTION AND STORMWATER QUALITY MANAGEMENT METHODS FROM WHICH THE INDIVIDUAL PRIVATE LOT OWNER MAY CHOOSE TO MEET THE SWDS.



MENU OF POTENTIAL LOT DETENTION AND STORMWATER QUALITY METHODS



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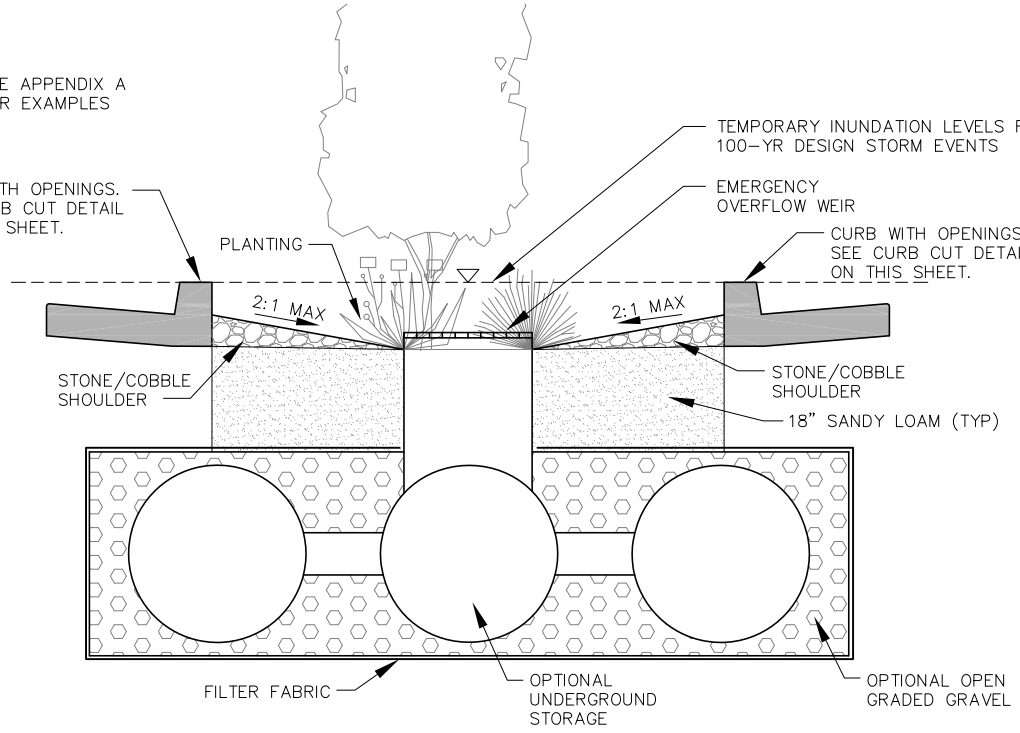
MARCH 2009

JOB NUMBER: 072067

FIGURE 8

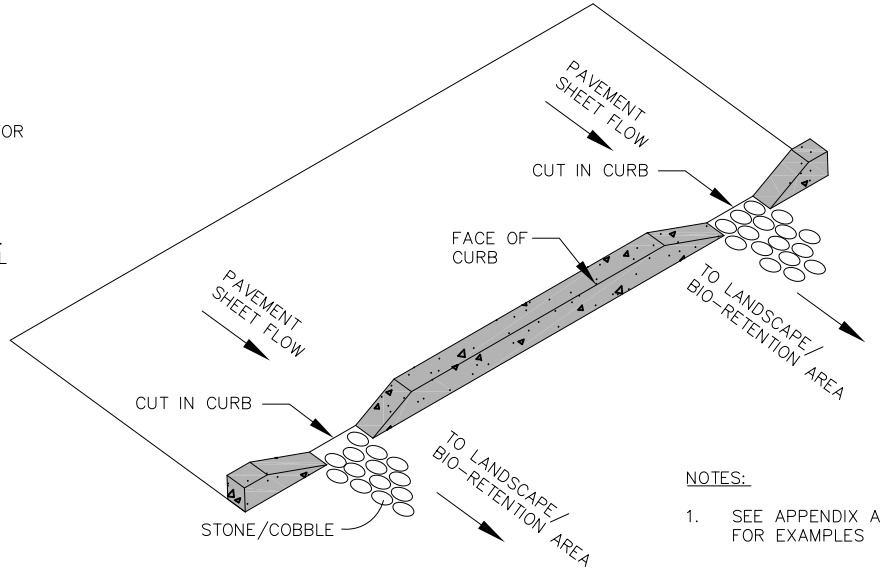
NOTES:

1. SEE APPENDIX A FOR EXAMPLES



CONCEPTUAL BIOSWALE AT PARKING LOT OR EDGE OF PAVEMENT WITH UNDERGROUND STORAGE PIPES OPTION

NO SCALE

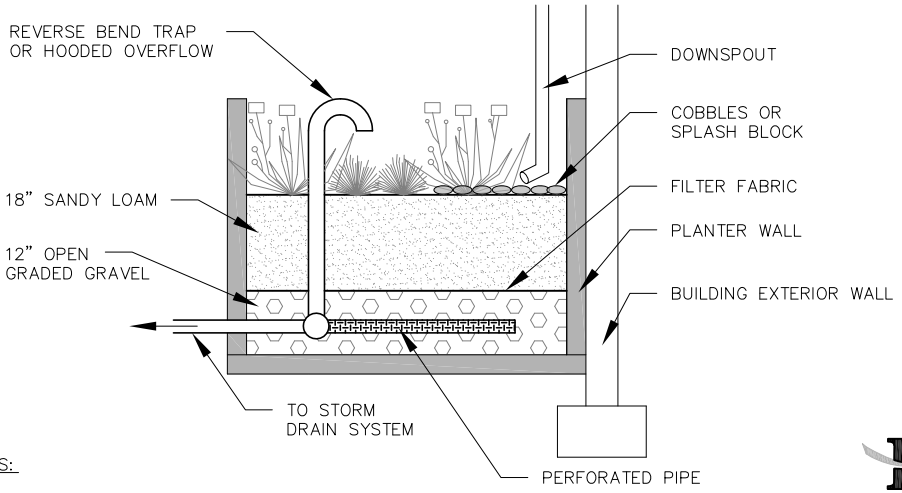


NOTES:

1. SEE APPENDIX A FOR EXAMPLES

CURB CUT DETAIL (ISOMETRIC VIEW)

NO SCALE

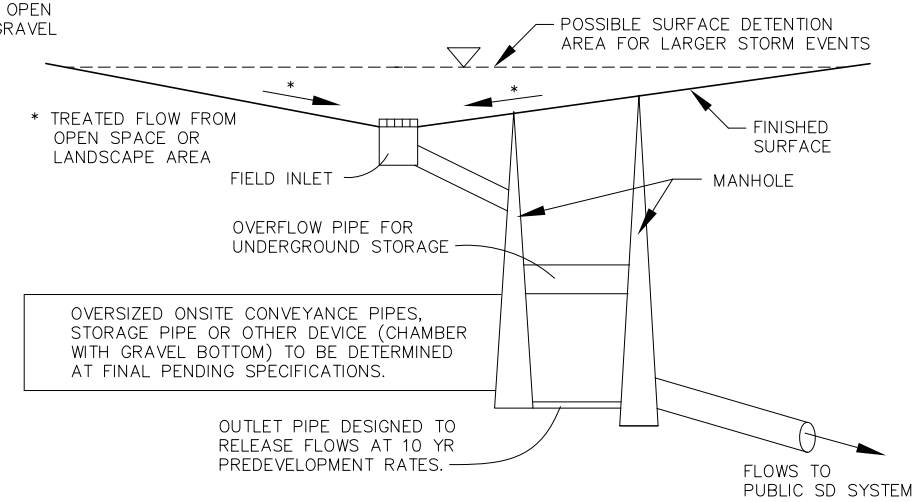


NOTES:

1. SEE APPENDIX A FOR EXAMPLES

RAISED BIOSWALE PLANTER BOXES

NO SCALE



BELOW AND ABOVE GROUND DETENTION

NO SCALE

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TREATMENT AND DETENTION METHODS

SALINAS AG-INDUSTRIAL CENTER

SALINAS, CALIFORNIA

UNI-KOOL PARTNERS

MARCH 2008

JOB NUMBER: 072067

FIGURE 9

3.0 Stormwater Sizing Calculations

BMPs shall be utilized to provide water quality benefits, reduce runoff velocity, and increase stormwater travel time. The *Plan Area* has two main treatment areas to consider: 1) the backbone public streets and 2) the future parcel development areas. The pollutants of concern are listed in Table 2.1.

3.1 Backbone Public Streets

The backbone public streets and swale area will be treated using a 22-foot wide roadside swale and biorentention treatment area as described in section 2.2. An 8-foot wide by 20-foot long bioretention treatment area will be provided every 250-feet along the length of the swale. The bioretention treatment area will provide treatment and filtration of fine particles and pollutants. The 100-foot impervious equivalent parcel frontage area will be treated by flow through the vegetated swale. The runoff will be discharged near the high point of the swale and allowed to flow slowly through the landscaping for a minimum of 70-feet. Treated runoff from the streets and equivalent parcel frontage areas will ultimately drain through the swale outlet structure and into the backbone street storm drain system. Table 3.1 summarizes the BMP sizing calculation for each swale. See Figure 5 for drainage area and BMP locations and Appendix C for complete sizing calculations.

Table 3.1 – Stormwater Treatment Summary Calculation for Backbone Streets , 22 foot Landscape/Detention Swale, and 100 foot Impervious Equivalent Parcel Frontage

Location	Drainage Area (acre)	BMP Classification	Sizing Criteria	Sizing Method	Runoff Coefficient	BMP Size (cfs/ft^3)	Calc Sheet Page No.
55’ R/W	6.2	Treatment	Volume	URQM	0.42	9,069 ft^3	App C-I-4
88’ R/W	17.3	Treatment	Volume	URQM	0.51	30,590 ft^3	App C-I-4
Street B	6.5	Treatment	Volume	URQM	0.57	12,659 ft^3	App C-I-4
Abbott Street	6.5	Treatment	Volume	URQM	0.59	13,162 ft^3	App C-I-4
Harris Road	3.2	Treatment	Volume	URQM	0.51	5,658 ft^3	App C-I-4
Parcel Frontage	51.3	Treatment	Flow	CA BMP	1.00	11.29 cfs	App C-I-4

3.2 Future Parcel Development Areas

The remainder of the parcel area not treated by the swale shall be treated on-site through the use of City accepted and approved treatment facilities as described in section 2.3. These facilities shall be sized and designed in accordance with the requirements of the latest City of Salinas Stormwater Development Standards. Future developers shall prepare and implement a site specific SWCP describing the treatment facility used and sizing calculations. Table 3.2 summarizes the estimated BMP requirements for each remaining parcel area. See Appendix C for complete sizing calculations and treatment volume requirements on a per-acre of parcel development area basis.

Table 3.2 - Treatment Area Summary Calculation for Future Parcel Areas (includes all Parcel Areas less an area equivalent to 100' of parcel frontage)							
Parcel	**Drainage Area (acre)**	**BMP Classification**	**Sizing Criteria**	**Sizing Method**	**Runoff Coefficient**	**BMP Size (ft^3)**	**Calc Sheet Page No.**
A	23.9	Treatment	Volume	URQM	0.73	60,139	App C-II-2
B	14.0	Treatment	Volume	URQM	0.73	35,228	App C-II-2
C	30.1	Treatment	Volume	URQM	0.73	75,739	App C-II-2
D	57.8	Treatment	Volume	URQM	0.73	145,440	App C-II-2
E	46.6	Treatment	Volume	URQM	0.73	117,258	App C-II-2

4.0 Source Control Measures

Source Control Measures are the first line of defense to preventing storm water contamination. The following source control measures are proposed for the *Plan Area* and shall be included in all subsequent SWCPs prepared for future development within the *Plan Area* parcels:

Table 4.1 - Source Control Measures	
Non-Structural Source Control	**BMP Description**
Education	Property owner is responsible to provide practical information materials to the employees on general practices that contribute to the protection of storm water quality. Materials shall include: ▪ Chemical use guidelines and restrictions on the property. ▪ The proper handling of material such as fertilizers, pesticides, and cleaning solutions. ▪ The environmental and legal impacts of illegal dumping of harmful substances into storm drains and sewers. ▪ Hazardous waste collection programs. ▪ Proper procedures for spill prevention and clean up. ▪ Proper storage of materials that pose pollution risks to local waters. ▪ Carpooling programs and public transportation alternatives to driving.
Landscape Management	Ongoing management consistent with the CASQA "Stormwater Best Management Practice Handbook: New Development and Redevelopment" BMPs SD-10 & SD-12, including limiting pesticide and fertilizer usage and minimizing irrigation and runoff.
BMP Maintenance	Property owner is responsible for the inspection and maintenance of structural BMPs located on the property consistent with this Stormwater Control Plan and the City of Salinas "Stormwater Development Standards".
Litter Control	All dumpsters shall be marked with "Do Not Dump Hazardous Materials Here" or similar message. Property owner is responsible for emptying trash receptacles in a timely fashion to avoid overflowing (once daily minimum), as well as, patrolling for trash disposal violations by the employees. Spills will be cleaned up using dry methods.
Employee Training	Property owner is responsible for training employees or hiring an outside consultant to properly implement this Stormwater Control Plan.

Drain Inlet Inspection	All inlets shall be marked with "No Dumping Drains to Bay" or similar message. Property owner is responsible for inspection and maintenance of all privately owned and drain inlets. All drain inlets will be cleaned prior to the storm season, no later than October 1st each year.
Street Sweeping	Property owner is responsible to sweep private parking lots weekly, weather permitting, and prior to the storm season.
Vehicle Washing	Vehicle washing will be prohibited on the public streets. Vehicle washing on-site shall be limited to designated vehicle wash areas. Vehicle wash areas shall be covered, designed with a sand/oil separator, and drain to the sanitary sewer system.
Vehicle Fueling	Vehicle fueling shall be strictly prohibited on-site.
Loading Bays & Docks	Design and management shall be consistent with the CASQA "Stormwater Best Management Practice Handbook: New Development and Redevelopment" BMP SD-31.
Outdoor Material Storage	Outdoor material storage shall be strictly prohibited on-site.
Fire Sprinklers	Sprinkler tests will drain to landscape treatment areas before entering the storm drain system.

5.0 Permitting and Code Compliance Issues

There are no known conflicts between the proposed stormwater control plan and the City of Salinas ordinances or policies. Any conflicts that are found will be resolved through the design review process or during subsequent permitting.

6.0 BMP Operation and Maintenance

6.1 Means to Finance and Implement BMP Maintenance

Proper maintenance and operation of stormwater management facilities will be the responsibility of the Owner to be established under this project. All necessary forms or agreements will be established between the City and developer during the course of final completion of the stormwater control plan.

The applicant will prepare and submit, for the City's review, and acceptable Stormwater Control Operation and Maintenance Plan prior to completion of the construction and will execute a Stormwater Management Facilities Operation and Maintenance Agreement before sale, transfer, or permanent occupancy of the site. The applicant accepts responsibility for maintenance of stormwater management facilities until such responsibility is transferred to another entity.

6.2 Summary of Maintenance Requirements

Treatment facilities remove pollutants primarily by filtering runoff slowly through an active layer of soil. Routine maintenance is needed to insure flow is unobstructed, erosion is prevented,

and soils are held together by plant roots and biologically active. Typical routine maintenance consists of the following:

- Inspect inlets for channels, exposure of soils, or other evidence of erosion. Clear any obstructions and remove any accumulation of sediment. Examine rock or other material used as a splash pad and replenish if necessary.

- Inspect outlets for erosion or plugging.

- Inspect side slopes for evidence of instability or erosion and correct as necessary.

- Observe soil in the swale or planter for uniform percolation throughout. If portions of the swale or filter do not drain within 48 hours after the end of a storm, the soil should be tilled and replanted. Remove any debris or accumulation of sediment.

- Confirm that any check dams and flow spreader are in place and level and that channelization within the swale or filter is effectively prevented.

- Examine the vegetation to insure that it is healthy and dense enough to provide filtering and to protect soils from erosion. Replenish mulch as necessary, remove fallen leaves and debris, prune large shrubs or trees, and now turf areas. Confirm that irrigation is adequate and not excessive. Replace dead plants and remove invasive vegetation.

- Abate any potential vectors by filling ground holes in and around the swale, and by insuring there are no areas where water stands longer than 48 hours following a storm. Mosquito larvicides should be applied only when absolutely necessary and only by a licensed contractor.

- Maintenance of vegetated swales and bioretention areas will be required a minimum of two (2) times per year: once at the beginning of the rainy season and once at the end of the rainy season. Additional maintenance may be required throughout the rainy season if excessive debris is found within the swales, or the swales do not drain completely in 48 hours after a rain event.

- Allow leaf drop to become part of the mulch layer in tree, shrub, and groundcover areas

- Keep lawn mower blades sharp and grass cycle

- Collect lawn and garden clippings, pruning waste, and tree trimming. Chip if necessary, and compost or take to the local municipal yard waste recycling/composting facility.

- Sweep paved areas regularly to collect loose particles. Wipe up spills with rags and other absorbent material immediately; do not hose down the area to a storm drain.

7.0 Certification

Owner/Developer

The Owner/Developer certifies that all storm water management construction will be done according to this Stormwater Management Plan.

Owner/Developer Signature	Date
Owner/Developer Name and Title	Telephone Number

As-built Certification by Engineer

The Engineer certifies that this Stormwater Management Plan has been built and implemented per the approved Civil Engineer construction plans.

Engineer Signature	Date
Engineer Name and Title	Telephone Number

APPENDIX A

Impervious Surface Data Form

IMPERVIOUS SURFACE DATA FORM

What Projects Apply?

All applicants for projects adding, or replacing 5000 sq. ft. or more of impervious surface on the project site or adding impervious surface per NPDES Priority Development criteria for new development projects must fill out this worksheet and submit it to the Engineering Services Section at the City of Salinas Permit Center prior to the issuance of a building permit.

What is an Impervious Surface?

An impervious surface prevents the infiltration or passage of water into the soil. Impervious surfaces include building rooftops, paved patios, covered patios, driveways, parking lots, paved walkways, sidewalks and streets.

For More Information

For more information regarding selection of Best Management Practices for stormwater pollution prevention or stormwater treatment contact: Dale Rosskamp, P.E., Senior Civil Engineer, City of Salinas Permit Center, 831-758-7295

Project Name: The Salinas Ag-Industrial Center **APN #** 177 __ __ - 133 __ - 004,005,007

Applicant Name: The Uni-Kool Partners

Project Location: Abbott Street and Harris Road, Salinas, California
(address)

1. **Project Type (Check all that apply):**

   ☐ Residential ☐ Commercial ☒ Industrial ☐ Public

2. **Project size:**

   a. Site size 11,205,840 sq. ft.

   b. Existing impervious surface area (includes land covered by buildings, sheds, patios/covers, parking lots, streets, sidewalks, paved walkways and driveways) 6,800 sq. ft.

   c. Impervious surface area created, added, or replaced 9,742,200 sq. ft.

   d. Total impervious surface area (new + existing) 9,749,000 sq. ft.

   e. Percent increase/replacement of impervious surface area 87 % c/b(100%)

   f. Estimated area of land disturbance during construction 11,205,840 sq. ft. (including clearing, grading, or excavating).

If impervious surface area added or replaced is > 5,000 sq. ft, then low impact development measures and practices as described in the City of Salinas Development Standards apply.

4. Types of Stormwater Controls Used (check all that apply):

Description	Code
☒ Stormwater Treatment Measure	STM
☒ Source Control Measure	SCM
☒ Site Design Measure	SDM
☐ Doesn't Apply	DNA

Examples of Stormwater Control Measures:

Stormwater Treatment

- Biofilter (veg. swale/strip)
- Detention basin (dry)
- Detention pond (wet)
- Underground detention
- Media filter (sand, organic matter, bioretention)
- Hydrodynamic device (commercially available in-line treatment unit)
- Infiltration trench
- Porous pavement
- Wetland basin
- Wetland channel
- Inlet filter
- Other _____

Source Controls

- Wash area/racks, drain to sanitary sewer
- Covered dumpster area, drain to sanitary sewer
- Swimming pool drain to sanitary sewer
- Beneficial landscaping (minimizes irrigation, runoff, pesticides and fertilizers; promotes treatment)
- Outdoor material storage protection
- Covers, drains for loading docks, maintenance bays, fueling areas
- Maintenance (street sweeping, catch basin cleaning)
- Other _____

Site Design

- Minimize land disturbance
- Minimize impervious surfaces
- Minimum-impact street or parking lot design
- Cluster structures/pavement
- Disconnect downspouts
- Alternative driveway design
- Microdetention in landscape
- Preserve open space
- Protect riparian and wetland areas, riparian buffers
- Minimize change in runoff hydrograph
- Other _____

Reviewed:

City of Salinas Permit Center

Engineering Section: _____ **Date:** _____

APPENDIX B

Low Impact Development (LID) Examples

Redirect Roof Downspouts

Planning Considerations

- Check with the City about requirements for trees located in public utility easements.
- Locate trees appropriate distances from infrastructure ~~and structures~~ that could be damaged by roots and branches. These include, but are not limited to, overhead utilities and lighting, underground utilities, signage, septic systems, curb/gutter and sidewalks, paved surfaces, building foundations and existing trees.
- Select tree species based on the soils found on the site, available water, and aesthetics.
- Consult a landscape architect or arborist regarding suitability of species for site conditions and design intent.

Photo: NEMO Nevada

Figure 3-3: A Rooftop Downspout Redirected to a Landscaped Area

Design Considerations

- Direct downspouts towards landscaping, vegetated swales, filter strips, bioretention systems, sand filters, infiltration trenches, infiltration basins and other pervious areas.
- Install splash blocks or gravel splash pads beneath the outlet of downspouts to dissipate runoff energy and minimize erosion.
- Stormwater planters and rock-lined trenches located under roofline/drip lines help to control erosion from concentrated sheet flow off of the roof and promote infiltration.
- Plants installed along a building's drip line shall be sturdy enough to handle heavy runoff sheet flows from rooftop runoff.
- Roof runoff can also be stored for irrigation by directing downspouts to rainwater collection devices.
- If used, rain barrels and cisterns must be securely covered to prevent vector breeding and must be child proof.

Potential Limitations

- Plantings under rooflines must be able to withstand heavy runoff sheet flows and soil saturation.
- Soil permeability may limit applicability of infiltration trenches.
- An uncovered rain barrel or cistern can provide mosquito habitat if it contains standing water. All stormwater storage devices must be designed, to the satisfaction of the City Engineer, to provide sanitary storage conditions, including vector control.

Maintenance Considerations

- Routine landscape maintenance required for plantings located under rooflines and around downspouts.
- Inspect and maintain rain barrels and cisterns at least twice a year to ensure they are secure, functioning properly, and not breeding mosquitoes.

Redirect Roof Downspouts

Bioretention – Stormwater Planters

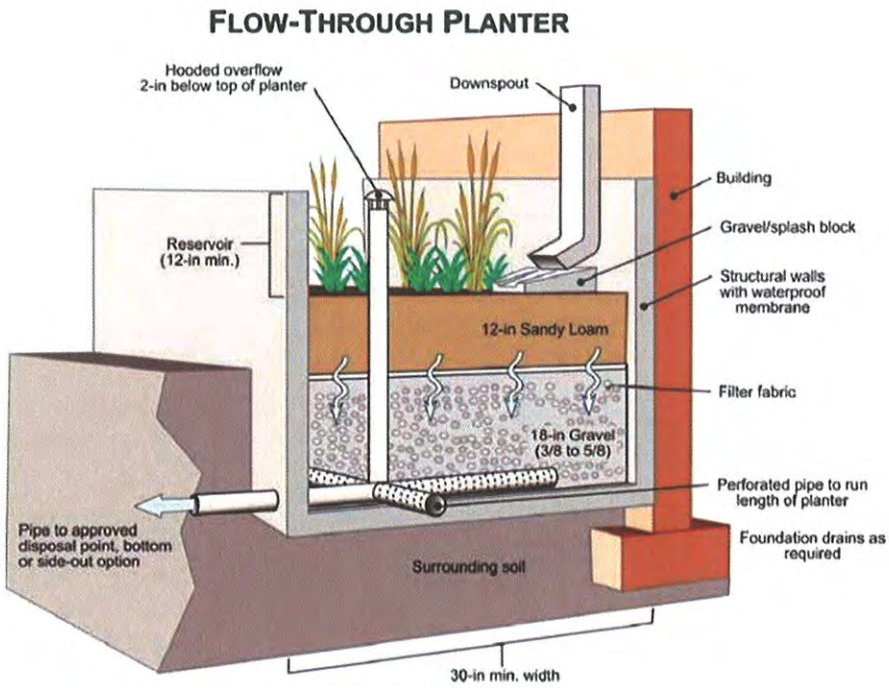


Figure 3-4~~8~~: Schematic of a Stormwater Planter that Detains and Treats Roof Runoff, and Drains and Overflows to the Conventional Storm Drain System via an Underdrain and Overflow Pipe System (Source: Portland BES)

Figure 3-5~~0~~49: Stormwater Planters Installed Next to Office Buildings
(Source: Portland BES)

Bioretention – Landscape Detention

Photo: Center for Watershed Protection

Photo: Colorado AWARE

Figure 3-398: Landscape Detention Basins Located at the Edge of a Parking Lot (left photo) and in a Parking Lot Island with Turf and Shrubs and Trees (right photo)

Photo: Center for Watershed Protection

Photo: Center for Watershed Protection

Figure 3-4039: Curb Opening Design for a Landscape Detention System Located Upstream of a Conventional Storm Drain Inlet (left photo) and a Bioretention System Retrofit into an Existing Parking Lot Island (right photo)

Siting Criteria

- Drainage area shall be less than 1 acre
- May be located on-line or off-line of the primary drainage system
- Not recommended for areas with slopes greater than 20 percent
- Layout shall be determined based on site constraints such as location of utilities, underlying soil conditions, existing vegetation, and drainage patterns
- Not to be used in areas where the infiltration rate of existing site soils is less than 0.5 inch/hr (120 min/inch) and there is no adjacent storm drain system or other

LID Designs for Parking Lots

Photo: Chris Conway, Kennedy/Jenks Consultants

Figure 3-17: Curb Cuts Direct Water into a Parking Lot Bioretention System in the City of Salinas

References and Additional Sources of Information

BASMAA. 1999. Start at the Source: Design Guidance Manual for Stormwater Quality Protection. Bay Area Stormwater Management Agencies Association. Prepared by Tom Richman & Associates. www.basmaa.org

Kelsey, P. D. and S. Andrew. 2005. The Morton Arboretum's "Green" Parking Lot. StormCon.

Minnesota's Metropolitan Council Environmental Services. Urban Small Sites Best Management Practice Manual - Chapter 3, Parking Lot Design. http://www.metrocouncil.org/environment/Watershed/bmp/CH3_RPPImpParking.pdf

Puget Sound Action Team. 2005. Low Impact Development: Technical Guidance Manual for Puget Sound. Olympia, WA. http://www.psp.wa.gov/downloads/LID/LID_manual2005.pdf

ToolBase Services. Permeable Pavement. http://www.toolbase.org/Technology-Inventory/Sitework/permeable-pavement

LID Designs for Parking Lots

- Porous surfaces can be installed in down gradient parking stalls and in overflow parking areas (Figure 3-16). Permeable materials that can be utilized include permeable pavers, porous asphalt, and porous concrete (see Section 3.4.3). In some circumstances, gravel or wood chips can also be used.

Figure 3-15: Parking Lot Bioretention
(Photo: Kennedy/Jenks Consultants)

Photo: Kennedy/Jenks Consultants

Figure 3-34: Parking Lot Island Bioretention System

- Stormwater runoff from the top floor of parking garages can be drained to planter boxes located at the perimeter of the parking lot or at street level.

Design Considerations

- Utilize minimum stall dimensions and compact parking spaces. In larger commercial lots, 30 percent of the parking spaces should be for compact cars.
- Use porous concrete, porous asphalt or permeable pavers in overflow parking areas or down gradient parking stalls (at low points in the parking lot).
- Utilize the most space-efficient design for parking stalls.
- Utilize vegetation and landscaping for capture and infiltration of rainfall and stormwater runoff, for impervious surface reduction, and for shading.
- Utilize flat curbs or curb cuts (Figure 3-17) to direct runoff into landscaped areas.

Maintenance Considerations

- Regular maintenance of landscaped areas is required.
- Irrigation of landscaped areas may be required.

Bioretention – Landscape Detention

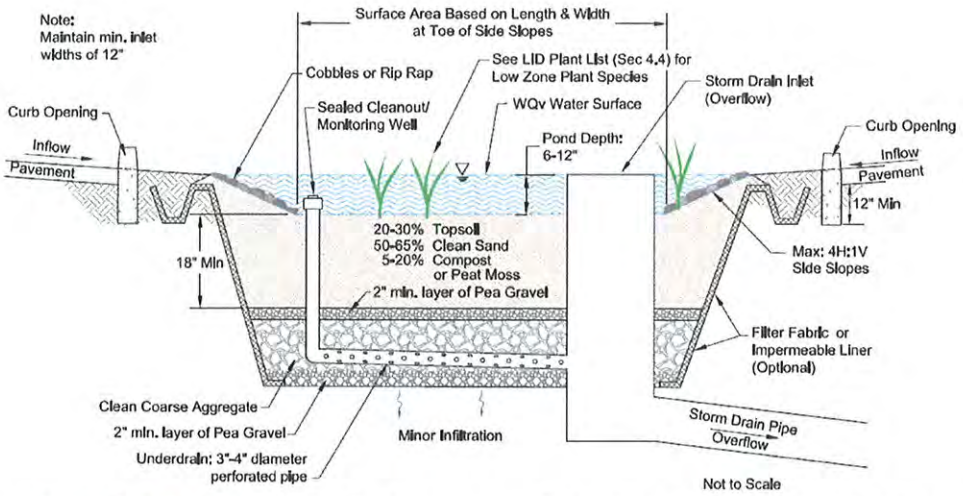


Figure 3-43: Schematic of a Landscape Detention Basin Located in Slow-draining Soils with an Underdrain System and a Storm Drain Inlet Located Inside the Basin to Capture Overflow from Relatively Large Storm Events. (Graphic by Kennedy/Jenks Consultants)

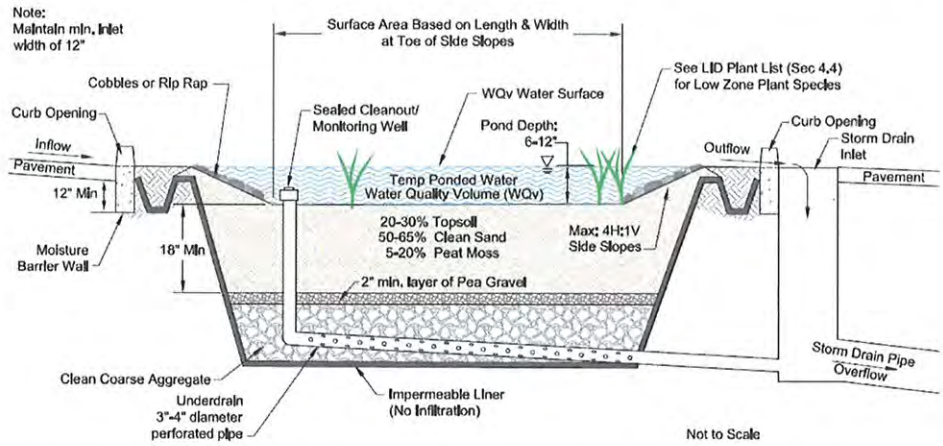


Figure 3-44: Schematic of a Landscape Detention Basin Located in Expansive Clays or Where There is Outdoor Storage or Use of Chemicals or Materials within the BMP Drainage Area that Could Threaten Groundwater Quality if a Spill Were to Occur.
(Graphic by Kennedy/Jenks Consultants)

Vegetated Swales

Source: San Mateo County Sustainable Green Streets and Parking Lots Guidebook

Vegetated swales are long, narrow landscaped depressions, with a slight longitudinal slope. They are primarily used to convey stormwater runoff on the land's surface while also providing water quality treatment. As water flows through a vegetated swale, it is slowed by the interaction with plants and soil, allowing sediments and associated pollutants to settle out. Some water soaks into the soil and is taken up by plants, and some may infiltrate further if native soils are well drained. The remaining water that continues to flow downstream travels more slowly than it would through pipes in a traditional stormwater conveyance system. Vegetated swales are typically built very shallow and contain runoff that is only a few of inches deep.

Parking lots and certain street conditions that have a long, continuous space to support a functioning landscape system are excellent candidate sites for vegetated swales. The longer a vegetated swale is, the greater the residence time for slowing and filtering of stormwater runoff.

Vegetated swales are relatively low-cost, simple to construct, and widely accepted as a stormwater management strategy.

Vegetated swales can be planted in a variety of ways ranging from mown grass to a diverse palate of grasses, sedges, rushes, shrubs, groundcovers and trees.

For green street and parking lot applications, vegetated swales can be used in both relatively flat conditions or steeper conditions up to a 5% longitudinal slope. For swales above a 2% slope, check dams or terraces should be used to help slow the flow of water. Additional guidance on check dams for green street and parking lot applications is provided in Chapter 5 of this guidebook.

Vegetated Swales (cont.)

Source: San Mateo County Sustainable Green Streets and Parking Lots Guidebook

SOURCE: ABBY HALL-EPA

Figure 2-47: *A residential street with a vegetated swale.*

SOURCE: SHERWOOD DESIGN ENGINEERS

Figure 2-48: *A local San Francisco Bay Area parking lot with a vegetated swale.*

Good Places for Vegetated Swales:

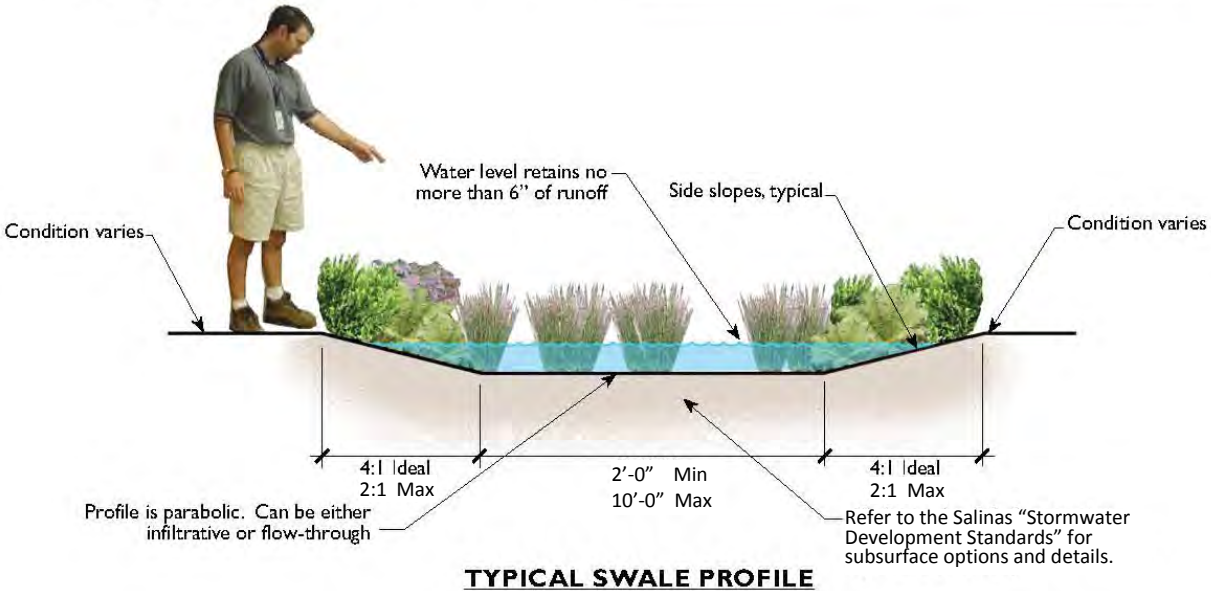
- New residential and commercial streets
- Arterial streets and boulevards
- Within street medians on new streets
- Within the interior and along the edges of parking lots

Why Choose Vegetated Swales:

- Widely-accepted stormwater strategy
- Simple to construct
- Relatively low-cost to implement

Potential Constraints:

- Need long, continuous spaces which can be difficult to find in retrofit conditions
- Difficult to incorporate other streetscape elements within swales (lighting, signage, etc.)
- More difficult to provide good pedestrian circulation through swales
- Often designed to be "too deep" and, as a result, are not aesthetically pleasing



TYPICAL SWALE PROFILE

Vegetated Swales (cont.)

Source: San Mateo County Sustainable Green Streets and Parking Lots Guidebook

Street Applications

SOURCE: NEVUE NGAN ASSOCIATES

Figure 2-52: *Residential street with a vegetated swale.*

SOURCE: NEVUE NGAN ASSOCIATES

Figure 2-53: *A vegetated swale alongside a steep residential street.*

SOURCE: NEVUE NGAN ASSOCIATES

Figure 2-54: *An arterial street with a vegetated swale.*

Parking Lot Applications

SOURCE: KEVIN ROBERT PERRY - CITY OF PORTLAND

Figure 2-55: *An elementary school parking lot with a vegetated swale.*

SOURCE: WWW.IA.NRCS.USDA.GOV/FEATURES/URBAN PHOTOS

Figure 2-56: *A vegetated swale within a large parking lot.*

SOURCE: NEVUE NGAN ASSOCIATES

Figure 2-57: *A commercial center with a parking lot vegetated swale.*

Pervious Pavement

Source: San Mateo County Sustainable Green Streets and Parking Lots Guidebook

Figure 4-44: EXAMPLE: *This arterial street utilizes a vegetated swale to accept stormwater from the street. This green street also uses sidewalks made from pervious concrete.*

Figure 2-37: *This residential driveway utilizes pervious joint pavers in San Mateo County.*

Pervious pavers used for neighborhood plaza

Pervious pavers used for street sidewalk

Figure 2-44: *Sand-set interlocking concrete unit pavers create gaps between adjoining pavers and allow water to soak into the ground.*

APPENDIX C

LID Calculations

Treatment Volume Calculations
The Salinas Ag-Industrial Center
June 9 2009

I. 22' Landscape/Detention Swale

Problem: Determine flow based and volume based storm water treatment requirements for the roadside swale drainage areas. This sample calculation considers a 250' long section of backbone public streets.

A. Volume Based Treatment

It is assumed the backbone public street R/W and 22' wide landscape/swale area will be treated with volume based bioretention cells. SeeTable C.1 - "Swale Bioretention Treatment Sizing Calculations" for complete calculations.

1. Water Quality Volume

Use volume based "Urban Runoff Quality Management Approach"

$$V_T = \frac{aCP_6A}{12} \text{ ft}^3$$

where,
- a = 1.582, regression constant for 24 hour design draw down
- C = $0.858i^3 - 0.78i^2 + 0.774i + 0.04$, Runoff Coefficient
- i = drainage area imperviousness ratio
- P_6 = maximized detention volume, in inches
- A = drainage area, in square feet

for sample calculation area use Street B treatment width (84' R/W & 22' Swale),

L =	250	ft
W =	106	ft
A =	26500	ft^2
P_6 =	0.6	in
a =	1.582	
i =	0.77	
C =	0.57	

Therefore, V_T = 1185 ft^3

2. Treatment Infiltration Area

$$A_R = \frac{SF[V_T(12)]}{RT_D} \text{ acres}$$

where,
- V_T = water quality treatment volume, in acre-ft
- R = infiltration rate of engineered soil mix or subsurface soils, in inches per hour
- T_D = draw down time, in hours
- SF = Safety factor against clogging

R =	5.0	in/hr
T_D =	24	hr
SF =	1.5	

Therefore, A_R = 178 ft^2

Infiltration Area Width =	8	ft
Infiltration Area Length =	22	ft

Use 8'x20' infiltration area = 160 ft^2

A subdrain and orifice plate will also be used to limit the treatment volume drawdown to 24 hours and a 5 in/hr surface loading rate. See attached spreadsheet for orifice sizing and drawdown calculations.

Treatment Volume Calculations
The Salinas Ag-Industrial Center
June 9 2009

3 Loading Rate Calculation

$$LR_{MAX} = \frac{Q(43200)}{A_R} \text{ in/hr}$$

where, Q = Subdrain orifice maximum release rate in cfs

$Q =$ 0.017 cfs
$A_R =$ 160 ft^2

Therefore, $LR_{MAX} =$ 4.59 in/hr < 5 in/hr

$$LR_{AVE} = \frac{V_T(12)}{T_D A_R} \text{ in/hr}$$

where, $V_T =$ 1161 ft^3
$T_D =$ 22 hr
$A_R =$ 160 ft^2

Therefore, $LR_{AVE} =$ 3.96 in/hr < 5 in/hr

B. Volume Based Treatment

It is assumed the 100' impervious equivalent parcel frontage area will be treated by flow through the landscaped swale. SeeTable C.2 - "Swale Flow Treatment Sizing Calculations" for complete calculations.

1. Water Quality Flow

Use City flow based design criteria,

$$Q_T = \frac{Ci_T A}{43560} \text{ cfs}$$

where, A = drainage area, in square feet
C = Runoff Coefficient
i_T = Two times the 24-hr, 85th percentile rainfall intensity, in in/hr

assume half of 250' long section of parcel frontage is discharged at each swale high point,

$L =$ 125 ft
$W =$ 100 ft
$A =$ 12500 ft^2
$C =$ 1.0
$i_T =$ 0.22 in/hr

Therefore, $Q_T =$ 0.063 cfs

Treatment Volume Calculations
The Salinas Ag-Industrial Center
June 9 2009

2. Water Quality Velocity

Using Manning's Equation and the following swale section assumptions,

Depth	0.098	ft
Side slope	2	:1
Low Flow Width	8	ft
Channel slope	0.004	ft/ft
Manning's n	0.25	
Top Width	8.39	ft
Area	0.80	ft^2
Hydraulic Radius	0.10	ft
Q =	0.063	cfs
Therefore, v =	0.078	ft/s

3. Contact Time Calculation

City criteria requires a 10 minute minimum contact time. Calculate minimum flow length for 10 minute contact time,

$$L_T = T_C v(60) \text{ ft}$$

where,
T_C = Treatment contact time, in min
v = Treatment flow velocity, in ft/s

T_C =	10	min
v =	0.078	ft/s
Therefore, L_T =	47	ft

3. Loading Rate Calculation

City criteria limits the surface loading rate to 5 in/hr. Calculate the minimum flow length for 5 in/hr surface loading rate,

$$L_T = \frac{Q_T(43200)}{LR(w)} \text{ ft}$$

where,
Q_T = Treatment flow, in cfs
LR = Surface loading rate, in/hr
w = Swale width, in ft

Q_T =	0.063	cfs	
LR =	5.0	in/hr	
w =	8.0	ft	
Therefore, L_T =	68	ft	**Use a 70' minimum treatment flow length**

Treatment Volume Calculations
The Salinas Ag-Industrial Center
June 9 2009

C. Swale Stormwater Treatment Sizing Calculations

Volume Based

a =	1.582	
P_6 =	0.60	in
R =	5.0	in/hr
T_D	24	hr
Typical Cell Spacing	250	ft
Typical Cell Width	8	ft
SF =	1.5	

Flow Based

C =	1.0	
i_T =	0.22	in/hr
Manning's n =	0.25	

250' Swale Stage-Volume Relationship
See attached swale volume calculations

Depth (ft)	Swale Volume (ft^3)
0.0	0
0.5	524
1.0	1685
1.5	3071
2.0	4682
2.5	7099

Table C.1 - Swale Bioretention Treatment Sizing Calculations

Drainage Area	*Swale Length (ft)*	*Drainage Area Width (ft)*	*Treatment Area (acre)*	*Percent Impervious (%)*	*Runoff Coefficient*	*Treatment Volume (ft^3)*	*Infiltration Area (ft^2)*	*Cell Length Length (ft)*	*Treatment Volume Depth (ft)*
55' R/W	250	49.5	0.28	62%	0.42	416	42	8	0.40
Total	**5,530**		**6.2**	**62%**	**0.42**	**9,069**	**907**		
88' R/W	250	66	0.38	72%	0.51	670	67	13	0.56
Total	**10,810**		**17.3**	**72%**	**0.51**	**30,590**	**3,059**		
Street B	250	106	0.61	77%	0.57	1,185	118	22	0.78
Total	**2,290**		**6.5**	**77%**	**0.57**	**12,659**	**1,266**		
Abbott St	250	90	0.52	79%	0.59	1,046	105	20	0.72
Total	**2,930**		**6.5**	**79%**	**0.59**	**13,162**	**1,316**		
Harris Rd	250	66	0.38	72%	0.51	670	67	13	0.56
Total	**1,900**		**3.2**	**72%**	**0.51**	**5,658**	**566**		
Total/Ave	**23,460**		**39.7**			**71,138**	**7,114**		

Table C.2 - Swale Flow Treatment Sizing Calculations

Drainage Area	*Length (ft)*	*Drainage Area Width (ft)*	*Treatment Area (acre)*	*Percent Impervious (%)*	*Runoff Coefficient*	*Treatment Flow (cfs)*	*Flow Velocity (ft/s)*	*Flow Depth (ft)*	*Min Flow Length (ft)*	*Contact Time (min)*
Parcel Frontage	125	100	0.29	100%	1.00	0.063	0.078	0.098	70	15.0
Total/Ave			**51.3**			11.29				

Treatment Volume Calculations
The Salinas Ag-Industrial Center
June 9 2009

II. Remainder Parcel Areas

Problem: Determine water quality volume and infiltration area for remaining parcel development areas. Determine Treatment requirements on a per acre basis of gross parcel development area.

A. Sample Calculation

Note: This sample calculation is for remainder parcel area "Parcel A" per the attached exhibit.
See Table C.3 - "Future Parcel Area Water Quality Sizing Calculations" for complete calculations.

1. Water Quality Volume

Use volume based "Urban Runoff Quality Management Approach"

$$V_T = \frac{aCP_6A}{12} \text{ acre-ft}$$

where,
- a = 1.582, regression constant for 48 hour design draw down
- C = $0.858i^3 - 0.78i^2 + 0.774i + 0.04$, Runoff Coefficient
- i = drainage area imperviousness ratio
- P_6 = maximized detention volume, in inches
- A = drainage area, in acres

for drainage area "Lot A",

A =	23.9	acres
P_6 =	0.6	in
a =	1.582	
i =	0.90	
C =	0.73	

Therefore, V_T = 1.381 acre-ft

2. Treatment Infiltration Area

$$A_R = \frac{V_T(12)}{RT_D} \text{ acres}$$

where,
- V_T = water quality treatment volume, in acre-ft
- R = infiltration rate of engineered soil mix or subsurface soils, in inches per hour
- T_D = draw down time, in hours

Note: Surface soils onsite consist of expansive fat clays with slow percolation rates. All treatment areas shall be designed with a perforated subdrain to collect water after it filters through the engineered soil mix. Therefore, an engineered soil mix infiltration rate of 5 in/hr shall be used for all treatment infiltration area calculations.

R =	5.0	in/hr
T_D =	24	hr

Therefore, A_R = 0.138 acres

3. Gross Parcel Development Area Treatment Requirements

Determine water quality volume and infiltration area on a per acre basis of gross parcel development area.

Parcel A Gross Area = 31.9 acres

V =	1,885	ft^3/acre
A_R =	189	ft^2/acre

Treatment Volume Calculations
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Total treatment facility area based on an average ponding depth of 0.75 ft,

A_F = 1.841 acres or, 2,514 ft^2/acre
% of gross Parcel A Area = 5.8%

B. Future Parcel Area Water Quality Sizing Calculations

% Imperv = 90%
C = 0.73
a = 1.582
P_6 = 0.60 in
R = 5.0 in/hr
T_D = 24 hr

Table C.3 - Future Parcel Area Sizing Calculations

Parcel	*Gross Parcel Area (acre)*	*Remainder Parcel Area (acre)*	*Treatment Volume (ft^3)*	*Infiltration Area, minimu (ft^2)*	*A_F for 0.75' of Ponding (ft^2)*	*% of Gross Parcel Area*	*V_T per Gross Parcel Area (ft^3/acre)*	*A_R per Gross Parcel Area (ft^2/acre)*
A	31.9	23.9	60,139	6,014	80,185	5.8%	1,885	189
B	23.0	14.0	35,228	3,523	46,970	4.7%	1,532	153
C	36.9	30.1	75,739	7,574	100,986	6.3%	2,053	205
D	78.7	57.8	145,440	14,544	193,920	5.7%	1,848	185
E	65.1	46.6	117,258	11,726	156,343	5.5%	1,801	180
Total/Ave	**235.6**	**172.4**	**433,803**	**43,380**	**578,404**	**5.6%**	**1,841**	184

Swale Discharge Orifice and Drawdown Design for Water Treatment Volume
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Criteria:

1) Completely drain in 24 hours
2) Use treatment volume from the 88' R/W drainage area

Stage (ft)	Elevation	V (ft^3)	V (Ac-ft)
-2	53	0	0.00
0	55	100	0.00
0.5	55.5	524	0.01
1	56	1685	0.04
1.5	56.5	3071	0.07

Orifice Data

C =	0.6
Ø =	0.625 in
A =	0.0021 ft^2
g =	32.2 ft/s^2
H_0 =	-2 ft

Time(min)	Time (hr)	H (ft)	V (ft^3)	V (Ac-ft)	Q (cfs)
0	0.00	0.750	1161	0.03	0.017
10	0.17	0.770	1151	0.03	0.017
20	0.33	0.766	1141	0.03	0.017
30	0.50	0.761	1130	0.03	0.017
40	0.67	0.757	1120	0.03	0.017
50	0.83	0.752	1110	0.03	0.017
60	1.00	0.748	1100	0.03	0.017
70	1.17	0.744	1089	0.03	0.017
80	1.33	0.739	1079	0.02	0.017
90	1.50	0.735	1069	0.02	0.017
100	1.67	0.730	1059	0.02	0.017
110	1.83	0.726	1049	0.02	0.017
120	2.00	0.722	1039	0.02	0.017
130	2.17	0.717	1028	0.02	0.017
140	2.33	0.713	1018	0.02	0.017
150	2.50	0.708	1008	0.02	0.017
160	2.67	0.704	998	0.02	0.017
170	2.83	0.700	988	0.02	0.017
180	3.00	0.695	978	0.02	0.017
190	3.17	0.691	968	0.02	0.017
200	3.33	0.687	958	0.02	0.017
210	3.50	0.682	947	0.02	0.017
220	3.67	0.678	937	0.02	0.017
230	3.83	0.674	927	0.02	0.017
240	4.00	0.669	917	0.02	0.017
250	4.17	0.665	907	0.02	0.017
260	4.33	0.661	897	0.02	0.017
270	4.50	0.656	887	0.02	0.017
280	4.67	0.652	877	0.02	0.017
290	4.83	0.648	867	0.02	0.017
300	5.00	0.643	857	0.02	0.017
310	5.17	0.639	847	0.02	0.017
320	5.33	0.635	837	0.02	0.017
330	5.50	0.631	827	0.02	0.017
340	5.67	0.626	817	0.02	0.017
350	5.83	0.622	807	0.02	0.017
360	6.00	0.618	797	0.02	0.017
370	6.17	0.613	787	0.02	0.017
380	6.33	0.609	777	0.02	0.017
390	6.50	0.605	767	0.02	0.017
400	6.67	0.600	757	0.02	0.017
410	6.83	0.596	747	0.02	0.017
420	7.00	0.592	737	0.02	0.017
430	7.17	0.588	728	0.02	0.017
440	7.33	0.583	718	0.02	0.016
450	7.50	0.579	708	0.02	0.016
460	7.67	0.575	698	0.02	0.016
470	7.83	0.571	688	0.02	0.016
480	8.00	0.566	678	0.02	0.016
490	8.17	0.562	668	0.02	0.016
500	8.33	0.558	658	0.02	0.016
510	8.50	0.554	649	0.01	0.016
520	8.67	0.549	639	0.01	0.016
530	8.83	0.545	629	0.01	0.016

Swale Discharge Orifice and Drawdown Design for Water Treatment Volume
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Time(min)	Time (hr)	H (ft)	V (ft^3)	V (Ac-ft)	Q (cfs)
540	9.00	0.541	619	0.01	0.016
550	9.17	0.537	609	0.01	0.016
560	9.33	0.533	599	0.01	0.016
570	9.50	0.528	590	0.01	0.016
580	9.67	0.524	580	0.01	0.016
590	9.83	0.520	570	0.01	0.016
600	10.00	0.516	560	0.01	0.016
610	10.17	0.511	551	0.01	0.016
620	10.33	0.507	541	0.01	0.016
630	10.50	0.503	531	0.01	0.016
640	10.67	0.499	521	0.01	0.016
650	10.83	0.485	512	0.01	0.016
660	11.00	0.474	502	0.01	0.016
670	11.17	0.463	492	0.01	0.016
680	11.33	0.451	483	0.01	0.016
690	11.50	0.440	473	0.01	0.016
700	11.67	0.428	463	0.01	0.016
710	11.83	0.417	454	0.01	0.016
720	12.00	0.406	444	0.01	0.016
730	12.17	0.395	435	0.01	0.016
740	12.33	0.383	425	0.01	0.016
750	12.50	0.372	416	0.01	0.016
760	12.67	0.361	406	0.01	0.016
770	12.83	0.350	397	0.01	0.016
780	13.00	0.339	387	0.01	0.016
790	13.17	0.328	378	0.01	0.016
800	13.33	0.317	368	0.01	0.016
810	13.50	0.305	359	0.01	0.016
820	13.67	0.294	350	0.01	0.016
830	13.83	0.283	340	0.01	0.016
840	14.00	0.273	331	0.01	0.015
850	14.17	0.262	322	0.01	0.015
860	14.33	0.251	313	0.01	0.015
870	14.50	0.240	303	0.01	0.015
880	14.67	0.229	294	0.01	0.015
890	14.83	0.218	285	0.01	0.015
900	15.00	0.207	276	0.01	0.015
910	15.17	0.196	267	0.01	0.015
920	15.33	0.186	257	0.01	0.015
930	15.50	0.175	248	0.01	0.015
940	15.67	0.164	239	0.01	0.015
950	15.83	0.154	230	0.01	0.015
960	16.00	0.143	221	0.01	0.015
970	16.17	0.132	212	0.00	0.015
980	16.33	0.122	203	0.00	0.015
990	16.50	0.111	194	0.00	0.015
1000	16.67	0.101	185	0.00	0.015
1010	16.83	0.090	176	0.00	0.015
1020	17.00	0.080	167	0.00	0.015
1030	17.17	0.069	159	0.00	0.015
1040	17.33	0.059	150	0.00	0.015
1050	17.50	0.048	141	0.00	0.015
1060	17.67	0.038	132	0.00	0.015
1070	17.83	0.028	123	0.00	0.015
1080	18.00	0.017	115	0.00	0.015
1090	18.17	0.007	106	0.00	0.015
1100	18.33	-0.003	97	0.00	0.014
1110	18.50	-0.232	88	0.00	0.014
1120	18.67	-0.395	80	0.00	0.013
1130	18.83	-0.551	72	0.00	0.012
1140	19.00	-0.700	65	0.00	0.012
1150	19.17	-0.840	58	0.00	0.011
1160	19.33	-0.972	51	0.00	0.010
1170	19.50	-1.097	45	0.00	0.010
1180	19.67	-1.214	39	0.00	0.009
1190	19.83	-1.323	34	0.00	0.008
1200	20.00	-1.425	29	0.00	0.008

Swale Discharge Orifice and Drawdown Design for Water Treatment Volume
The Salinas Ag-Industrial Center
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Time(min)	Time (hr)	H (ft)	V (ft^3)	V (Ac-ft)	Q (cfs)	
1210	20.17	-1.518	24	0.00	0.007	
1220	20.33	-1.603	20	0.00	0.006	
1230	20.50	-1.681	16	0.00	0.006	
1240	20.67	-1.751	12	0.00	0.005	
1250	20.83	-1.812	9	0.00	0.004	
1260	21.00	-1.865	7	0.00	0.004	
1270	21.17	-1.911	4	0.00	0.003	
1280	21.33	-1.947	3	0.00	0.002	
1290	21.50	-1.976	1	0.00	0.002	
1300	21.67	-1.995	0	0.00	0.001	
1310	21.83	-2.004	0	0.00	#NUM!	
1320	22.00	#NUM!	#NUM!	#NUM!	#NUM!	**Drains volume in 22 hours**
1330	22.17	#NUM!	#NUM!	#NUM!	#NUM!	
1340	22.33	#NUM!	#NUM!	#NUM!	#NUM!	
1350	22.50	#NUM!	#NUM!	#NUM!	#NUM!	
1360	22.67	#NUM!	#NUM!	#NUM!	#NUM!	
1370	22.83	#NUM!	#NUM!	#NUM!	#NUM!	
1380	23.00	#NUM!	#NUM!	#NUM!	#NUM!	
1390	23.17	#NUM!	#NUM!	#NUM!	#NUM!	
1400	23.33	#NUM!	#NUM!	#NUM!	#NUM!	
1410	23.50	#NUM!	#NUM!	#NUM!	#NUM!	
1420	23.67	#NUM!	#NUM!	#NUM!	#NUM!	
1430	23.83	#NUM!	#NUM!	#NUM!	#NUM!	
1440	24.00	#NUM!	#NUM!	#NUM!	#NUM!	

Swale Volume Calculation
The Salinas Ag-Industrial Center
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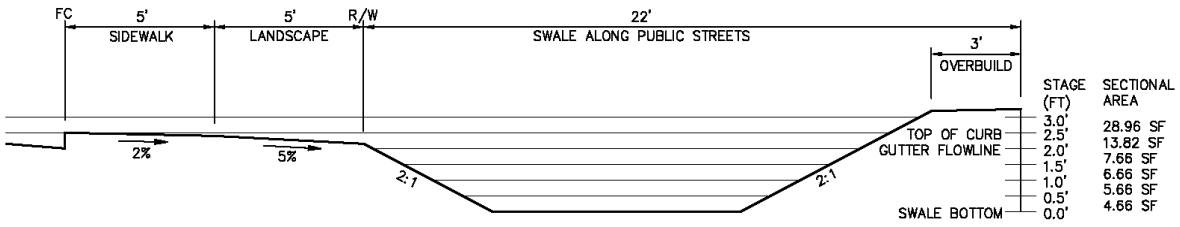

TYPICAL SWALE SECTION FOR 250' LONG SEGMENT

Assumptions:

1. Swale follows the street slope.
2. Street high point to high point = 250'.
3. Street high point to low point = 125'.
4. Street/Swale slope = 0.004 ft/ft.
5. Swale volume will be reduced by 10% to acount for construction inconsistancies, future parcel driveways, and street slope.
6. One outlet structure every 250'.

Swale Volume Calculations per 250' Long Segement:

Stage (ft)	Stage Area (ft^2)	Stage Volume (ft^3)	Total Volume (ft^3)	10% Reduced Volume (ft^3)
0.0	0	0	0	0
0.5	4.66	583	583	524
1.0	5.66	1290	1873	1685
1.5	6.66	1540	3413	3071
2.0	7.66	1790	5203	4682
2.5	13.82	2685	7888	7099
3.0	28.96	5348	13235	11912

Swale Volume Calculations per Model Drainage Area:

ID	Swale Length (ft)	# of Outlets	Stage (ft)	Swale Volume (ft^3)	Elevation (ft)	Swale Volume (Acre-ft)
PO-72-S	21,560	86	0.0	0	55.0	0.000
			0.5	45211	55.5	1.038
			1.0	145336	56.0	3.336
			1.5	264865	56.5	6.080
			2.0	403797	57.0	9.270
			2.5	612196	57.5	14.054
			3.0	1027248	58.0	23.582
PO-48-S1	920	4	0.0	0	59.0	0.000
			0.5	1929	59.5	0.044
			1.0	6202	60.0	0.142
			1.5	11302	60.5	0.259
			2.0	17231	61.0	0.396
			2.5	26123	61.5	0.600
			3.0	43834	62.0	1.006
PO-48-S2	980	4	0.0	0	62.0	0.000
			0.5	2055	62.5	0.047
			1.0	6606	63.0	0.152
			1.5	12039	63.5	0.276
			2.0	18354	64.0	0.421
			2.5	27827	64.5	0.639
			3.0	46693	65.0	1.072
Total	23,460	94	0.0	0	-	0.000
			0.5	49196	-	1.129
			1.0	158144	-	3.630
			1.5	288206	-	6.616
			2.0	439382	-	10.087
			2.5	666147	-	15.293
			3.0	1117775	-	25.661

Swale Discharge Calculations
The Salinas Ag-Industrial Center
June 4 2009

Typical Swale Outlet Structure Configuration

Number of Structures = 1

Orifice Equation		**Orifice Equation**		**Rectangular Weir Equation**		**Bioretention Cell Flow**		**Total Discharge**	
$Q=C*A*Sqrt(2*g*H)$		$Q=C*A*Sqrt(2*g*H)$		$Q=C*L*H^{3/2}$					
Orifice 1		Orifice 2		Weir 1		Subdrain Orifice			
C =	0.6	C =	0.6	C =	3.33	C =	0.6		
Ø =	1 in	Ø =	1 in	L =	3.14 ft	Ø =	0.625 in		
A =	0.0055 ft^2	A =	0.0055 ft^2	H_0=	2.5 ft	A =	0.0021 ft^2		
g =	32.2 ft/s^2	g =	32.2 ft/s^2	#	1	g =	32.2 ft/s^2		
H_0=	0.81 ft	H_0=	1.54 ft			H_0=	-2 ft		
#	2	#	1			#	1		
H (ft)	Q (cfs)	H (ft)	Q (cfs)	H (ft)	Q (cfs)	H (ft)	Q (cfs)	H (ft)	Q (cfs)
0.0	0.000	0.0	0.000	0.0	0.000	0.0	0.015	0.0	0.015
0.5	0.000	0.5	0.000	0.5	0.000	0.5	0.016	0.5	0.016
1.0	0.023	1.0	0.000	1.0	0.000	1.0	0.018	1.0	0.041
1.5	0.044	1.5	0.000	1.5	0.000	1.5	0.019	1.5	0.063
2.0	0.057	2.0	0.018	2.0	0.000	2.0	0.021	2.0	0.096
2.5	0.068	2.5	0.026	2.5	0.000	2.5	0.022	2.5	0.116
3.0	0.078	3.0	0.032	3.0	3.697	3.0	0.023	3.0	3.829

Treatment Volume Calculations
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I. 22' Landscape/Detention Swale

Problem: Determine flow based and volume based storm water treatment requirements for the roadside swale drainage areas. This sample calculation considers a 250' long section of backbone public streets.

A. Volume Based Treatment

It is assumed the backbone public street R/W and 22' wide landscape/swale area will be treated with volume based bioretention cells. SeeTable C.1 - "Swale Bioretention Treatment Sizing Calculations" for complete calculations.

1. Water Quality Volume

Use volume based "Urban Runoff Quality Management Approach"

$$V_T = \frac{aCP_6A}{12} \quad ft^3$$

where,
- a = 1.582, regression constant for 24 hour design draw down
- C = $0.858i^3 - 0.78i^2 + 0.774i + 0.04$, Runoff Coefficient
- i = drainage area imperviousness ratio
- P_6 = maximized detention volume, in inches
- A = drainage area, in square feet

for sample calculation area use Street B treatment width (84' R/W & 22' Swale),

L =	250	ft
W =	106	ft
A =	26500	ft^2
P_6 =	0.6	in
a =	1.582	
i =	0.77	
C =	0.57	

Therefore, V_T = 1185 ft^3

2. Treatment Infiltration Area

$$A_R = \frac{SF[V_T(12)]}{RT_D} \quad acres$$

where,
- V_T = water quality treatment volume, in acre-ft
- R = infiltration rate of engineered soil mix or subsurface soils, in inches per hour
- T_D = draw down time, in hours
- SF = Safety factor against clogging

R =	5.0	in/hr
T_D =	24	hr
SF =	1.5	

Therefore, A_R = 178 ft^2

Infiltration Area Width =	8	ft	
Infiltration Area Length =	22	ft	**Use 8'x20' infiltration area = 160 ft^2**

A subdrain and orifice plate will also be used to limit the treatment volume drawdown to 24 hours and a 5 in/hr surface loading rate. See attached spreadsheet for orifice sizing and drawdown calculations.

Treatment Volume Calculations
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3 Loading Rate Calculation

$$LR_{MAX} = \frac{Q(43200)}{A_R} \text{ in/hr}$$

where, Q = Subdrain orifice maximum release rate in cfs

$Q = 0.017$ cfs
$A_R = 160$ ft^2

Therefore, $LR_{MAX} = 4.59$ in/hr < 5 in/hr

$$LR_{AVE} = \frac{V_T(12)}{T_D A_R} \text{ in/hr}$$

where, $V_T = 1161$ ft^3
$T_D = 22$ hr
$A_R = 160$ ft^2

Therefore, $LR_{AVE} = 3.96$ in/hr < 5 in/hr

B. Volume Based Treatment

It is assumed the 100' impervious equivalent parcel frontage area will be treated by flow through the landscaped swale. SeeTable C.2 - "Swale Flow Treatment Sizing Calculations" for complete calculations.

1. Water Quality Flow

Use City flow based design criteria,

$$Q_T = \frac{Ci_T A}{43560} \text{ cfs}$$

where, A = drainage area, in square feet
C = Runoff Coefficient
i_T = Two times the 24-hr, 85th percentile rainfall intensity, in in/hr

assume half of 250' long section of parcel frontage is discharged at each swale high point,

$L = 125$ ft
$W = 100$ ft
$A = 12500$ ft^2
$C = 1.0$
$i_T = 0.22$ in/hr

Therefore, $Q_T = 0.063$ cfs

Treatment Volume Calculations
The Salinas Ag-Industrial Center
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2. Water Quality Velocity

Using Manning's Equation and the following swale section assumptions,

Depth	0.098	ft
Side slope	2	:1
Low Flow Width	8	ft
Channel slope	0.004	ft/ft
Manning's n	0.25	
Top Width	8.39	ft
Area	0.80	ft^2
Hydraulic Radius	0.10	ft
Q =	0.063	cfs

Therefore, v = 0.078 ft/s

3. Contact Time Calculation

City criteria requires a 10 minute minimum contact time. Calculate minimum flow length for 10 minute contact time,

$L_T = T_C v(60)$ ft

where, T_C = Treatment contact time, in min
v = Treatment flow velocity, in ft/s

T_C = 10 min
v = 0.078 ft/s

Therefore, L_T = 47 ft

3. Loading Rate Calculation

City criteria limits the surface loading rate to 5 in/hr. Calculate the minimum flow length for 5 in/hr surface loading rate,

$$L_T = \frac{Q_T(43200)}{LR(w)} \text{ ft}$$

where, Q_T = Treatment flow, in cfs
LR = Surface loading rate, in/hr
w = Swale width, in ft

Q_T = 0.063 cfs
LR = 5.0 in/hr
w = 8.0 ft

Therefore, L_T = 68 ft **Use a 70' minimum treatment flow length**

Treatment Volume Calculations
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June 9 2009

C. Swale Stormwater Treatment Sizing Calculations

Volume Based

a =	1.582	
P_6 =	0.60	in
R =	5.0	in/hr
T_D	24	hr
Typical Cell Spacing	250	ft
Typical Cell Width	8	ft
SF =	1.5	

Flow Based

C =	1.0	
i_T =	0.22	in/hr
Manning's n =	0.25	

250' Swale Stage-Volume Relationship
See attached swale volume calculations

Depth (ft)	Swale Volume (ft^3)
0.0	0
0.5	524
1.0	1685
1.5	3071
2.0	4682
2.5	7099

Table C.1 - Swale Bioretention Treatment Sizing Calculations

Drainage Area	*Swale Length (ft)*	*Drainage Area Width (ft)*	*Treatment Area (acre)*	*Percent Impervious (%)*	*Runoff Coefficient*	*Treatment Volume (ft^3)*	*Infiltration Area (ft^2)*	*Cell Length Length (ft)*	*Treatment Volume Depth (ft)*
55' R/W	250	49.5	0.28	62%	0.42	416	42	8	0.40
Total	**5,530**		**6.2**	**62%**	**0.42**	**9,069**	**907**		
88' R/W	250	66	0.38	72%	0.51	670	67	13	0.56
Total	**10,810**		**17.3**	**72%**	**0.51**	**30,590**	**3,059**		
Street B	250	106	0.61	77%	0.57	1,185	118	22	0.78
Total	**2,290**		**6.5**	**77%**	**0.57**	**12,659**	**1,266**		
Abbott St	250	90	0.52	79%	0.59	1,046	105	20	0.72
Total	**2,930**		**6.5**	**79%**	**0.59**	**13,162**	**1,316**		
Harris Rd	250	66	0.38	72%	0.51	670	67	13	0.56
Total	**1,900**		**3.2**	**72%**	**0.51**	**5,658**	**566**		
Total/Ave	**23,460**		**39.7**			**71,138**	**7,114**		

Table C.2 - Swale Flow Treatment Sizing Calculations

Drainage Area	*Length (ft)*	*Drainage Area Width (ft)*	*Treatment Area (acre)*	*Percent Impervious (%)*	*Runoff Coefficient*	*Treatment Flow (cfs)*	*Flow Velocity (ft/s)*	*Flow Depth (ft)*	*Min Flow Length (ft)*	*Contact Time (min)*
Parcel Frontage	125	100	0.29	100%	1.00	0.063	0.078	0.098	70	15.0
Total/Ave			**51.3**			11.29				

Treatment Volume Calculations
The Salinas Ag-Industrial Center
June 9 2009

II. Remainder Parcel Areas

Problem: Determine water quality volume and infiltration area for remaining parcel development areas. Determine Treatment requirements on a per acre basis of gross parcel development area.

A. Sample Calculation

Note: This sample calculation is for remainder parcel area "Parcel A" per the attached exhibit.
See Table C.3 - "Future Parcel Area Water Quality Sizing Calculations" for complete calculations.

1. Water Quality Volume

Use volume based "Urban Runoff Quality Management Approach"

$$V_T = \frac{aCP_6A}{12} \text{ acre-ft}$$

where,
- a = 1.582, regression constant for 48 hour design draw down
- C = $0.858i^3 - 0.78i^2 + 0.774i + 0.04$, Runoff Coefficient
- i = drainage area imperviousness ratio
- P_6 = maximized detention volume, in inches
- A = drainage area, in acres

for drainage area "Lot A",

A =	23.9	acres
P_6 =	0.6	in
a =	1.582	
i =	0.90	
C =	0.73	

Therefore, V_T = 1.381 acre-ft

2. Treatment Infiltration Area

$$A_R = \frac{V_T(12)}{RT_D} \text{ acres}$$

where,
- V_T = water quality treatment volume, in acre-ft
- R = infiltration rate of engineered soil mix or subsurface soils, in inches per hour
- T_D = draw down time, in hours

Note: Surface soils onsite consist of expansive fat clays with slow percolation rates. All treatment areas shall be designed with a perforated subdrain to collect water after it filters through the engineered soil mix. Therefore, an engineered soil mix infiltration rate of 5 in/hr shall be used for all treatment infiltration area calculations.

R =	5.0	in/hr
T_D =	24	hr

Therefore, A_R = 0.138 acres

3. Gross Parcel Development Area Treatment Requirements

Determine water quality volume and infiltration area on a per acre basis of gross parcel development area.

Parcel A Gross Area = 31.9 acres

V =	1,885	ft^3/acre
A_R =	189	ft^2/acre

Treatment Volume Calculations
The Salinas Ag-Industrial Center
June 9 2009

Total treatment facility area based on an average ponding depth of 0.75 ft,

A_F = 1.841 acres or, 2,514 ft^2/acre
% of gross Parcel A Area = 5.8%

B. Future Parcel Area Water Quality Sizing Calculations

% Imperv = 90%
C = 0.73
a = 1.582
P_6 = 0.60 in
R = 5.0 in/hr
T_D = 24 hr

Table C.3 - Future Parcel Area Sizing Calculations

Parcel	*Gross Parcel Area (acre)*	*Remainder Parcel Area (acre)*	*Treatment Volume (ft^3)*	*Infiltration Area, minimu (ft^2)*	*A_F for 0.75' of Ponding (ft^2)*	*% of Gross Parcel Area*	*V_T per Gross Parcel Area (ft^3/acre)*	*A_R per Gross Parcel Area (ft^2/acre)*
A	31.9	23.9	60,139	6,014	80,185	5.8%	1,885	189
B	23.0	14.0	35,228	3,523	46,970	4.7%	1,532	153
C	36.9	30.1	75,739	7,574	100,986	6.3%	2,053	205
D	78.7	57.8	145,440	14,544	193,920	5.7%	1,848	185
E	65.1	46.6	117,258	11,726	156,343	5.5%	1,801	180
Total/Ave	**235.6**	**172.4**	**433,803**	**43,380**	**578,404**	**5.6%**	**1,841**	184

Swale Discharge Orifice and Drawdown Design for Water Treatment Volume
The Salinas Ag-Industrial Center
June 9 2009

Criteria:

1) Completely drain in 24 hours
2) Use treatment volume from the 88' R/W drainage area

Stage (ft)	Elevation	V (ft^3)	V (Ac-ft)
-2	53	0	0.00
0	55	100	0.00
0.5	55.5	524	0.01
1	56	1685	0.04
1.5	56.5	3071	0.07

Orifice Data

C =	0.6	
Ø =	0.625	in
A =	0.0021	ft^2
g =	32.2	ft/s^2
H_0 =	-2	ft

Time(min)	Time (hr)	H (ft)	V (ft^3)	V (Ac-ft)	Q (cfs)
0	0.00	0.750	1161	0.03	0.017
10	0.17	0.770	1151	0.03	0.017
20	0.33	0.766	1141	0.03	0.017
30	0.50	0.761	1130	0.03	0.017
40	0.67	0.757	1120	0.03	0.017
50	0.83	0.752	1110	0.03	0.017
60	1.00	0.748	1100	0.03	0.017
70	1.17	0.744	1089	0.03	0.017
80	1.33	0.739	1079	0.02	0.017
90	1.50	0.735	1069	0.02	0.017
100	1.67	0.730	1059	0.02	0.017
110	1.83	0.726	1049	0.02	0.017
120	2.00	0.722	1039	0.02	0.017
130	2.17	0.717	1028	0.02	0.017
140	2.33	0.713	1018	0.02	0.017
150	2.50	0.708	1008	0.02	0.017
160	2.67	0.704	998	0.02	0.017
170	2.83	0.700	988	0.02	0.017
180	3.00	0.695	978	0.02	0.017
190	3.17	0.691	968	0.02	0.017
200	3.33	0.687	958	0.02	0.017
210	3.50	0.682	947	0.02	0.017
220	3.67	0.678	937	0.02	0.017
230	3.83	0.674	927	0.02	0.017
240	4.00	0.669	917	0.02	0.017
250	4.17	0.665	907	0.02	0.017
260	4.33	0.661	897	0.02	0.017
270	4.50	0.656	887	0.02	0.017
280	4.67	0.652	877	0.02	0.017
290	4.83	0.648	867	0.02	0.017
300	5.00	0.643	857	0.02	0.017
310	5.17	0.639	847	0.02	0.017
320	5.33	0.635	837	0.02	0.017
330	5.50	0.631	827	0.02	0.017
340	5.67	0.626	817	0.02	0.017
350	5.83	0.622	807	0.02	0.017
360	6.00	0.618	797	0.02	0.017
370	6.17	0.613	787	0.02	0.017
380	6.33	0.609	777	0.02	0.017
390	6.50	0.605	767	0.02	0.017
400	6.67	0.600	757	0.02	0.017
410	6.83	0.596	747	0.02	0.017
420	7.00	0.592	737	0.02	0.017
430	7.17	0.588	728	0.02	0.017
440	7.33	0.583	718	0.02	0.016
450	7.50	0.579	708	0.02	0.016
460	7.67	0.575	698	0.02	0.016
470	7.83	0.571	688	0.02	0.016
480	8.00	0.566	678	0.02	0.016
490	8.17	0.562	668	0.02	0.016
500	8.33	0.558	658	0.02	0.016
510	8.50	0.554	649	0.01	0.016
520	8.67	0.549	639	0.01	0.016
530	8.83	0.545	629	0.01	0.016

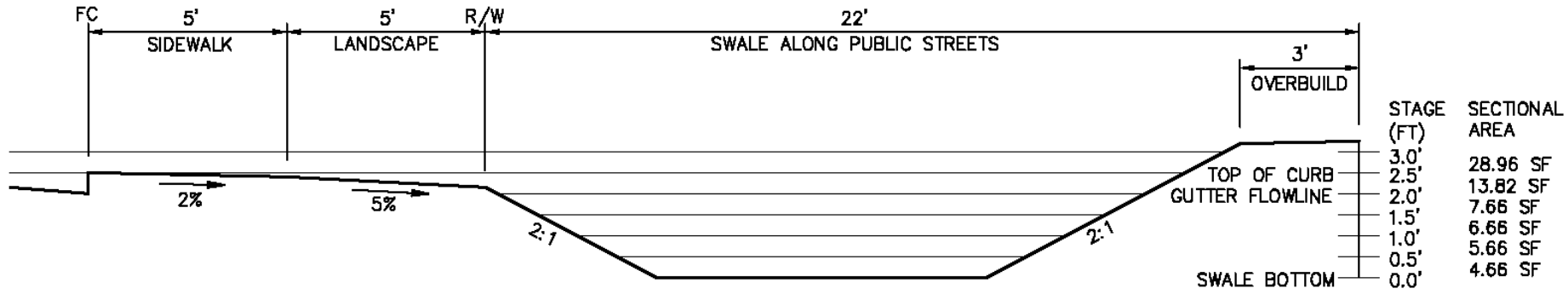
Swale Discharge Orifice and Drawdown Design for Water Treatment Volume
The Salinas Ag-Industrial Center
June 9 2009

Time(min)	Time (hr)	H (ft)	V (ft^3)	V (Ac-ft)	Q (cfs)
540	9.00	0.541	619	0.01	0.016
550	9.17	0.537	609	0.01	0.016
560	9.33	0.533	599	0.01	0.016
570	9.50	0.528	590	0.01	0.016
580	9.67	0.524	580	0.01	0.016
590	9.83	0.520	570	0.01	0.016
600	10.00	0.516	560	0.01	0.016
610	10.17	0.511	551	0.01	0.016
620	10.33	0.507	541	0.01	0.016
630	10.50	0.503	531	0.01	0.016
640	10.67	0.499	521	0.01	0.016
650	10.83	0.485	512	0.01	0.016
660	11.00	0.474	502	0.01	0.016
670	11.17	0.463	492	0.01	0.016
680	11.33	0.451	483	0.01	0.016
690	11.50	0.440	473	0.01	0.016
700	11.67	0.428	463	0.01	0.016
710	11.83	0.417	454	0.01	0.016
720	12.00	0.406	444	0.01	0.016
730	12.17	0.395	435	0.01	0.016
740	12.33	0.383	425	0.01	0.016
750	12.50	0.372	416	0.01	0.016
760	12.67	0.361	406	0.01	0.016
770	12.83	0.350	397	0.01	0.016
780	13.00	0.339	387	0.01	0.016
790	13.17	0.328	378	0.01	0.016
800	13.33	0.317	368	0.01	0.016
810	13.50	0.305	359	0.01	0.016
820	13.67	0.294	350	0.01	0.016
830	13.83	0.283	340	0.01	0.016
840	14.00	0.273	331	0.01	0.015
850	14.17	0.262	322	0.01	0.015
860	14.33	0.251	313	0.01	0.015
870	14.50	0.240	303	0.01	0.015
880	14.67	0.229	294	0.01	0.015
890	14.83	0.218	285	0.01	0.015
900	15.00	0.207	276	0.01	0.015
910	15.17	0.196	267	0.01	0.015
920	15.33	0.186	257	0.01	0.015
930	15.50	0.175	248	0.01	0.015
940	15.67	0.164	239	0.01	0.015
950	15.83	0.154	230	0.01	0.015
960	16.00	0.143	221	0.01	0.015
970	16.17	0.132	212	0.00	0.015
980	16.33	0.122	203	0.00	0.015
990	16.50	0.111	194	0.00	0.015
1000	16.67	0.101	185	0.00	0.015
1010	16.83	0.090	176	0.00	0.015
1020	17.00	0.080	167	0.00	0.015
1030	17.17	0.069	159	0.00	0.015
1040	17.33	0.059	150	0.00	0.015
1050	17.50	0.048	141	0.00	0.015
1060	17.67	0.038	132	0.00	0.015
1070	17.83	0.028	123	0.00	0.015
1080	18.00	0.017	115	0.00	0.015
1090	18.17	0.007	106	0.00	0.015
1100	18.33	-0.003	97	0.00	0.014
1110	18.50	-0.232	88	0.00	0.014
1120	18.67	-0.395	80	0.00	0.013
1130	18.83	-0.551	72	0.00	0.012
1140	19.00	-0.700	65	0.00	0.012
1150	19.17	-0.840	58	0.00	0.011
1160	19.33	-0.972	51	0.00	0.010
1170	19.50	-1.097	45	0.00	0.010
1180	19.67	-1.214	39	0.00	0.009
1190	19.83	-1.323	34	0.00	0.008
1200	20.00	-1.425	29	0.00	0.008

Swale Discharge Orifice and Drawdown Design for Water Treatment Volume
The Salinas Ag-Industrial Center
June 9 2009

Time(min)	Time (hr)	H (ft)	V (ft^3)	V (Ac-ft)	Q (cfs)	
1210	20.17	-1.518	24	0.00	0.007	
1220	20.33	-1.603	20	0.00	0.006	
1230	20.50	-1.681	16	0.00	0.006	
1240	20.67	-1.751	12	0.00	0.005	
1250	20.83	-1.812	9	0.00	0.004	
1260	21.00	-1.865	7	0.00	0.004	
1270	21.17	-1.911	4	0.00	0.003	
1280	21.33	-1.947	3	0.00	0.002	
1290	21.50	-1.976	1	0.00	0.002	
1300	21.67	-1.995	0	0.00	0.001	
1310	21.83	-2.004	0	0.00	#NUM!	
1320	22.00	#NUM!	#NUM!	#NUM!	#NUM!	**Drains volume in 22 hours**
1330	22.17	#NUM!	#NUM!	#NUM!	#NUM!	
1340	22.33	#NUM!	#NUM!	#NUM!	#NUM!	
1350	22.50	#NUM!	#NUM!	#NUM!	#NUM!	
1360	22.67	#NUM!	#NUM!	#NUM!	#NUM!	
1370	22.83	#NUM!	#NUM!	#NUM!	#NUM!	
1380	23.00	#NUM!	#NUM!	#NUM!	#NUM!	
1390	23.17	#NUM!	#NUM!	#NUM!	#NUM!	
1400	23.33	#NUM!	#NUM!	#NUM!	#NUM!	
1410	23.50	#NUM!	#NUM!	#NUM!	#NUM!	
1420	23.67	#NUM!	#NUM!	#NUM!	#NUM!	
1430	23.83	#NUM!	#NUM!	#NUM!	#NUM!	
1440	24.00	#NUM!	#NUM!	#NUM!	#NUM!	

Swale Volume Calculation
The Salinas Ag-Industrial Center
June 9 2009



TYPICAL SWALE SECTION FOR 250' LONG SEGMENT

Assumptions:

1. Swale follows the street slope.
2. Street high point to high point = 250'.
3. Street high point to low point = 125'.
4. Street/Swale slope = 0.004 ft/ft.
5. Swale volume will be reduced by 10% to acount for construction inconsistancies, future parcel driveways, and street slope.
6. One outlet structure every 250'.

Swale Volume Calculations per 250' Long Segement:

Stage (ft)	Stage Area (ft^2)	Stage Volume (ft^3)	Total Volume (ft^3)	10% Reduced Volume (ft^3)
0.0	0	0	0	0
0.5	4.66	583	583	524
1.0	5.66	1290	1873	1685
1.5	6.66	1540	3413	3071
2.0	7.66	1790	5203	4682
2.5	13.82	2685	7888	7099
3.0	28.96	5348	13235	11912

Swale Volume Calculations per Model Drainage Area:

ID	Swale Length (ft)	# of Outlets	Stage (ft)	Swale Volume (ft^3)	Elevation (ft)	Swale Volume (Acre-ft)
PO-72-S	21,560	86	0.0	0	55.0	0.000
			0.5	45211	55.5	1.038
			1.0	145336	56.0	3.336
			1.5	264865	56.5	6.080
			2.0	403797	57.0	9.270
			2.5	612196	57.5	14.054
			3.0	1027248	58.0	23.582
PO-48-S1	920	4	0.0	0	59.0	0.000
			0.5	1929	59.5	0.044
			1.0	6202	60.0	0.142
			1.5	11302	60.5	0.259
			2.0	17231	61.0	0.396
			2.5	26123	61.5	0.600
			3.0	43834	62.0	1.006
PO-48-S2	980	4	0.0	0	62.0	0.000
			0.5	2055	62.5	0.047
			1.0	6606	63.0	0.152
			1.5	12039	63.5	0.276
			2.0	18354	64.0	0.421
			2.5	27827	64.5	0.639
			3.0	46693	65.0	1.072
Total	23,460	94	0.0	0	-	0.000
			0.5	49196	-	1.129
			1.0	158144	-	3.630
			1.5	288206	-	6.616
			2.0	439382	-	10.087
			2.5	666147	-	15.293
			3.0	1117775	-	25.661

Swale Discharge Calculations
The Salinas Ag-Industrial Center
June 4 2009

Typical Swale Outlet Structure Configuration

Number of Structures = 1

Orifice Equation
$Q=C*A*Sqrt(2*g*H)$

Orifice 1

C =	0.6	
Ø =	1	in
A =	0.0055	ft^2
g =	32.2	ft/s^2
H_0=	0.81	ft
#	2	

H (ft)	Q (cfs)
0.0	0.000
0.5	0.000
1.0	0.023
1.5	0.044
2.0	0.057
2.5	0.068
3.0	0.078

Orifice Equation
$Q=C*A*Sqrt(2*g*H)$

Orifice 2

C =	0.6	
Ø =	1	in
A =	0.0055	ft^2
g =	32.2	ft/s^2
H_0=	1.54	ft
#	1	

H (ft)	Q (cfs)
0.0	0.000
0.5	0.000
1.0	0.000
1.5	0.000
2.0	0.018
2.5	0.026
3.0	0.032

Rectangular Weir Equation
$Q=C*L*H^{3/2}$

Weir 1

C =	3.33	
L =	3.14	ft
H_0=	2.5	ft
#	1	

H (ft)	Q (cfs)
0.0	0.000
0.5	0.000
1.0	0.000
1.5	0.000
2.0	0.000
2.5	0.000
3.0	3.697

Bioretention Cell Flow
Subdrain Orifice

C =	0.6	
Ø =	0.625	in
A =	0.0021	ft^2
g =	32.2	ft/s^2
H_0=	-2	ft
#	1	

H (ft)	Q (cfs)
0.0	0.015
0.5	0.016
1.0	0.018
1.5	0.019
2.0	0.021
2.5	0.022
3.0	0.023

Total Discharge

H (ft)	Q (cfs)
0.0	0.015
0.5	0.016
1.0	0.041
1.5	0.063
2.0	0.096
2.5	0.116
3.0	3.829

APPENDIX D

City of Salinas Stormwater Treatment Facility Maintenance Agreement

Recording requested by
and when recorded return to:

CITY OF SALINAS
Permit Center
65 West Alisal Street, Suite 101
Salinas, CA 93901
Attn: Dale Rosskamp

Title of Document | *Above space for Recorder's use*

STORMWATER TREATMENT FACILITY MAINTENANCE AGREEMENT
(Device Maintenance and Access)

THIS STORMWATER TREATMENT FACILITY MAINTENANCE AGREEMENT ("Agreement") is executed as of _____, 200__ by _____ _____ (hereafter the "Declarant") with reference to the following facts:

A. Declarant is the owner of that certain property, located within the City of Salinas, California (hereinafter, "Salinas"), commonly referred to as_____, Monterey County, California APN XXX-XXX-XXX-XXX and more particularly described in Exhibit A and the plat thereof on Exhibit B, attached hereto and incorporated herein by reference (hereinafter the "Subject Property").

B. At the time of Salinas's initial approval of the development project known as _____wherein the Subject Property is located, Salinas required installation of on-site control measures to minimize pollutants in urban runoff.

C. Declarant has chosen to install_____, hereinafter referred to as the "Device", as the on-site control measure to minimize pollutants in urban runoff.

D. The Device has been installed in accordance with plans and specifications accepted by Salinas.

E. The maintenance of the Device is essential to its ability to function as it was designed.

F. The Device, being installed on private property and draining only private property, is a private facility, and all maintenance or replacement of the Device is the sole responsibility of the Declarant in accordance with the terms of this Agreement.

G. The Declarant is aware that periodic and continuous maintenance, including, but not necessarily limited to, filter material replacement and sediment removal, is required to assure

peak performance of the Device in accordance with the maintenance procedures prepared for the Device which maintenance procedures are attached hereto as Exhibit C and incorporated herein.

H. Maintenance of the Device will require compliance with all Local, State, or Federal and regulations, including those pertaining to confined space and waste disposal methods, in effect at the time such maintenance occurs.

NOW, THEREFORE, in consideration of the foregoing benefits, as well as the benefits obtained by the Declarant and other valuable consideration, the receipt and adequacy of which is hereby acknowledged, Declarant hereby declares, covenants, and agrees as follows:

1. **Covenant Running with Land**. The Declarant does hereby covenant that the burdens and benefits herein made and undertaken shall constitute covenants running with the Subject Property and constitute an encumbrance on said Subject Property which shall bind all successors, heirs and assigns and Salinas is hereby specifically given the right to enforce this Agreement.

2. **Declarant Responsibility to Maintain**. Declarant, its successors and assigns, shall at all times maintain the Device in accordance with the requirements stated in Exhibit C and Declarant shall use its best efforts to maintain the Device in a manner assuring its peak performance at all times. All reasonable precautions shall be exercised by Declarant and Declarant's representatives in a manner consistent with all relevant laws and regulations in effect at the time of removal and consistent with the direction of the City Engineer. Declarant shall not destroy, remove or otherwise modify the Device in a manner that lessens its effectiveness and shall, at its sole cost and expense, adequately maintain the Device in good working order and repair acceptable to Salinas. At its sole expense, Declarant shall make changes or modifications to the Device as may be determined as reasonably necessary by Salinas to ensure that the Device is properly maintained and continues to operate as originally designed and approved.

a. Routine and Preventative Maintenance. Declarant shall be responsible for all routine and preventative maintenance necessary to ensure the Device operates and functions in the manner in which it was intended, in accordance with all applicable federal, state and local laws and regulations. Declarant's obligations under this section shall include the removal of all litter and debris within the Device and the regular mowing and seeding of the Device to promote growth and pollutant uptake. Declarant shall properly dispose of any cuttings or vegetative waste which result from such maintenance or repair.

Declarant shall be responsible for the management of any erosion or slope failure that occurs within the Device. Declarant shall provide for the repair of any areas of erosion of slope failure as soon as possible after discovery. Any damage to the vegetation within the Device shall be promptly repaired by Declarant and any invasive species or weeds shall be promptly removed by Declarant to ensure the proper operation and functioning of the Device. If necessary, flow through the Device shall be redirected to avoid deterioration or erosion while such maintenance or repair is being completed.

b. Vector Control. The Device shall be properly inspected, maintained and repaired by Declarant to ensure uniform percolation throughout and to prevent the accumulation of standing

water or debris or other harborages for vectors. Declarant shall promptly abate any vectors or potential vectors that occur within the Device. The Northern Salinas Valley Mosquito Abatement District shall be contacted, as needed, for assistance should any mosquito issues arise.

c. Sediment Management. Sediment accumulation from the normal operation of the Device will be managed appropriately by Declarant. The Declarant will provide for the removal and disposal of accumulated sediments. Disposal of accumulated sediments shall not occur on the Subject Property. Any disposal or removal of accumulated sediments or debris shall be in compliance with federal, state and local laws and regulations.

d. Pesticide and Herbicide Use. Application of any pesticides or herbicides by Declarant to meet the obligations of this Agreement shall be minimal and in accordance with all applicable federal, state and local laws and regulations and in accordance with any restrictions imposed upon such use or application by the City Engineer or his designee.

3. **Retention of Records**. For a time period of the most recent three (3) years, Declarant shall maintain written documentation verifying all material(s) removed from the Device, including identifying the material(s) removed, quantity, and manner and place of disposal thereof. Such documentation is subject to review by Salinas from time to time upon request.

4. **Failure to Maintain**. In the event the Declarant, or its successors or assigns, fails to maintain and repair the Device as required by this Agreement, after thirty (30) days written notice thereof, Salinas may and is hereby authorized to cause, at the Declarant's sole cost and expense, any and all maintenance to the Device necessary under the requirements specified in Exhibit C. In addition to the actual costs of such maintenance, the Declarant shall reimburse Salinas for an additional fifteen percent (15%) thereof to cover costs of administration. All such actual and administrative costs shall accrue interest from the date incurred by Salinas at the maximum rate authorized by law until paid in full. The notice provided herein shall be effective on the date sent by U.S. Mail, first class postage prepaid to the record owner of the Subject Property as shown on the most recent tax roll. If such costs are not paid within the time frame established by Salinas, the unpaid costs shall be assessed against the Subject Property. Said assessment shall be a lien against the Subject Property and may be collected as ordinary taxes by Salinas. The actions described in this section are in addition to and not in lieu of any and all legal remedies as provided by law, available to Salinas as a result of Declarant's failure to maintain the Device.

5. **Security**. The Declarant, at the Declarant's sole cost and expense, shall post a security in a form, for time period, and in an amount satisfactory to Salinas, to guarantee the Declarant's performance of the obligations set forth herein. Should the Declarant fail to perform the obligations under this Agreement, then Salinas may realize against said security, and in the case of a cash bond, act for the Declarant using the proceeds from it, or in the case of a surety bond, require the sureties to perform the obligations of this Agreement. Said security shall be available to Salinas to satisfy the Declarant's reimbursement obligation under paragraph 3 hereof.

6. **Access by Salinas**. Declarant grants Salinas or Salinas's designee and all other responsible

government agencies and their agents or designees the unrestricted right of access to the Device, including its immediate vicinity, and including ingress and egress to and from said Device, at any time, upon twenty-four (24) hour advance notice in writing, of any duration for the purpose of inspection, sampling, and testing of the Device. Salinas shall make reasonable efforts at all times to maintain or avoid interference with Declarant's use of the Subject Property. It is specifically understood and agreed that Salinas is under no obligation to maintain or repair the Device and in no event shall the Device be considered to impose any such obligation on Salinas.

7. **Indemnification.** Declarant and its successors, heirs and assigns shall indemnify, defend, and hold Salinas, its officers, employees, agents and representatives, harmless from and against any and all liability, claims, demands, suits, damages, loss and causes of action arising out of or asserted against Salinas by reason of Declarant's design, construction, maintenance, repair, and care of the Device. Declarant shall also have the obligation to indemnify, defend against any claims, demands, causes of action, liability or loss arising from, connected with, caused by or claimed to be caused by the active or passive negligence of Salinas, its officers, employees, agents or representatives which may be in combination with the negligence of Declarant, its employees, agents or officers, or any third party. It is understood that the duty of Declarant to indemnify and hold harmless includes the duty to defend as set forth in Section 2778 of the California Civil Code, and that Declarant shall at its own expense, upon written request by Salinas, defend any such suit or action brought against Salinas, its officers, agents, employees or representatives.

Declarant shall reimburse the Salinas for all costs and expenses (including but not limited to reasonable fees and charges of architects, engineers, attorneys, and other professionals, and court costs) incurred by Salinas in enforcing the provisions of this section.

8. **Successors and Assigns Bound**. Declarant hereby agrees and acknowledges that maintenance of the Device as herein above set forth and the costs of maintenance, Salinas's access to the device, and Salinas's right of ingress and egress to the Device and recovery of costs if Declarant fails to maintain the Device as herein set forth, are a burden and restriction on the use of the Subject Property. The provisions of this Agreement shall be enforceable as an equitable servitude and as conditions, restrictions and covenants running with the land, and shall be binding upon the Declarant and upon each and all of its respective heirs, devisees, successors, and assigns, officers, directors, employees, agents, representatives, executors, trustees, successor trustees, beneficiaries and administrators, and upon any future owners of the Subject Property and each of them. Whenever the Subject Property is sold, conveyed or otherwise transferred, Declarant shall provide Salinas with no less than thirty (30) days written notice identifying the new owner who shall be subject to this Agreement which shall apply to, bind and be obligatory to all present and subsequent owners of the Subject Property.

9. **Enforcement**. It is the express intent of the Declarant that the terms and provisions of this Agreement shall be enforceable as an equitable servitude by Declarant. To the extent necessary to do so, Declarant and its successors and assigns, hereby confer and assign rights to enforce the terms and conditions of this Agreement to Salinas and this Agreement may be enforced by any proceedings at law or in equity by or against the Declarant and its successors and assigns.

10. **Recording of Agreement**. This Agreement shall be recorded in the Office of the Recorder of Monterey County, California and shall constitute notice to all successors and assigns of the title to the Subject Property of the rights and obligations herein set forth.

11. **Amendment**. This Agreement may be amended by Declarant, but only if in writing, and only after written approval of Salinas.

12. **Attorney's Fees.** In case suit shall be brought to interpret or to enforce this Agreement, or because of the breach of any other covenant or provision herein contained, the prevailing party in such action shall be entitled to recover their reasonable attorneys' fees in addition to such costs as may be allowed by the Court. City's attorneys' fees, if awarded, shall be calculated at the market rate.

13. **Taxes.** Declarant shall pay all real estate taxes and any other charges or fees that may be assessed against the Subject Property and the Device

IN WITNESS WHEREOF, Declarant has executed this Agreement as of the day and year written above.

CITY OF SALINAS

_____ _____

Robert C. Russell Date
Deputy City Manager/City Engineer

APPROVED AS TO FORM:

_____ _____

Vanessa W. Vallarta, City Attorney Date
By
Christopher A. Callihan, Sr. Deputy City Attorney

DECLARANT

_____ _____

(name) Date

APPENDIX E

City of Salinas 2007 Stormwater Ordinance

Appendix E

City of Salinas 2007 Stormwater Ordinance

ORDINANCE NO. 2473 (N.C.S.)

AN ORDINANCE AMENDING CHAPTER 29 OF THE SALINAS CITY CODE REGARDING STORMWATER MANAGEMENT AND DISCHARGE CONTROL

WHEREAS, on June 1, 1999, the City Council adopted Ordinance No. 2350 adding Chapter 29 to the Salinas City Code to establish a program for stormwater management and control; and

WHEREAS, the City of Salinas seeks to comply with all provisions of state and federal law; and

WHEREAS, to ensure compliance with federal and state regulatory requirements, and to comply with the terms of the City's 2005 National Pollutant Discharge Elimination System (NPDES) Permit, the City must amend its existing stormwater management and discharge control ordinance; and

WHEREAS, the implementation of these amended pollutant control measures is exempt from the provisions of the California Environmental Quality Act (CEQA); Chapter 3 (commencing with Section 21100) of Division 13 of the California Public Resources Code in accordance with Section 13389 of the California Water Code as provided in categorical exemption classes 7 and 8 of the CEQA Guidelines (Title 14, California Code of Regulations Section 15307 through 15308); and

WHEREAS, this proposed ordinance has been duly processed and the City Council has conducted legally noticed public hearings and provided all interested parties and opportunity to be heard on these issues.

NOW, THEREFORE BE IT ORDAINED BY THE COUNCIL OF SALINAS as follows:

Section 1: Chapter 29 of the Salinas City Code entitled Stormwater Management and Discharge Control is hereby amended as follows:

Article I. General.

Division 1. Title, Purpose and Definitions.

Sec. 29-1. Title.

Sec. 29-2. Purpose and intent.

Sec. 29-3. Definitions.

Division 2. General Provisions.

Sec. 29-4. Responsibility for administration.

Sec. 29-23. Concealment.

Sec. 29-24. Acts potentially resulting in violation of federal Clean Water Act and/or Porter-Cologne Act.

Sec. 29-25. Violations deemed a public nuisance.

Sec. 29-26. Recovery of Costs.

Sec. 29-27. Civil actions.

Sec. 29-28. Administrative enforcement powers.

Sec. 29-29. Authority to arrest or issue citations.

Sec. 29-30. Appeal.

Sec. 29-31. Judicial review.

Sec. 29-32. Remedies not exclusive.

Sec. 29-33. Disclaimer of liability.

Article IV. Coordination with Other Programs.

Sec. 29-34. Coordination with hazardous materials inventory and response program.

~~Sec. 29-33. Confidential information.~~

~~Sec. 29-34. Special agreements.~~

Sec. 29-1. Title.

This ordinance shall be known as the "City of Salinas Stormwater Management and Discharge Control Ordinance" and may be so cited. (Ord. No. 2350 (NCS), § 1.)

Sec. 29-2. Purpose and intent.

The purpose and intent of this chapter is to ensure the health, safety and general welfare of citizens, and protect the water quality of watercourses and water bodies in a manner pursuant to and consistent with the requirements of the NPDES permit issued to the City of Salinas by the California Regional Water Quality Control Board and the Federal Clean Water Act (33 U.S.C. Section 1251 et seq.) by reducing pollutants in urban stormwater discharges to the maximum extent practicable and by effectively prohibiting non-stormwater discharges to the storm sewer drain system. ~~(Ord. No. 2350 (NCS), § 1.)~~ The provisions of this chapter shall be implemented and enforced in such a manner as to prevent or reduce downstream erosion, to protect stream habitat and to implement controls for the post-development runoff and discharges. To that end, development within the jurisdictional authority of the City of Salinas shall be done in a manner consistent with

Low Impact Development guidance set forth in the Stormwater Development Standards document established by the City of Salinas.

Sec. 29-3. Definitions.

When used in this chapter, the following words shall have the meanings ascribed to them in this section:

~~(a) "Act" means the Federal Water Pollution Control Act, including the 1972 amendments, referred to as the Clean Water Act or CWA (33 U.S.C. Section 1251 et seq.).~~

(a) "Approval Authority" means the state of California Central Coast Regional Water Quality Control Board.

(b) "Authorized enforcement officer" means the City Engineer and those individuals designated by the City Engineer to enforce the provisions of this chapter.

(c) Authorized Representative of Industrial Activity (Use). An authorized representative of an industrial user may include, but is not limited to the following persons:

(1) A principal executive officer of at least the level of vice-president, if the industrial user is a corporation;

(2) A general partner or proprietor if the industrial user is a partnership or proprietorship, respectively; or

(3) A duly authorized representative of the individual designated above if such representative is responsible for the overall operation of the facility from which the discharge originates.

(d) "Best management practices (BMP)" means a program, schedule of activity, technology, process, siting criteria, operating method, measure, device, prohibition, practice (including, but not limited to, general housekeeping practices and pollution prevention practices), procedure or other management policy which effectively controls, prevents, removes or minimizes~~reduces~~ the discharge of pollutants, directly or indirectly to the municipal storm drain system and waters of the United States.

(e) "California general construction activities stormwater permit" means the general permit as adopted by the California State Water Resources Control Board for the permitting of stormwater discharges associated with construction activities.

(f) "California general industrial activities stormwater permit" means the general permit as adopted by the California State Resources Control Board for the permitting of stormwater discharges associated with given industrial activities.

(g) "Clean Water Act" means the federal Water Pollution Control Act (33 U.S.C. Section 1251 et seq.) and any subsequent amendments thereto and regulations adopted thereunder.

(h) "CFR" means the Code of Federal Regulations.

(i) "City" means the City of Salinas.

(j) "City Engineer" means the City Engineer of the City of Salinas

(k) "City storm sewer drainage system" or "storm drainage system" means and includes, but is not limited to, those facilities owned and operated by the City through which stormwater may be collected and/or conveyed to the waters of the United States, including flood control channels, any roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels or storm drains which are not part of a publicly-owned treatment works (POTW) as defined at 40 Code of Federal Regulations Section 122.2 and all conduits, pumping plants, collection facilities and other appurtenances owned and operated by the City of Salinas for carrying, collecting, pumping and/or disposing of stormwater, surface water, groundwater, roof runoff or other unpolluted water.

(k) "City's NPDES permit" means the municipal separate storm sewer system (MS4) permit issued to the City under Section 402(p) of the Clean Water Act.

(l) "Construction activity" means activities subject to the California general construction activities permit.

(m) "Development" means the construction, building or placement of any structure or portion thereof which would require a building permit.

(n) "Enforcement Officer" means the City Engineer -or his designee.

(o) "Facility" means any nonresidential premises.

(p) "Hazardous materials" means any material, including any substance, waste or combination thereof, which because of its quantity, concentration or physical, chemical or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property or the environment when improperly treated, stored, transported, disposed of or otherwise managed.

(q) "Illicit discharge" or "illegal discharge" means any direct or indirect non-stormwater discharge to the storm drain system, except as exempted in Section 29-10 of this chapter.

(r) "Illicit Connections." An illicit connection is defined as either of the following:

(1) Any drain or conveyance, whether on the surface or subsurface, which allows an illegal discharge to enter the storm drain system including but not limited to any conveyances which allow any non-stormwater discharge including sewage, process wastewater and wash water to enter the storm drainage system and any connections to the storm drainage system from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted or approved by a government agency; or

(2) Any drain or conveyance connected from a commercial or industrial land use to the storm drainage system, which has not been documented in plans, maps or equivalent records and approved by the City.

(s) "Industrial activity" means any activity that involves manufacturing, processing or raw materials storage areas. Further definition of activities covered is given in 40 Code of Federal Regulations Section 122.26 (b).

(t) "Inspector" means an authorized enforcement officer as defined in this section.

(u) "Low Impact Development (LID) means the stormwater management approach towards development planning and design that minimizes post-construction stormwater runoff pollutant loads and stormwater runoff quantity, by promoting infiltration and biofiltration, and minimizing the installation of impervious surfaces. The LID design orientation is to minimize the site stormwater runoff impact of development by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to its source.

(v) "Maximum Extent Practicable" (MEP) is a standard for the control of pollutants required by Section 402(p) [33 U.S.C. §1342(p)] of the Clean Water Act requiring the application of practical, technologically feasible, and economically achievable management practices, including but not limited to, pollution control techniques, and system, design, and engineering methods.

(w) "National Pollutant Discharge Elimination System (NPDES) permit" means a permit issued by the Approval Authority pursuant to the Clean Water Act, which authorizes a discharge to the waters of the state.

(x) "Non-stormwater discharge" means any discharge to the storm drain system that is not entirely composed of stormwater.

(y) "Notice of intent (NOI)" means the formal notification to the State Regional Water Quality Control Board by the applicant that either a construction or industrial activity will occur in compliance with the conditions of the general permit and thereby commits the applicant to prepare and implement a stormwater pollution prevention plan.

(z) "Outfall" means the point at which the City's storm drainage system discharges to the waters of the state.

(aa) "Person" means any natural person, corporation, partnership, business trust, company, government agency, association or other entity.

(bb) "Point Source" means any discernible, confined and discrete conveyance including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock or vessel or other floating craft. (33 U.S.C. Sec. 1362(14); 40 C.F.R. Sec. 122.2)

(cc) "Pollutant" includes dredged soil, solid waste, incinerator residue, sewage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal and agricultural waste discharged into water; paints, varnishes and solvents; oil and other automotive fluids; non-hazardous liquid and solid wastes and yard wastes; refuse, rubbish, garbage, litter or other discarded or abandoned objects, articles and accumulations, so that same may cause or contribute to pollution; floatables; pesticides, herbicides and fertilizers;

hazardous substances and wastes; animal wastes; wastes and residues that result from constructing a building or structure; and noxious or offensive matter of any kind.

(dd) "Pollution" means ~~human-caused~~ man-made or ~~human~~-induced ~~alteration of the quality of waters by waste to a degree which unreasonably affects, or has the potential to unreasonably affect, either the waters for beneficial uses or the facilities which serve these beneficial uses~~alteration of the chemical, physical, biological, or radiological integrity of water or other media.

(ee) "Porter-Cologne Act" means the Porter-Cologne Water Quality Control Act (California Water Code Section 13000 et seq.) and any subsequent amendments thereto and regulations adopted thereunder.

(ff) "Premises" means any building, lot parcel, real estate or land or portion of land, whether improved or unimproved, including adjacent sidewalks and parkway~~ing~~ strips or other surface area which is capable of contributing runoff to the City's storm drainage system.

(gg) "Redevelopment" means any construction, alteration or improvement at an already developed site that will increase the total impervious surface area of that site. Redevelopment could include, but is not limited to, the expansion of building footprints, the addition or replacement of a structure, exterior construction or remodeling, replacement of existing impervious surfaces that is not part of a maintenance activity, and other activities that create additional impervious surfaces. "Significant Redevelopment" is a level of redevelopment at or above a defined threshold set forth in the Stormwater Development Standards.

(hh) "State" means the state of California.

(ii) "Stormwater" means stormwater runoff, snowmelt runoff, and surface runoff and drainage.

(jj) "Stormwater Control Plan" means a engineered plan with calculations for stormwater drainage and treatment. The plan shall show how runoff from each drainage area on a development or redevelopment project will be handled to meet the requirements of the Stormwater Development Standards.

(kk) "Stormwater Management Program" means a comprehensive planning process to reduce discharge of pollutants to the maximum extent practicable using best management practices.

(ll) "Stormwater Management Facility" means any device designated to detain, retain, filter or infiltrate stormwater.

(mm)"Stormwater Development Standards" means the current City of Salinas Stormwater Development Standards and any amendments and/or supplements thereto.

(nn) "Stormwater Pollution Prevention Plan (SWPPP)" means the report required to be prepared by industrial or construction site stormwater dischargers, which sets forth the site map, identifies the activities that have the potential to pollute stormwater and describes the proposed BMPs to be implemented by the discharger.

(oo) "User" means any person who contributes, causes or permits the contribution of stormwater to the City's storm drainage system.

(pp) "Unpolluted water" means water to which no pollutant has been intentionally or accidentally introduced so as to render such water unacceptable to the City for disposal to storm or natural drainages or directly to surface waters.

(qq) "Waters of the state" means surface watercourses, and water bodies as defined at 40 CFR Section 122.2 and any subsequent amendment. (Ord. No. 2350 (NCS), § 1.)

(rr) "Waters of the U.S." or "waters of the United States" shall have the meaning set forth in 40 CFR §122.2.

Sec. 29-4. Responsibility for administration.

This part shall be administered by the City Engineer for the City of Salinas and authority to enforce this part is delegated to the City Engineer and his designee(s). (Ord. No. 2350 (NCS), § 1.)

Sec. 29-5. Construction and application.

The rules and regulations set forth in this chapter shall be construed in a manner consistent with and shall in no way be construed in such a manner so as to diminish the authority of the requirements of the ~~federal Water Pollution Control Act and the 1972 amendments thereto, referred to as the~~ Clean Water Act~~, and any amendments or supplements thereto and its applicable implementing regulations~~; the Porter-Cologne Act; the City of Salinas NPDES ~~stormwater~~municipal separate storm sewer system permit and any amendment, revision or reissuance thereof; and all other provisions contained in the Salinas Municipal Code. (Ord. No. 2350 (NCS), § 1.)

Sec. 29-6. Severability and application.

If any portion of this chapter is declared invalid, the remaining portions of this chapter are to be considered severable and valid. (Ord. No. 2350 (NCS), § 1.)

Sec. 29-7. Taking.

The provisions of this chapter shall not operate to deprive any landowner of substantially all of the market value of his or her property or otherwise constitute an unconstitutional taking without compensation. If application of this chapter to a specific project would create a taking, then pursuant to the chapter the City Council may allow additional land uses; but only to the extent necessary to avoid a taking. Such uses shall be consistent with and carry out the purposes of this chapter as stated in Section 29-2. (Ord. No. 2350 (NCS), § 1.)

Sec. 29-8. Effective date.

This ordinance codified in this chapter will take effect thirty days from the date of passage, and shall be published following passage as required by the California Government Code. (Ord. No. 2350 (NCS), § 1.)

Sec. 29-9. General discharge prohibition--Illegal discharges.

Non-stormwater discharges to the City storm drain system are prohibited, except as specifically ~~exempted~~allowed in Section 29-10. No person shall contribute or cause to be contributed, directly or indirectly, to the City's storm drainage system any pollutant, wastewater or any substance or material which will interfere with the operation or performance of the storm drainage system, violate the City's NPDES permit or violate other applicable law or regulations. (Ord. No. 2350 (NCS), § 1.)

Sec. 29-10. Discharges exempt from the general prohibition.

(a) The general discharge prohibition shall not apply to any discharge regulated under an NPDES permit, or, in the case of a non-point source discharge, a waiver or waste discharge order issued to the discharger and administered by the State of California under the authority of the United States Environmental Protection Agency ("USEPA"), provided that the discharger is in full compliance with all requirements of the permit, waiver or order and other applicable laws or regulations.

(b) Unless otherwise determined by the City Engineer, discharges from the following activities shall not be considered a source of pollutants to waters of the United States when properly managed to ensure that no potential pollutants are present, and therefore they shall not be considered illegal discharges unless determined to cause a violation of the provisions of the Porter-Cologne Act, Clean Water Act, or this chapter:

(1) Diverted stream flows
(2) Rising ground waters
(3) Uncontaminated ground water infiltration [as defined by 40 CFR 35.2005(20)]
(4) Uncontaminated pumped ground water
(5) Foundation drains
(6) Springs
(7) Water from crawl space pumps
(8) Footing drains
(9) Air conditioning condensation
(10) Flows from riparian habitats and wetlands
(11) Water line flushing
(12) Lawn and landscape irrigation from potable water sources
(13) Discharges from potable water sources
(14) Irrigation water
(15) Individual residential car washing
(16) De-chlorinated or de-brominated swimming pool / spa water

(c) Discharges or flows from firefighting activities are excluded from the non-stormwater discharge prohibition and need only be addressed where identified as significant sources of pollutants to water of the United States. (Ord. No. 2350 (NCS), § 1.)

Sec. 29-11. Discharge in violation of permit.

Any discharge not managed in accordance with the City's Stormwater Management Program as referenced in the City's NPDES permit or any amendment, revision or reissuance thereof, either separately considered or when combined with other discharges, is prohibited. Liability for any such discharge shall be the responsibility of the person(s)

causing or responsible for the discharge, and such person(s) shall defend, indemnify, and hold the City harmless against any litigation, administrative proceeding, claim, expense, liability, fine, penalty or payment for injury or damage to any person or property resulting from such discharges. (Ord. No. 2350 (NCS), § 1.)

Sec. 29-12. Requirement to eliminate illegal discharges.

(a). An authorized enforcement officer may require by written notice that ~~a person responsible for an illegal discharge immediately, or by a specified date, discontinue~~a person responsible for an illegal discharge immediately, or by a specified date, discontinues the discharge and, if necessary, take measures to eliminate the source of the discharge to prevent the occurrence of future illegal discharges. (Ord. No. 2350 (NCS), § 1.)

(b). Unauthorized non-stormwater discharges include, but are not limited to, the following:

(1). Sanitary sewer overflows;

(2). Discharges of wash water resulting from the hosing off or cleaning of gas stations, vehicle repair services, or other types of automotive service facilities;

(3). Discharges resulting from the storage, cleaning, repair, or maintenance of any type of equipment, machinery, or facility including, but not limited to, motor vehicles, cement-related equipment, and portable toilet servicing;

(4). Discharges of wash water from mobile operations including, but not limited to, mobile vehicle washing, steam cleaning, power washing, and carpet cleaning;

(5). Discharges of wash water from the cleaning of impervious surfaces in municipal, industrial and commercial areas including, but not limited to, parking lots, streets, sidewalks, driveways, patios, plazas, work yards and outdoor eating or drinking areas;

(6). Discharges of runoff from material storage areas containing chemicals, fuels, grease, oil, or other hazardous materials;

(7). Discharges of pool or fountain water containing chlorine, biocides, or other chemicals and discharges of pool or fountain filter backwash water;

(8). Discharges of sediment, pet waste, vegetation clippings, or other landscape or construction-related wastes;

(9). Discharges of food-related wastes (e.g., grease, fish processing, and restaurant kitchen mat and trash bin wash water);

(10). Discharge of runoff from washing toxic materials from paved or unpaved areas; and

(11). Discharge of materials such as litter, landscape debris, construction debris, or any state or federally banned pesticides.

Sec. 29-13. Illicit connections.

It is unlawful for any person to establish, use, maintain or continue illicit discharges or illicit drainage connections to the City storm drainage system. This prohibition shall apply to connections in existence at the time of the adoption of the ordinance codified in this chapter, irrespective of whether such connection was made under a permit or other authorization or whether permissible under the law or practices applicable or prevailing at the time the connection was made. (Ord. No. 2350 (NCS), § 1.)

Sec. 29-14. Requirement to eliminate or secure approval for illicit connections.

The authorized enforcement officer may require by written notice that a person responsible for an illicit connection to the storm drain system comply with the requirements of this article to eliminate or secure approval for the connection by a specified date, regardless of whether or not the connection or discharges to it had been established or approved prior to the effective date of this article.

If, subsequent to eliminating a connection found to be in violation of this article, the responsible person can demonstrate that an illegal discharge will no longer occur, such person may request City approval to reconnect. The reconnection or reinstallation of the connection shall be at the responsible person's expense. (Ord. No. 2350 (NCS), § 1.)

Sec. 29-15. Reduction of pollutants in stormwater.

Storm water runoff, soil erosion and non-point source pollution can be controlled and minimized through the regulation of storm water runoff from development sites. These goals are achieved by designing sites that disturb only the smallest area necessary, minimize soil compaction and imperviousness, preserve natural drainages, vegetation and buffer zones, and utilize on-site storm water treatment techniques. These principles and techniques are collectively known as Low Impact Development (LID). The California Regional Water Resources Control Board has determined that LID techniques are effective, feasible and economically practical, and that they are a component of the maximum extent practicable (MEP) standard as defined in section 29-3 of this chapter.

Any person engaged in activities, which will, or may result in pollutants entering the City storm drainage system or which may otherwise cause or contribute to pollution shall undertake all feasible measures to reduce the introduction of such pollutants, including the implementation of LID techniques. Where best management practices requirements are promulgated by the City or any federal, state or regional agency for any activity, operation or facility which would otherwise cause the discharge of pollutants to the storm drain system or waters of the United States, every person undertaking such activity or operation, or owning or operating such facility shall comply with such requirements.

The City's Stormwater Management Program shall establish minimum requirements that apply to pollutant generating activities within the City. With regard to such activities, the following minimum requirements shall apply. Where applicable, the requirements of paragraphs (d) through (h) shall be made conditions of any ministerial or discretionary building permit.

(a) Littering. No person shall throw, deposit, leave, maintain, keep or permit to be thrown, deposited, placed or left, any refuse, rubbish, garbage or other discarded or abandoned

objects, articles and accumulations, in or upon any street, alley, sidewalk, storm drain, inlet, catch basin, conduit or any other drainage structures, business place or upon any public or private plot of land in the City, so that the same might be or become a pollutant. No person shall throw or deposit litter in any fountain, pond, lake, stream or any other body of water in a park or elsewhere in the City. This section shall not apply to the storing of such potential pollutants in containers or in lawfully established waste disposal facilities.

(b) Owners of Abutting Property. The occupants, tenants, owners, lessees and/or proprietors of any real property in the City of Salinas in front of which there is a paved sidewalk shall be responsible for maintaining such sidewalk and keeping the same free of dirt and litter ~~to the maximum extent practicable~~. Sweepings from such sidewalk shall not be swept or otherwise made or allowed to go into the gutter or roadway, but shall be disposed of in receptacles maintained on such real property as required for the disposal of garbage.

(c) Owners and Operators of Parking Lots and Similar Structures. Persons owning or operating a paved parking lot, gas station pavement, paved private street or road, or similar structure, shall clean those structures in a manner that does not result in discharge of pollutants to the City storm drain system.

(d) Best Management Practices for Construction Sites. All construction shall comply with ~~Resolution No. 10836 (NCS)~~ the City of Salinas Standards to Control Excavations, Cuts, Fills, Clearing, Grading, Erosion and Sediments, as adopted by the City Council and as the same may be amended from time to time. Any construction contractor performing work in the City shall keep debris and dirt out of the City's storm drain system. The authorized enforcement officer may require any construction contractor performing work in the City to submit a stormwater pollution prevention plan prior to final map approval by city or prior to issuance of a building permit by City , whichever occurs first.

(e) ~~Best Management Practices for New Development and Redevelopment. The authorized enforcement officer may adopt regulations establishing controls on volume and rate of stormwater runoff for new development and redevelopment within the city as may be appropriate to minimize the discharge and transport of pollutants.~~ Implementation of Post-Construction Pollutant Control Strategies. Every person undertaking any new development or significant redevelopment, as defined herein, that may discharge pollutants to waters of the United States or cause or contribute to pollution, shall implement Low Impact Development (LID) strategies and/or structural treatment control BMPs as specified in the Stormwater Development Standards or other applicable standards adopted by the City. Every such person shall also implement any additional storm water control strategies specified by the City Engineer based on site or project considerations. All new development and significant redevelopment, as defined herein, shall develop and implement a storm water control plan, as defined herein, demonstrating how the site's drainage will be managed. The storm water control plan shall be included in the building permit application. The approved plan shall become a condition of the building permit. These requirements apply to both ministerial and discretionary projects.

Any person subject to this paragraph shall be solely responsible for any costs and expenses necessary to develop and implement the LID and/or structural treatment control BMPs and shall be solely responsible for the ongoing maintenance of such features. All storm water treatment practices shall have an enforceable operation and maintenance agreement to ensure the system functions as designed. This agreement will include any and all

maintenance easements required to access and inspect the storm water treatment practices, and to perform routine maintenance as necessary to ensure proper functioning of the storm water treatment practice. All applicable building permits shall have, as a requirement of the permit, an enforceable operation and maintenance agreement. In addition, a legally binding covenant specifying the parties responsible for the proper maintenance of all storm water treatment practices shall be secured prior to issuance of a certificate of occupancy.

Prior to the issuance of any permit that requires a storm water management facility, the applicant or owner of the site must execute a maintenance easement or agreement that shall be binding on all subsequent owners of land served by the storm water management facility. The easement or agreement shall provide for access to the facility at reasonable times for periodic inspection by the City, or its contractor or agent, and for regular or special assessments of property owners to ensure that the facility is maintained in proper working condition to meet Stormwater Development Standards and any other requirements of this Chapter. The easement or agreement shall be recorded by the owner of record prior to issuance of a certificate of final occupancy.

Maintenance of all storm water management facilities shall be ensured through the creation of an easement or other maintenance covenant that must be approved by the City and recorded prior to final plan approval. The City, in lieu of a maintenance covenant, may accept dedication of any existing or future storm water management facility for maintenance, in accordance with the Stormwater Development Standards.

The City Engineer may only exempt requirements for LID strategies or other development standards in accordance with a waiver program incorporated into in the Stormwater Development Standards, and only in circumstances where, in the opinion of the City Engineer, it is not feasible to implement; or where implementation of such requirements would provide no benefit to water quality.

(f) Notification of Intent and Compliance with General Permits. Each industrial discharger, discharger associated with construction activity, or other discharger, described in any general stormwater permit addressing such discharges, as may be adopted by the USEPA, the State Water Resources Control Board, or the California Regional Water Quality Control Board, Central Coast Region, shall provide notice of intent, comply with, and undertake all other activities required by any general stormwater permit applicable to such discharges unless the discharger is covered by an individual permit. Each discharger identified in an individual NPDES permit relating to stormwater discharges shall comply with and undertake all activities required by such permit. Violation of any applicable general or individual NPDES storm water permit shall constitute a violation of this chapter.

(g) Compliance with Best Management Practices. Where best management practices guidelines or requirements have been defined in City ordinances, the Stormwater Development Standards, the City's Stormwater Management Program, by the City Engineer or adopted by any federal, state, regional, county and/or City agency, for any activity, operation or facility which may cause or contribute to stormwater pollution or contamination, and/or discharges of non-stormwater to the stormwater system or waters of the United States, provided the same is first determined by the City Engineer to be equivalent, every person undertaking such activity or operation or use of premises, or owning or operating any facility, that may cause or contribute to stormwater pollution or contamination, illegal discharges or non-stormwater discharges shall comply with such guidelines or requirements. Any person engaged in activities or operations, or owning

facilities or property which will or may result in pollutants entering stormwater, the storm drainage system or waters of the U.S. shall implement best management practices to the extent they are technologically achievable to prevent or reduce the discharge or runoff of such pollutants.

(h) Watercourse Protection. Every person owning property through which a watercourse passes, or such person's lessee, shall keep and maintain that part of the watercourse within the property reasonably free of trash, debris, excessive vegetation and other obstacles that would ~~pollute, contaminate~~cause or contribute to pollution or significantly retard the flow of water through the watercourse, except as prohibited by the regulations of the California Department of Fish and Game. In addition, the owner or lessee shall maintain existing privately owned structures within or adjacent to a watercourse, so that such structures will not become a hazard to the use, function or physical integrity of the watercourse. The owner or lessee shall not remove healthy bank vegetation beyond that actually necessary for maintenance, nor remove such vegetation in such a manner as to increase the vulnerability of the watercourse to erosion. The property owner shall be responsible for maintaining and stabilizing that portion of the watercourse that is within their property lines in order to protect against erosion and degradation of the watercourse originating or contributed from their property. (Ord. No. 2350 (NCS), § 1.)

Sec. 29-16. Spill prevention plan.

Each facility shall provide protection from spills of hazardous or prohibited materials or other substances regulated by this chapter. The methods, procedures, mechanisms and facilities established and utilized for the purpose of preventing accidental discharges or spills of materials with pollution potential shall be provided and maintained at the owner's own cost and expense.

Facilities required to file a NOI for coverage under the California general industrial activities stormwater permit shall submit to the city a copy of the stormwater pollution prevention plan (SWPPP) prepared for the general permit. The SWPPP shall outline the user's spill prevention and response procedure, describe the nature and location of any chemicals stored on the user's premises and shall contain procedures for immediately notifying the City and preventing adverse impacts of any discharge of such chemicals, substances or materials. (Ord. No. 2350 (NCS), § 1.)

Sec. 29-17. Notification of spills.

All persons in charge of a facility or responsible for emergency response for a facility have a personal responsibility to train facility personnel and maintain notification procedures to assure immediate notification is provided to the City of any suspected, confirmed or unconfirmed release of material, pollutants or waste creating a risk of discharge into the City storm drain system.

As soon as any person in charge of a facility or responsible for emergency response for a facility has knowledge of any suspected, confirmed or unconfirmed release of materials, pollutants or waste which may result in pollutants or non-stormwater discharge entering the City storm drain system, such person shall take all necessary steps to ensure the discovery, containment and clean up of such release and notify the City of the occurrence.

In the event of a release of hazardous materials, such person shall telephone 911 to report the release immediately. In the event of a release of non-hazardous materials, see Section 29-3(q), such person shall notify the City of Salinas, Maintenance Services~~public works department~~ Department in person or by phone or facsimile no later than 5:00 p.m. of the next business day. Notifications in person and by phone shall be confirmed by written notice addressed and mailed, within three business days, to the Maintenance Services Director~~City Engineer~~, City of Salinas, ~~200 Lincoln Avenue~~426 Work Street, Salinas CA 93901, Attention: Spill Notification.

Notification shall identify the location of the discharge, the type, concentration and volume of waste, and corrective actions taken and/or anticipated. Such notification shall not relieve the user of any expense, loss, damage or other liability which may be incurred as a result of damage to the City, fish kills, or any other damage to person or property; nor shall such notification relieve the user of any fines, civil penalties or other liabilities which may be imposed by this part or other applicable law.

A notice advising employees whom to call in the event of an accidental discharge or spill shall be posted on the user's bulletin board or other prominent place. Employers shall provide spill prevention and response training for all employees who may cause an accidental discharge or spill to occur. (Ord. No. 2350 (NCS), § 1.)

Sec. 29-18. Authority to inspect.

(a) Whenever necessary to make an inspection to enforce any of the provisions of this chapter, or whenever an authorized enforcement officer has reasonable cause to believe that there exists in any building or upon any premises any condition which constitutes a violation of the provisions of this chapter, the officer may enter such building or premises at all reasonable times to inspect the same or perform any duty imposed upon the officer by this chapter, provided that (i) if such building or premises be occupied, he or she shall first present proper credentials and request entry; and (ii) if such building or premises be unoccupied, he or she shall first make a reasonable effort to locate the owner or other persons having charge or control of the building or premises and request entry.

Any such request for entry shall state that the property owner or occupant has the right to refuse entry and that in the event such entry is refused, inspection may be made only upon ~~issuance of a search warrant~~authorization by a duly authorized court.

(b) Routine or area inspections shall be based upon such reasonable selection processes as may be deemed necessary to carry out the objectives of this chapter, including but not limited to random sampling and/or sampling in areas with evidence of stormwater contamination, illicit discharges, discharge of non-storm-water to the stormwater system, or similar factors.

(c) Authority to Sample and Establish Sampling Devices. ~~With the consent of the owner or occupant or pursuant to a search warrant, a~~Any authorized enforcement officer may establish on any property such devices as are necessary to conduct sampling or metering operations. During all inspections as provided herein, the officer may take any samples deemed necessary to aid in the pursuit of the inquiry or in the recordation of the activities on-site.

(d) Requirement to Test or Monitor. Any authorized enforcement officer may require that any person engaged in any activity and/or owning or operating any facility which may cause or contribute to stormwater pollution or contamination, illicit discharges and/or discharges of non-stormwater to the stormwater system, undertake such monitoring activities and/or analyses and furnish such reports as the officer may specify. The burden, including costs, of these activities, analyses and reports shall bear a reasonable relationship to the need for the monitoring, analyses and reports and the benefits to be obtained. The recipient of such request shall undertake and provide the monitoring, analyses and reports required.

In the event the owner or operator of a facility subject to a monitoring and/or analyses order fails to conduct required monitoring and/or analyses and furnish the required reports in the form required, the authorized enforcement officer may ~~in addition to the other penalties noted in this chapter,~~ cause such monitoring and/or analyses to be completed and the cost of which, ~~therefor,~~ including the reasonable additional administrative costs incurred by the City shall be borne by the owner of the property and the cost thereof shall be invoiced to the owner of the property. Whenever the full amount of such costs has not been paid within ninety (90) days from the date of notice of such costs, the City may take whatever action is available to it in order to recover such costs. This obligation may constitute a lien or, in the alternative, a special assessment against the real property on which the violation occurred. (Ord. No. 2350 (NCS), § 1.)

Sec. 29-19. Violations constituting misdemeanors.

~~Unless otherwise specified by ordinance, the~~The violation of any provision of this chapter, or failure to comply with any of the mandatory requirements of this chapter shall constitute a misdemeanor; except that notwithstanding any other provisions of this chapter, any such violation constituting a misdemeanor under this chapter may, at the discretion of an authorized enforcement officer be ~~charged and prosecuted as an infraction~~enforced pursuant to any available legal remedy including the City's Administrative Remedies Ordinance (Chapter 1, Article II of this Code). (Ord. No. 2350 (NCS), § 1.)

Sec. 29-20. Penalty for violation.

Upon conviction of a misdemeanor, a person shall be subject to payment of a fine, or imprisonment, or both, not to exceed the limits set forth in California Government Code Section 36901.

~~Upon conviction of an infraction, a person shall be subject to payment of a fine; not to exceed the limits set forth in California Government Code Section 36900. After a third conviction for a violation of the same provision subsequent violations within a twelve-month period may be charged as a misdemeanor. (Ord. No. 2350 (NCS), § 1.)~~

Sec. 29-21. Continuing violation.

Unless otherwise provided, a person, firm, corporation or organization shall be deemed guilty of a separate offense for each and every day during any portion of which a violation of this chapter is committed, continued or permitted by the person, firm, corporation or organization and shall be punishable accordingly as herein provided. (Ord. No. 2350 (NCS), § 1.)

Sec. 29-22. Violations; Abatement by the City.

(a) If any violation of this chapter has not been corrected pursuant to the requirements set forth by the City, the City shall enter upon the subject private property and is authorized to take any and all measures necessary to abate the violation and/or restore the property. It shall be unlawful for any person, owner, agent or person in possession of any premises to refuse to allow the City to enter upon the premises for the purposes set forth herein.

(c) Within thirty (30) days after abatement of the violation by the City, the City Engineer or an enforcement officer shall notify the property owner, as shown on the last equalized assessment roll, of the cost of abatement, which shall include all costs relating to the abatement and administrative costs incurred by the City. Such costs may become a lien or special assessment against the real property on which the violation occurred.

The owner may file a written protest objecting to the amount of the assessment with the City Clerk within thirty (30) days of the date of the notification of costs. The City Clerk shall set the matter for a public hearing by the City Council. The decision of the Council shall be final. Failure to timely protest the amount of the abatement as provided herein shall constitute a failure to exhaust administrative remedies and no further appeal rights shall be granted.

If such costs are not paid within ninety (90) days of the date of the Council's final determination of the matter, or if the determination of the City Council as set forth above has not been successfully challenged by a timely writ of mandate, the obligation may constitute a lien or, in the alternative, a special assessment against the property on which the violation occurred.

(c) The City Engineer or designated enforcement officer is authorized to require immediate abatement of any violation of this chapter that constitutes an immediate threat to the health, safety or welfare of the public. If any such violation is not abated immediately as directed by the City Engineer or designated ~~an~~ enforcement officer, the City of Salinas is authorized to enter onto the property and to take any and all measures required to remediate the violation. Any expense related to such remediation undertaken by the City of Salinas shall be fully reimbursed by the property owner and/or responsible party. Any relief obtained under this section shall not prevent the City from seeking other and further relief authorized under this Chapter.

(d) If any violation of this chapter constitutes a seasonal and recurrent nuisance, the City Engineer shall so declare. Thereafter such seasonal and recurrent nuisance shall be abated every year without the necessity of further learning. If the City prevails in any administrative or civil proceedings initiated under this chapter, the City shall be entitled to seek reimbursement for all costs incurred in connection with such proceeding. Such reimbursable costs may include, but are not limited to, the costs of investigation, administrative overhead, out-of-pocket expenses, costs of administrative hearings, costs of suit, and reasonable attorney fees.

Sec. 29-23. Concealment.

Causing, permitting, aiding, abetting or concealing a violation of any provision of this chapter shall constitute a violation of such provision. (Ord. No. 2350 (NCS), § 1.)

Sec. 29-24. Acts potentially resulting in violation of federal Clean Water Act and/or Porter-Cologne Act.

Any person who violates any provision of this chapter, any provision of any permit issued pursuant to this chapter, or who discharges waste or wastewater which causes pollution, or who violates any cease and desist order, prohibition, or effluent limitation, may also be in violation of the federal Clean Water Act and/or Porter-Cologne Act and may be subject to the sanctions of those acts including civil and criminal penalty. Any enforcement action authorized under this article should also include notice to the violator of such potential liability. (Ord. No. 2350 (NCS), § 1.)

Sec. 29-25. Violations deemed a public nuisance~~; Recovery of costs.~~

In addition to the penalties hereinbefore provided, any condition caused or permitted to exist in violation of any of the provisions of this chapter is deemed a threat to the public health, safety and welfare, and is declared and deemed to be a public nuisance, and may be summarily abated and/or restored by the authorized enforcement officer, and/or civil action to abate, enjoin or otherwise compel the cessation of such nuisance may be taken by the City Attorney. Any costs or expenses incurred by the City in violating such nuisance shall be recoverable by the City as set forth in this Chapter.

Sec. 29-26. Recovery of Costs.

In addition to any fine or penalty imposed, whenever any discharger introduces or causes the introduction of non-stormwater or any pollutant in violation of this chapter and the discharge results in a violation of any State or Federal laws or regulations, in violation of the City's NPDES Permit, damages pubic property, or adversely affects the City's storm drainage system or receiving waters, the discharger shall be liable to the City for reasonable costs necessary to correct such discharge, detriment or adverse effect, including, but not limited to costs of investigation, inspection or re-inspection, and any other costs and expenses incurred by the City in association with the corrective action or the clean-up of the pollutant and its effects.

All costs incurred by the City shall be a personal obligation of the discharger and any owner of any property that is the source of any discharge, and may be recovered by the City by any available legal remedies. In addition to this personal obligation and all other remedies provided by law, the City may collect any judgment, fee, cost or charge, including any permit fees, fines, late charges or interest incurred by it in enforcing the provisions of this chapter.

~~The cost of such abatement and restoration shall be borne by the owner of the property and the cost thereof shall be invoiced to the owner of the property.~~

~~If any violation of this chapter constitutes a seasonal and recurrent nuisance, the City Engineer shall so declare. Thereafter such seasonal and recurrent nuisance shall be abated every year without the necessity of further learning. If the city prevails in any administrative or civil proceedings initiated under this chapter, the city shall be entitled to seek reimbursement for all costs incurred in connection with such proceeding. Such reimbursable costs may include, but are not limited to, the costs of investigation, administrative overhead, out-of-pocket expenses, costs of administrative hearings, costs of suit, and reasonable attorney fees. (Ord. No. 2350 (NCS), § 1.)~~

Sec. 29-27. Civil actions.

In addition to any other remedies provided in this chapter, any violation of this chapter may be enforced by civil action brought by the City. In any such action, the City may seek, and the court may grant, as appropriate, any or all of the following remedies:

(a) A temporary and/or permanent injunction;

(b) Assessment against the violator for the costs of any investigation, inspection, or monitoring survey, which led to the discovery of the violation, and for the reasonable costs incurred in preparing and prosecuting legal action as a result of violations of this Chapter.

(c) Costs incurred in removing, correcting, or terminating the adverse effects resulting from the violation.

(d) Compensatory damages for loss or destruction to water quality, wildlife, fish and aquatic life.

(e) Such other relief as the court may authorize. Assessments under this subsection shall be paid to the City to be used exclusively for costs associated with monitoring and establishing storm water discharge pollution control systems and/or implementing or enforcing the provisions of these standards. (Ord. No. 2350 (NCS), § 1.)

Sec. 29-28. Administrative enforcement powers.

In addition to the other enforcement powers and remedies established in this chapter, the authorized enforcement officer has the authority to utilize the following administrative remedies.

(a) Cease and Desist Orders. When the authorized enforcement officer finds that a discharge has taken place or is likely to take place in violation of this chapter, the officer may issue an order to cease and desist such discharge, or practice, or operation likely to cause such discharge and direct that those persons not complying shall: (a) comply with the requirement, (b) comply with a time schedule for compliance, and/or (c) take appropriate remedial or preventive action to prevent the violation from recurring.

(b) Notice to Clean. Whenever the authorized enforcement officer finds any oil, earth, dirt, grass, weeds, dead trees, tin cans, rubbish, refuse, waste or any other material of any kind, in or upon the sidewalk abutting or adjoining any parcel of land, or upon any parcel of land or grounds, which may result in an increase in pollutants entering the City storm drain system or a non-stormwater discharge to the City storm drain system, he or she may give formal written notice to remove such oil, earth, dirt, grass, weeds, dead trees, tin cans, rubbish, refuse, waste or other material in any manner that he or she may reasonably provide. The authorized enforcement officer shall specify in site notice the time allotted for compliance and the recipient of such notice shall undertake the activities necessary to abate such condition within the period of time specified. In the event the owner or operator of a facility fails to conduct the required activities as described in the notice, the authorized enforcement officer may cause such required activities as described in the notice and the cost thereof shall be invoiced to the owner of the property. (Ord. No. 2350 (NCS), § 1.)

(c) Referral. The City may also report violations to the Monterey County Water Resources Agency, State Regional Water Control Board, or California Department of Fish and Game for action as appropriate. Such actions may be taken for failure to respond appropriately to a cease and desist order or if evidence indicates that the violator acted willfully with intent to cause, allow to continue, or conceal discharge in violation of the ordinance.

Sec. 29-29. Authority to arrest or issue citations.

Duly authorized peace officers for the City shall have and are vested with the authority to arrest or cite and release any person who violates the provisions of this chapter, in the manner provided by California Penal Code Section 849.

It is the intent of the City Council that the immunities prescribed in Section 836.5 of the Penal Code which apply to public officers or employees in the discharge of their duties within the course and scope of their employment shall apply to all actions taken by such peace officers or other City employees in discharging their duties in accordance with this part. (Ord. No. 2350 (NCS), § 1.)

Sec. 29-30. Appeal.

Any person, firm, corporation or organization required to perform monitoring, analyses, reporting, and/or corrective activities by the authorized enforcement officer who is aggrieved by the decision of the City Engineer or an authorized enforcement officer may appeal such decision to the City Manager within fifteen days following the effective date of the decision by furnishing written request for an appeal to the City Manager. Upon receipt of such request, the City Manager or his designee may request a report and recommendation from the City Engineer or authorized enforcement officer and shall set the matter for hearing at the earliest practical date. At such hearing, the ~~Engineer~~ City Manager or his designee shall hear any evidence presented by the appellant and the City Engineer or enforcement officer,~~may hear additional evidence,~~ and may reject, affirm or modify the authorized enforcement officer's decision. Such decision shall be the City's final administrative determination of the matter. (Ord. No. 2350 (NCS), § 1.)

Sec. 29-31. Judicial review.

The provisions of Sections 1094.5 and 1094.6 of the California Code of Civil Procedure are applicable to judicial review of City decisions pursuant to this chapter. (Ord. No. 2350 (NCS), § 1.)

Sec. 29-32. Remedies not exclusive.

Remedies under this article are in addition to and do not supersede or limit any and all other remedies, civil or criminal. The remedies provided for herein shall be cumulative and not exclusive. (Ord. No. 2350 (NCS), § 1.)

Sec. 29-33. Disclaimer of liability.

The degree of protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific, engineering and other relevant technical considerations. The standards set forth herein are minimum standards and this division

does not imply that compliance will ensure that there will be no unauthorized discharge of pollutants into the waters of the United States. This chapter shall not create liability on the part of the City or any officer or employee thereof for any damages that result from reliance on this chapter or any administrative decision lawfully made thereunder. (Ord. No. 2350 (NCS), § 1.)

Sec. 29-34. Coordination with hazardous materials inventory and response program.

The first revision of the business plan for any facility subject to the City's hazardous materials inventory and response program shall include a program for compliance with this chapter, including the prohibitions on non-stormwater discharges and illicit discharges, and the requirement to reduce stormwater pollutants to the maximum extent practicable. (Ord. No. 2350 (NCS), § 1.)

~~**Sec. 29-33. Confidential information.**~~

~~Information and data on a user obtained from reports, questionnaires, permit applications, permits and monitoring programs, and from inspections shall be made available to the EPA, state agencies and other local governmental agencies without restrictions. Such information and data shall also be made available to the public or other nongovernmental agencies without restriction unless the user specifically requests and is able to demonstrate to the satisfaction of the city that the release of such information would divulge information, processes or methods of production entitled to protection as trade secrets of the user. However, in no event shall stormwater constituents and characteristics be recognized as confidential information.~~

~~Information accepted by the city as confidential shall not be transmitted to any nongovernmental agency or to the general public by the city until or unless the request is received in writing and until ten days after notification of the request has been given to the user by the city. Furthermore, when requested by the person furnishing a report for uses related to this part, the National Pollutant Discharge Elimination System (NPDES) permit, state general industrial stormwater permit and/or state general construction activity water permit, the portions of a report which might disclose trade secrets or secret processes shall not be made available when requested by the public or nongovernmental agencies. However, such portions of such reports shall be made available, without reservation, to the EPA, state agencies or local governmental agencies upon the written request of such agency. (Ord. No. 2350 (NCS), § 1.)~~

~~Sec. 29-34. Special agreements.~~

~~Special agreements and arrangements between the council of the city and any persons or agencies may be established when, in the opinion of the city, unusual or extraordinary circumstances compel special terms and conditions. However, in no event shall any such agreement be interpreted so as to authorize the violation or waiver of applicable standards or requirements as delineated in the city's NPDES permit. (Ord. No. 2350 (NCS), § 1.)~~

Section 2. If any section, subsection, sentence, clause or phrase of this ordinance is for any reason held to be invalid or unconstitutional by a decision of any court of any competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance. The Salinas City Council hereby declares that it would have passed this ordinance, and each and every section, subsection, clause and phrase thereof not declared

invalid or unconstitutional without regard to whether any portion of the ordinance would be subsequently declared invalid or unconstitutional.

SECTION 3. This ordinance shall take effect thirty (30) days from and after its adoption.

SECTION 4. The City Clerk of the City of Salinas is hereby directed to cause the following summary of this ordinance to be published by one (1) insertion in The Salinas Californian, a newspaper of general circulation printed, published, and circulated in the City of Salinas and hereby designated for that purpose by the Council of Salinas:

> "Chapter 29 of the Salinas City Code is hereby amended to update and revise the requirements related to stormwater management and discharge control within the City of Salinas."

This ordinance was introduced and read on the 19th day of June 2007, and passed and adopted on the 10th day of July 2007, by the following vote:

AYES: Councilmembers Barrera, Lutes, Sanchez, Villegas and Mayor Donohue

NOES: None

ABSTAIN: None

ABSENT: Councilmembers Barnes, and De La Rosa

Dennis Donohue, Mayor

ATTEST:

Ann Camel, City Clerk

The Salinas Californian
www.thecalifornian.com

This space is for the County Clerk's Filing Stamp

PROOF OF PUBLICATION

(2015.5 C.C.P.)

STATE OF CALIFORNIA

County of Monterey

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the above-entitled matter. I am the principal clerk of the printer of *The Salinas Californian*, a newspaper of general circulation, printed and published daily except Sunday in the City of Salinas, County of Monterey and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of Monterey, State of California; that the notice, of which the annexed is a printed copy (set in type no smaller than nonpareil), has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to-wit:

July 20, 2007

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Executed July 20, 2007

at Salinas, California.

Charene Clark

Signature

ORDINANCE 2473

City of Salinas
Ordinance 2473

Summary of Salinas City Ordinance, No. 2473 (NCS): Chapter 29 of the Salinas City Code is hereby amended to update and revised the requirements related to storm water management and discharge control within the City of Salinas. This Ordinance goes into effect 30 days after adoption. For additional detail concerning this amendment, contact the Development and Engineering Services Department at 758-7241.

This Ordinance was introduced and read on the 19th day of June 2007, and passed and adopted on the 10th day of July 2007, by the following vote:

AYES: Councilmembers Barrera, Lutes, Sanchez, Villegas, and Mayor Donohue. NOES: None. ABSENT: Councilmember Barnes and De La Rosa

July 20, 2007 *(19005)*

APPENDIX F

City of Salinas NPDES Permit

Appendix F

2005 City of Salinas MS4 NPDES Permit

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
895 Aerovista Place, Suite 101
San Luis Obispo, California 93401-7906

ORDER NO. R3-2004-0135
NPDES PERMIT NO. CA0049981

WASTE DISCHARGE REQUIREMENTS

FOR

CITY OF SALINAS
MUNICIPAL STORM WATER DISCHARGES
Monterey County

FINDINGS

The California Regional Water Quality Control Board, Central Coast Region (hereinafter the Regional Board, or RWQCB), finds that:

1. The City of Salinas (the City, or the Permittee) submitted a Report of Waste Discharge, dated March 31, 2004, to request a renewal of their Waste Discharge Requirements (WDR, see Attachment 1 for list of acronyms used in this Order). The Permittee has been operating pursuant to WDR Order No. 99-087, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0049981 (Waste Discharger Identification No. 3 279906001), issued October 1999. The NPDES permit allows discharge of storm water from municipal separate storm sewer systems (MS4s) within Salinas' jurisdiction. The existing five-year permit was extended until this Order is adopted.

AUTHORITY

2. This Order is based on the federal Clean Water Act, the Porter-Cologne Water Quality Control Act (Division 7 of the Water Code, commencing with Section 13000), applicable state and federal regulations, all applicable provisions of statewide Water Quality Control Plans and Policies adopted by the State Water Resources Control Board, and the Regional Water Quality Control Plan (Basin Plan) adopted by the Regional Board.

3. Salinas is defined as a medium municipality (i.e. those with populations greater than 100,000) in the Code of Federal Regulation (40 CFR 122.26(b)(7)), and operates an MS4. As such, the City must obtain an NPDES municipal storm water permit.

4. The Permit boundary, as shown in Attachment 2 and incorporated herein and made a part of this Order, is the incorporated area of the City and defines the boundary of the City's MS4.

5. The Permittee and other public agencies and private persons, own and operate storm water conveyance systems that service drainage areas within the Permit boundary. The Permittee's storm drain system consists of approximately 122 miles of pipes ranging from 12 to 84 inches in diameter. The storm drain system discharges into the surface water bodies listed in Finding 9, below.

6. There are municipal separate storm sewer systems discharging within the incorporated area of the city that are not owned or operated by the Permittee. The Permittee may lack legal

jurisdiction over storm water discharges into its system from some of the state and county facilities, agricultural land, utilities and special districts. Some of those systems are owned or operated by the California Department of Transportation (Caltrans), and Monterey County. Specifically, Caltrans owns and operates State of California rights-of-way, and Monterey County has jurisdiction over storm water discharges from County owned properties. In addition, Monterey County Water Resources Agency owns and operates the Reclamation Ditch 1665 (also referred to as the Reclamation Canal on some maps, hereinafter referred to as the Reclamation Ditch). To the extent the Permittee lacks jurisdiction, the Regional Board encourages the Permittee to develop agreements with appropriate entities to ensure proper management of storm water discharges; however, the Permittee will not be held responsible for municipal facilities and/or discharges for which it lacks jurisdiction.

7. The Permittee may petition the Regional Board to issue a separate NPDES permit to any discharger of non-storm water into storm drain systems that the Permittee owns or operates.

8. There are portions of the City that are primarily agricultural. It is not the intent of the federal storm water regulations to regulate storm water discharges from agricultural lands. These areas of the City are exempt from the requirements of this Order, but are subject to the requirements of the *Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands, Order No. R3-2004-0117*, adopted on July 8, 2004.

HYDROLOGIC SETTING AND RECEIVING WATER BODIES

9. The City of Salinas is situated in the northern part of the Salinas Valley in Monterey County, approximately ten miles east of the Pacific Ocean and adjacent to the Salinas River. Four major creeks and several minor tributaries pass through the Salinas area and receive storm water discharges from the City sections northeast and adjacent to Highway 101 (see Attachment 2). Santa Rita Creek collects flow from a very small, northern portion of the city, then flows west to the Espinosa Slough. The three other major creeks, Natividad, Gabilan, and Alisal Creeks, are interconnected. Alisal Creek is renamed the Reclamation Ditch within the City. Natividad and Gabilan Creeks flow through the northeastern portion of the City. Natividad and Gabilan Creeks flow to Carr Lake. Carr Lake is often dry and is utilized for farming, but also functions as a storm water retention basin before flowing to the downstream Reclamation Ditch (former Alisal Creek). The Reclamation Ditch collects flow, via Carr Lake, from Natividad and Gabilan Creeks, as well as other portions of the City. The Reclamation Ditch flows west from the City, paralleling the Alisal Slough and eventually discharges to the Tembladero Slough (Attachment 3). Espinosa and Tembladero Sloughs discharge to the Old Salinas River.

Storm water from the southernmost portion of the City is collected into a storm drain system that flows toward the industrial waste treatment plant. This storm water system terminates at a lift station, which discharges to the main Salinas River channel. The main Salinas River channel, like Espinosa and Tembladero Sloughs, enters into the Old Salinas River channel. The Old Salinas River channel is an estuary that is often separated from the Pacific Ocean by a sand bar. The Old Salinas River discharges into the Pacific Ocean at the downstream end of the Elkhorn Slough and Moro Cojo Slough estuary system near Moss Landing (Attachment 3).

BENEFICIAL USES

10. The Central Coast Water Quality Control Plan (Basin Plan) for the Central Coast Region, dated September 8, 1994, contains water quality objectives and water quality standards (collectively termed water quality objectives) and designates beneficial uses of ground and surface waters in the Central Coast Region. The Basin Plan also incorporates by reference all State Water Resources Control Board (State Board) water quality control plans and policies.

11. The beneficial uses, as listed in the Basin Plan, for receiving waters within and downstream of the permitted area include:

a. Municipal and Domestic Supply
b. Agricultural Supply
c. Ground Water Recharge
d. Water Contact Recreation
e. Non-Contact Water Recreation
f. Wildlife Habitat
g. Cold Fresh Water Habitat
h. Warm Fresh Water Habitat
i. Spawning, Reproduction, and/or Early Development
j. Preservation of Biological Habitats of Special Significance
k. Rare, Threatened, or Endangered Species
l. Estuarine Habitat
m. Migration of Aquatic Organisms
n. Freshwater Replenishment
o. Commercial and Sport Fishing

12. This Order specifies requirements to protect the beneficial uses of the waters of the United States. The intent of this permit is to regulate pollutant discharges, identify and focus on those areas that threaten beneficial uses, and implement Best Management Practices (BMPs) to reduce storm water pollutants to the Maximum Extent Practicable (refer to Finding 16, below) as required in 40 CFR 122.26(d)(2)(iv). Permittees can satisfy the requirements through effective implementation of a Storm Water Management Program (SWMP) (refer to Attachment 4 of this Order) which contains BMPs.

DISCHARGE CHARACTERISTICS

13. Development and urbanization increase pollutant load, volume, and discharge velocity over background levels. During urbanization, natural vegetated pervious ground cover is converted to impervious surfaces such as paved highways, streets, rooftops and parking lots. Natural vegetated soil can both absorb rainwater and remove pollutants, thereby providing an effective natural purification process. In contrast, pavement and concrete can neither absorb water nor remove pollutants, and thus the natural purification characteristics are lost. Urban areas provide pollution sources as the increased density of human population brings proportionately higher levels of urban pollutants and increased impervious surfaces.

14. Urban pollutants of concern that may be contained in storm water include, but are not limited to: certain heavy metals; sediments; pathogens; petroleum hydrocarbons; polycyclic aromatic hydrocarbons (PAHs), trash, and pesticides; herbicides; and nutrients that cause or contribute to the depletion of dissolved oxygen and/or toxic conditions in the receiving water. Excessive flow rates of storm water may cause or contribute to downstream erosion and/or excessive sediment discharge and deposition in stream channels. The quality and quantity of MS4 discharges may vary considerably because of the effects of hydrology, geology, land use, season, and sequence and duration of precipitation events.

15. The increased volume, increased velocity, and discharge duration of storm water runoff from developed areas has the potential to greatly accelerate downstream erosion and impair stream habitat in natural drainages. A higher percentage of impervious area correlates to a greater pollutant loading (see pollutants of concern described above). Significant declines in the biological integrity and physical habitat of streams and other receiving waters have been found to occur with as little as 10 percent conversion from natural to impervious surfaces. When water quality impacts are considered during the planning stages of a project, new development and many redevelopment projects can more efficiently incorporate measures to

protect water quality. Many studies[1] have demonstrated a direct correlation between the degree of imperviousness of an area and the degradation of its receiving waters.

16. **MAXIMUM EXTENT PRACTICABLE (MEP):** MEP is the technology-based standard established by Congress in CWA section 402(p)(3)(B)(iii) that municipal dischargers of storm water must meet. Technology-based standards establish the level of pollutant reductions that dischargers must achieve. MEP is generally a result of emphasizing pollution prevention and source control BMPs as the first lines of defense in combination with structural and treatment methods where appropriate serving as additional lines of defense. The MEP approach is an ever evolving, flexible, and advancing concept, which considers technical and economic feasibility. For purposes of this Permit, the Regional Board will determine compliance with the MEP standard based on the terms of the Permit, including Attachment 4; and State Board decisions or guidance, EPA regulations and guidance and applicable case law defining MEP.

17. **ANTIDEGRADATION:** Conscientious implementation of BMPs that reduce storm water pollutants to the Maximum Extent Practicable will reduce the likelihood that discharges from MS4s will cause or contribute to unreasonable degradation of the quality of receiving waters. The effect of the permit will be an overall improvement of receiving water quality, not degradation. Therefore, this Order is in conformance with SWRCB Resolution No. 68-16 and the federal antidegradation policy described in 40 CFR 131.12.

18. **CEQA:** The issuance of waste discharge requirements for the discharge of urban runoff from MS4s to waters of the United States is exempt from the requirement for preparation of environmental documents under the California Environmental Quality Act (CEQA) (Public Resources Code, Division 13, Chapter 3, § 21000 et seq.) in accordance with the CWC § 13389.

19. **PUBLIC NOTICE:** The Regional Board has notified the all known interested parties and the public of its intent to consider adoption of an order prescribing waste discharge requirements that would serve to renew an NPDES permit for the existing discharge of urban runoff.

20. **PUBLIC HEARING:** The Regional Board has, at a public meeting on February 11, 2005, held a public hearing and heard and considered all comments pertaining to the terms and conditions of this Order.

21. **EFFECTIVE DATE:** This Order serves as a NPDES Permit for discharges of storm water from the Permittee's storm drain system within the Permit boundary, pursuant to Section 402 of the CWA, or amendments thereto, and shall become effective ten days after the date of its adoption provided the U.S. EPA Regional Administrator has no objections.

22. **ATTACHMENTS TO THIS ORDER:** Attachments 1, 2, 3, 4, 5, and 6 are incorporated herein and made a part of this Order. A list of the attachments can be found at the bottom of this Order.

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[1] Impervious Cover as An Urban Stream Indicator and a Watershed Management Tool, Schueler, T. and R. Claytor, In, Effects of Water Development and Management on Aquatic Ecosystems (1995), ASCE, New York; Leopold, L. B., (1973), River Channel Change with Time: An Example, Geological Society of America Bulletin, v. 84, p. 1845-1860; Hammer, T. R., (1972), Stream Channel Enlargement Due to Urbanization: Water Resources Research, v. 8, p. 1530-1540; Booth, D. B., (1991), Urbanization and the Natural Drainage System--Impacts, Solutions and Prognoses: The Northwest Environmental Journal, v. 7, p. 93-118; Klein, R. D., (1979), Urbanization and Stream Quality Impairment: Water Resources Bulletin, v. 15, p. 948-963; May, C. W., Horner, R. R., Karr, J. R., Mar, B. W., and Welch, E. B., (1997), Effects of Urbanization on Small Streams in the Puget Sound Lowland Ecoregion: Watershed Protection Techniques, v. 2, p. 483-494; Morisawa, M. and LaFlure, E. Hydraulic Geometry, Stream Equilibrium and Urbanization In Rhodes, D. P. and Williams, G. P. Adjustments to the Fluvial System p.333-350. (1979): Dubuque, Iowa, Kendall/Hunt. Tenth Annual Geomorphology Symposia Series; and The Importance of Imperviousness: Watershed Protection Techniques, 1(3), Schueler, T. (1994).

THEREFORE, IT IS HEREBY ORDERED that Order No. 99-087 is rescinded, and that the City of Salinas, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the CWA as amended and regulations and guidelines adopted thereunder, shall comply with the following:

A. DISCHARGE PROHIBITIONS

1. Discharges from MS4s in a manner causing, or threatening to cause, a condition of pollution, contamination, or nuisance (as defined in §13050 of the California Water Code) in waters of the State of California are prohibited.

2. Discharges from MS4s that cause or contribute to the violation of water quality objectives or water quality standards are prohibited.

3. Discharges from MS4s containing pollutants that have not been reduced to the Maximum Extent Practicable (MEP – See Finding 16) are prohibited.

4. The Permittee shall prohibit all types of non-storm water discharges into its MS4 unless such discharges are either authorized by a separate NPDES permit or not prohibited in accordance with this Order.

5. The following categories of non-storm water discharges (copied from 40 CFR 122.26(d)(2)(iv)(B)(1), except as provided by Prohibition 7.b) shall be addressed where such discharges are identified by the municipality as sources of pollutants to waters of the United States:

   a. Diverted stream flows
   b. Rising ground waters
   c. Uncontaminated ground water infiltration [as defined by 40 CFR 35.2005(20)]
   d. Uncontaminated pumped ground water
   e. Foundation drains
   f. Springs
   g. Water from crawl space pumps
   h. Footing drains
   i. Air conditioning condensation
   j. Flows from riparian habitats and wetlands
   k. Water line flushing
   l. Lawn and landscape irrigation from potable water sources
   m. Discharges from potable water sources
   n. Irrigation water
   o. Individual residential car washing
   p. De-chlorinated or debrominated swimming pool water

6. Discharges or flows from fire fighting activities are excluded from the non-storm water discharge-prohibition and need only be addressed where they are identified as significant sources of pollutants to waters of the United States.

7. When a non-storm water discharge category listed above is identified by the Permittee or the Executive Officer as a source of pollutants to waters of the State of California, the Permittee shall either:

   a. Prohibit, via ordinance or other method, the discharge category from entering its MS4; or

   b. Not prohibit the discharge category and implement, or require the responsible party(ies) to implement, BMPs that will reduce pollutants to the MEP; and

   c. Submit the following information to the Regional Board for approval of the Executive Officer within 90 days upon identification of such discharge category:

      i. The non-storm water discharge category listed above that the Permittee elects not to prohibit; and

      ii. The BMPs for each discharge category listed above that the Permittee will implement, or require the responsible party(ies) to implement, to prevent or reduce pollutants to the MEP.

8. The Permittee shall examine all dry weather analytical monitoring results collected in accordance with the Monitoring and Reporting Program required by this Order (Attachment 5) to identify water quality problems that may be the result of any non-storm water discharge, including any non-prohibited discharge category(ies) listed in Discharge Prohibition A.5 of this Order (page 6). Follow-up investigations shall be conducted as necessary to identify and control or prohibit, as described above, any non-storm water discharges that are sources of pollutants. Non-prohibited discharges listed above containing pollutants that cannot be reduced to the MEP by the implementation of BMPs shall be prohibited on a categorical or case-by-case basis.

B. EFFLUENT DISCHARGE LIMITATIONS

1. Numerical and narrative water quality objectives exist for receiving waters in the Central Coast Region[2]. However, due to the variability in storm water quality and quantity and the complexity of urban runoff, the impact of urban storm water runoff discharges on water quality or receiving waters has not been fully determined. Therefore, this Order does not contain numerical effluent limitations for specific constituents. The Permittee's storm water discharges may not, however, cause or contribute to an exceedance of a receiving water quality objective contained in the Basin Plan or other statewide plans or policies. The Code of Federal Regulations (40 CFR 122.26(d)(2)(iv)) requires storm water permittees to implement BMPs to reduce pollutants in storm water discharges to the maximum extent practicable. BMPs are described in the Permittee's SWMP. This Order requires ongoing assessment and annual reporting on the implementation and effectiveness of the BMPs.

C. RECEIVING WATER LIMITATIONS

1. Discharges from MS4s that cause or contribute to the violation of water quality standards (designated beneficial uses and water quality objectives developed to protect beneficial uses) of Receiving Waters are prohibited.

[2] Water Quality Control Plan, Central Coast Region (Basin Plan), http://www.waterboards.ca.gov/centralcoast/BasinPlan/Index.htm

2. Discharges from the MS4 of storm water, or non-storm water for which a Permittee is responsible, shall not cause or contribute to a condition of nuisance in Receiving Waters.

3. The Permittee shall comply with Discharge Prohibitions A.1 and A.2 and Receiving Water Limitations C.1 and C.2 through timely implementation of control measures and other actions to reduce pollutants in the discharges in accordance with the SWMP and other requirements of this Order, including any modifications. The SWMP shall be designed to achieve compliance with Receiving Water Limitation C.1 and C.2 to the MEP. Due to the unique aspects of managing storm water discharges through storm drain systems (intermittent discharges, difficulties in monitoring, limited physical control over the discharge, etc.), the Permittee will need to evaluate the effectiveness of BMPs during the duration of the permit and determine whether the implemented BMPs are adequately protecting receiving waters. If exceedance(s) of water quality objectives persist notwithstanding implementation of the SWMP and other requirements of this Order, the Permittee shall assure compliance with Discharge Prohibitions A.1 and A.2 and Receiving Water Limitation C.1 and C.2 by complying with the following procedure:

   a. Upon a determination by either the Permittee or Regional Board that discharges are causing or contributing to an exceedance of an applicable water quality standard, the Permittee shall submit a Report of Water Quality Exceedance (Report of Exceedance) to the Regional Board that describes BMPs that are currently being implemented and additional BMPs that will be implemented to prevent or reduce any pollutants that are causing or contributing to the exceedance of water quality standards. The Report of Exceedance shall be incorporated in the next Annual Report unless the Regional Board directs an earlier submittal. The Report of Exceedance shall include proposed revisions to the SWMP and an implementation schedule for new or improved BMPs, if applicable. The Regional Board may require modifications to the Report of Exceedance.

   b. If the Regional Board requires modifications to the Report of Exceedance, the Permittee shall submit any modifications within 30 days of notification.

   c. Within 30 days following approval of the Report of Exceedance by the Regional Board, the Permittee shall revise the SWMP and its monitoring program to incorporate the approved modified BMPs that have been and will be implemented, implementation schedule, and any additional monitoring required.

   d. The Permittee shall implement the revised SWMP and monitoring program in accordance with the approved schedule.

4. So long as the Permittee has complied with the procedures set forth above and are implementing the revised SWMP, the Permittee does not have to repeat the same procedure for continuing or recurring exceedances of the same receiving water limitations unless directed by the Regional Board to develop additional BMPs.

D. PROVISIONS

D.1. General Requirements

a. The Permittee shall:

   i. Comply with the requirements of this Order, including all Attachments, the SWMP, and any Regional Board-approved modifications to these documents;

ii. Coordinate among its internal departments and agencies, as appropriate, to facilitate the implementation of the requirements of this Order and the SWMP in an efficient and cost-effective manner;

iii. Submit an annual report that includes a fiscal analysis of the necessary capital and operation and maintenance expenditures necessary to comply with this Order. Such analysis shall include a description of the source of funds that are proposed to meet the necessary expenditures, including legal restrictions on the use of those funds, and identification of any other resources (including volunteer programs or programs of other agencies). Inability to secure financial or other resources shall not excuse non-compliance with any provision of this Order or any Attachments.

D.2. Storm Water Management Program

a. The Permittee is currently operating within the Storm Water Management Program (SWMP) that was submitted with the original 1999 Storm Water Permit application. The SWMP provides an approach to reduce the discharge of pollutants to the Permittee's storm drain system to the MEP.

b. The Permittee must conduct and document an evaluation of each relevant SWMP element to determine whether storm water pollutants are reduced to MEP. After the evaluation, the Permittee must revise activities, control measures, BMPs, and measurable goals, as necessary to meet MEP.

c. Upon adoption of this Order, the Permittee shall review and modify its SWMP to address the requirements of the Storm Water Management Program Revision Requirements (Attachment 4) of this Order, and submit the revised SWMP within 180 days of permit adoption for approval by the Regional Board or its Executive Officer.

d. Attachment 4 of this Order describes the conditions by which the Permittee will revise the City's current SWMP. This Order requires the Permittee to revise the current SWMP to update and/or include the following major program elements:

i. Construction Site Management Component
ii. Development Standards Component
iii. Commercial/Industrial Facilities Component
iv. Municipal Maintenance Component
v. Illicit Discharge Detection and Elimination Component
vi. Public Education and Participation Component
vii. Program Effectiveness
viii. Legal Authority

D.3. Monitoring

a. This permit requires water quality monitoring which is designed to monitor and assess the implementation and effectiveness of the BMPs described in the SWMP. The Monitoring and Reporting Program is described and included as Attachment 5 of this Order. The monitoring program has been designed to compliment monitoring programs associated with: a) the Central Coast Ambient Monitoring Program (CCAMP); b) the Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands, Order No. R3-2004-0117, adopted on July 8, 2004; c) Monterey Bay National Marine Sanctuary's "First Flush", "Snapshot Day", and "Urban Watch" programs.

b. This Order requires the full implementation of the Monitoring and Reporting Program.

c. Monitoring data shall be submitted to the Regional Board electronically and in hard copy.

D.4. Annual Report

a. The Permittees shall submit an Annual Report by October 1 of each year. Requirements for the Annual Report are provided in the Salinas Monitoring and Reporting Program, Attachment 5 of this Order.

D.5. Annual Work Plan

a. The Permittee shall submit an Annual Work Plan to the Regional Board by October 1 of each year, commencing in October 2006. (The revised Storm Water Management Plan, required to be submitted six months after adoption of this Order, will replace the 2006 Annual Work Plan). The Annual Work Plan shall provide the Permittee's proposed activities for the upcoming fiscal year beginning July 1 of the current year and ending June 30 the following year. The Permittee will be required to continue the previous year's level of efforts until the current year's Annual Work Plan is finalized. This Provision is intended to ensure that SWMP activities are continuous, while recognizing that there may be delays in finalizing the City's annual budget, thus delaying a final Annual Work Plan.

b. The Annual Work Plan shall provide the Permittee's expected level of effort and the expected performance level necessary to meet each of the major elements in the SWMP.

c. The Annual Work Plan will include proposed modifications to the SWMP if necessary. The Regional Board may require modifications to the Annual Work Plan.

d. The Annual Work Plan shall include all applicable reporting requirements described in the Salinas Monitoring and Reporting Plan, Attachment 5 of this Order.

D.6. Legal Authority

a. The Permittee shall establish, maintain, and enforce adequate legal authority to control pollutant discharges into and from its MS4 through ordinance, statute, permit, contract or similar means, as described under the "Legal Authority" heading in Attachment 4, Storm Water Management Program Revision Requirements.

E. CHANGES TO THIS ORDER

1. This Order may be modified, or alternately, revoked or reissued, prior to the expiration date as follows:

   a. To address changed conditions or new information identified in the required technical reports or other sources deemed significant by the Regional Board;

   b. To incorporate applicable requirements of statewide water quality control plans adopted by the State Board or amendments to the Basin Plan; or

   c. To comply with any applicable requirements, guidelines, or regulations issued or approved under Section 402(p) of the CWA, if the requirement, guideline, or regulation so issued or approved contains different conditions or additional requirements not provided for in this Order. The Order as modified or reissued under this paragraph shall also contain any other requirements of the CWA then applicable.

d. To be consistent with any amendments to the CWA regarding the discharges from municipal separate storm sewer systems.

e. At the request of the permittee, this Order may be modified to revise or amend the Receiving Water Limitations to achieve consistency with State or federal laws or policies adopted subsequent to the date of this Order.

2. The permittee shall comply with the Salinas Monitoring and Reporting Program, Attachment 5 of this Order, and any revisions or modifications thereto as ordered by the Executive Officer. The Executive Officer is authorized to revise the Salinas Monitoring and Reporting Program and also to allow the permittee to participate in regional, statewide, national, or other monitoring programs.

3. Upon approval by the Regional Board's Executive Officer, all plans, reports, and subsequent amendments as required by this Order shall be implemented and shall become an enforceable part of this Order. Prior to approval by the Executive Officer these plans, reports, and amendments shall not be considered as an enforceable part of this Order.

F. EXPIRATION AND REAPPLICATION

1. This Order expires onFebruary 11, 2010. The permittee must file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, no later than 180 days in advance of such date in application for renewal of waste discharge requirements. The Report of Waste Discharge shall, at a minimum, include the following:

   a. Any revisions to the SWMP including, but not limited to, all the activities the permittee proposes to undertake during the next permit term, goals and objectives of such activities, an evaluation of the need for additional source control and/or structural BMPs, any proposed pilot studies, etc.,

   b. Changes in land use and/or population including map updates,

   c. Any significant changes to the storm drain systems, outfalls, detention or retention basins or dams, and other controls including map updates of the storm drain systems, and

   d. New or revised elements and compliance schedules necessary to comply with the Receiving Water Limitations in this Order.

2. The Permittee may petition the Regional Board Executive Officer to accept the **October 2009 Annual Report as the Permittee's Report of Waste Discharge** application for the subsequent permit term provided the Annual Report contains all of the information required in Section F.1 of this Order (above) and applicable sections of the RWQCB Report of Waste Discharge Form 200.

G. STANDARD PROVISIONS

1. The Regional Board and the Environmental Protection Agency shall be allowed:

   a. entry upon premises where an effluent source is located or where records must be kept under the conditions of this permit;

   b. access to copy any records that must be kept under the conditions of this permit;

c. to inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and,
d. to photograph, sample, and monitor for the purpose of showing permit compliance.

2. After notice and opportunity for a hearing, this order may be terminated for cause, including, but not limited to:
   a. violation of any term or condition contained in this order;
   b. obtaining this order by misrepresentation, or by failure to disclose fully all relevant facts;

3. This permit does not authorize commission of any act causing injury to the property of another, does not convey any property rights of any sort, does not remove liability under Federal, State, or local laws, and does not guarantee a capacity right in receiving waters.

4. Provisions of this permit are severable. If any provision of the permit is found invalid, the remainder of the permit shall not be affected.

5. After notice and opportunity for hearing, this order may be modified or revoked and reissued for cause, including:
   a. Promulgation of a new or revised effluent standard or limitation;
   b. Correction of technical mistakes or mistaken interpretations of law; and,
   c. Other causes set forth under Sub-part D of 40CFR Part 122.

6. The Permittee shall furnish, within a reasonable time, any information the Regional Board may request to determine compliance with this permit or to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit.

7. Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained in this permit may, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six months per violation, or both.

8. Any person failing to file a report of waste discharge or other report as required by this permit shall be subject to a civil penalty not to exceed $5,000 per day.

9. Any person who knowingly makes any false statement, representation, or certification of any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, may, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment of not more than six months per violation, or by both.

10. Any person causing violation of this permit shall be subject to a civil penalty not to exceed $15,000 per day of violation. Any person who willfully or negligently causes violation of this permit is subject to a fine of not less than $2,500 nor more than $25,000 per day of violation, and by imprisonment for not more than one year.

H. CERTIFICATION

I, Roger W. Briggs, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Coast Region, on February 11, 2005.

Roger W. Briggs
Executive Officer

3-23-05
Date

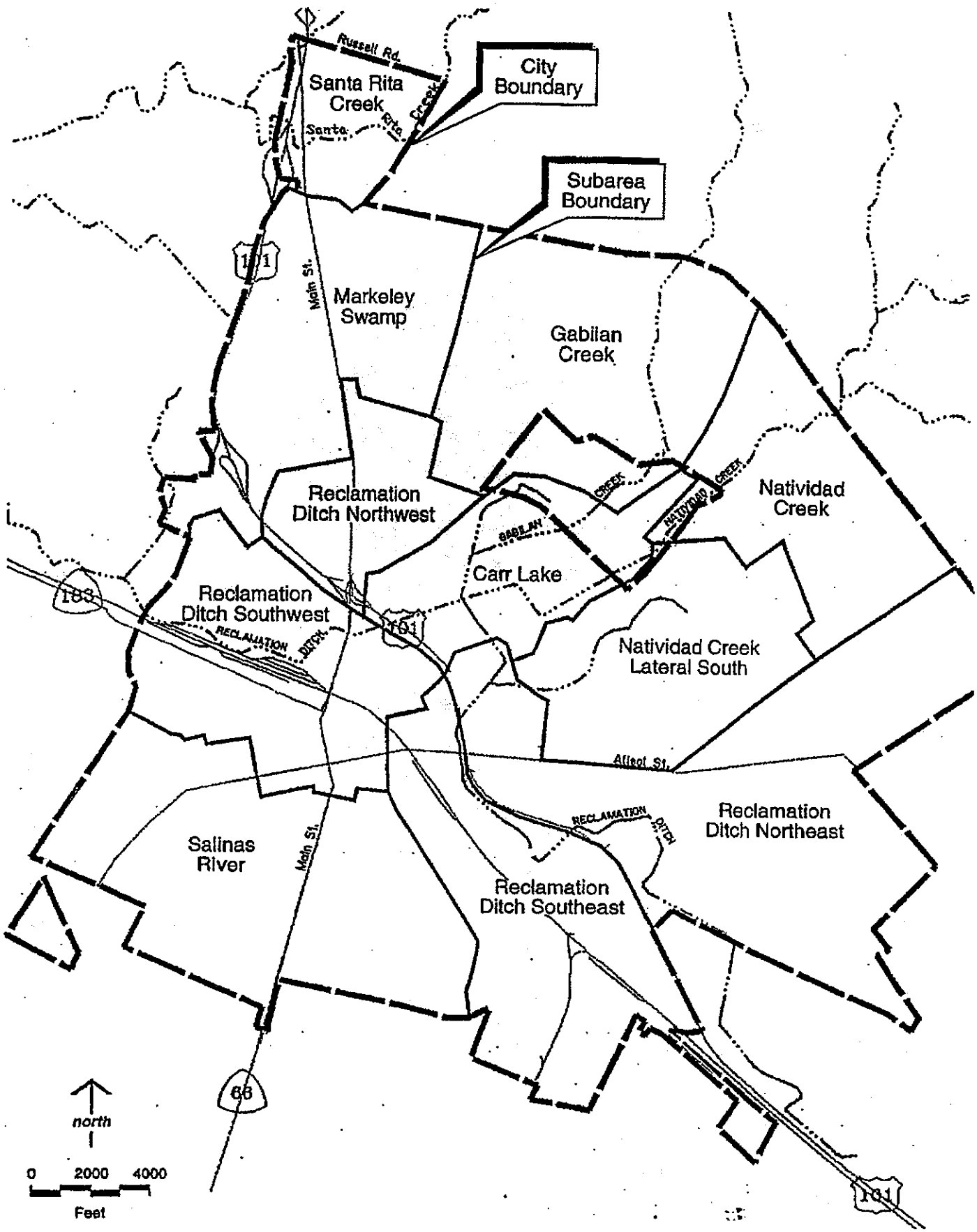
Attachments to Order R3-2004-0135

1 – List of Acronyms
2 – Watersheds Within the City of Salinas
3 – Water Bodies of the Greater Salinas Area
4 – Storm Water Management Program Revision Requirements
5 – Salinas Monitoring and Reporting Program
6 – Due Dates Required by Order No. 2004-0135

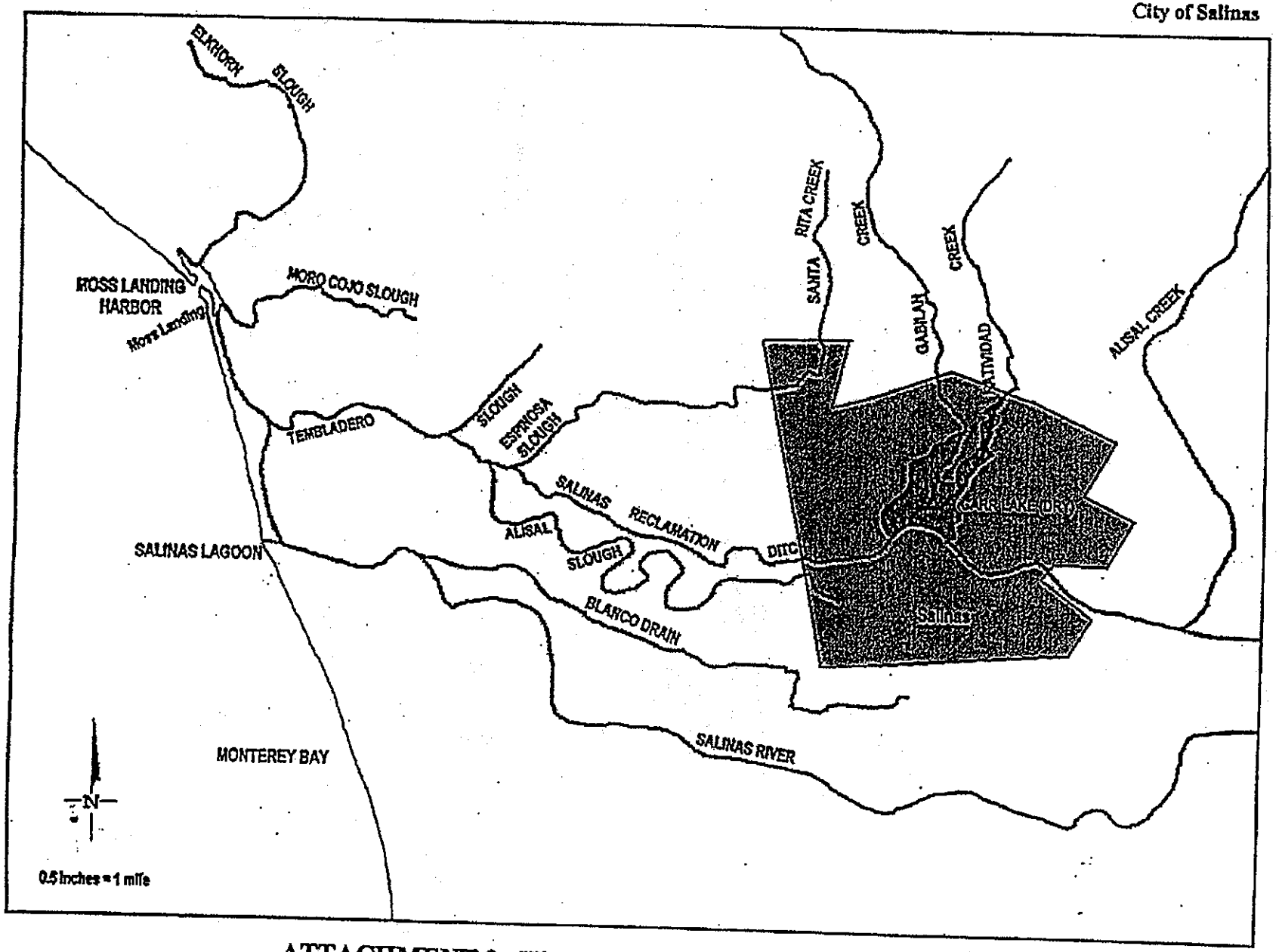
ATTACHMENT 1
List of Acronyms

BMP(s) – Best management practice(s)
CCAMP - Central Coast Ambient Monitoring Program
CFR – Code of Federal Regulations
CWA – Clean Water Act
DSP – Development standards plan
GIS – Geographic information system
MRP – Monitoring and Reporting Program
MS4 – Municipal separate storm sewer system
MEP – Maximum extent practicable[1]
NOI – Notice of intent
NPDES – National pollutant discharge elimination system
RWQCB – Regional Water Quality Control Board
SWMP – Storm water management program
SWPPP – Storm water pollution prevention plan
SWRCB – State Water Resources Control Board
TMDL – Total maximum daily load
USEPA – United States Environmental Protection Agency
WDR – Waste Discharge Requirement

[1] A definition of MEP is included in Finding 17 of this Order.



ATTACHMENT 2 – Watersheds Within City of Salinas
(from Camp Dresser & McKee Inc., Phase III Report for Part 2 NPDES Municipal Storm Water Permit Application, 1998)



ATTACHMENT 3 –Water Bodies of the Greater Salinas Area

Shaded Area Shows Permit Boundary

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401-7906

ATTACHMENT 4
STORM WATER MANAGEMENT PROGRAM REVISION REQUIREMENTS

ORDER R3-2004-0135
NPDES NO. CA0049981

FOR

THE CITY OF SALINAS
MUNICIPAL STORM WATER DISCHARGES
Monterey County

I. GENERAL

a. This attachment to Order R3-2004-0135 describes the revision requirements for the City of Salinas (the Permittee) Storm Water Management Program (SWMP)). The Permittee shall review and modify its SWMP to address the requirements herein, and submit the revised SWMP within 180 days of permit adoption for approval by the RWQCB or its Executive Officer. Interested persons shall have 30 days to comment on the revised SWMP prior to RWQCB or Executive Officer approval.

b. This attachment requires the Permittee to revise the current SWMP to update and/or include the following major program elements:

i. Construction Site Management Component
ii. Development Standards Component
iii. Commercial/Industrial Facilities Component
iv. Municipal Maintenance Component
v. Illicit Discharge Detection and Elimination Component
vi. Public Education and Participation Component
vii. Program Effectiveness
viii. Legal Authority

c. The Permittee is required to continue implementing the current SWMP during this revision process.

d. The Permittee's Storm Water Pollution Prevention Program may need to be modified, revised, or amended from time to time to respond to a change in conditions and to incorporate more effective approaches to pollutant control. Proposed SWMP revisions will be part of the annual review process and incorporated in the Annual Reports. In addition, the Permittee shall revise the

SWMP to comply with regional or watershed-specific requirements, and/or waste load allocations developed and approved pursuant to the process for the designation and implementation of TMDLs for impaired water bodies. Significant SWMP revisions shall be brought before the Regional Board for approval. Minor SWMP revisions may be approved by the Executive Officer following a 30-day public comment period.

II. Construction Site Management Component

The Permittee shall develop and implement a construction site management program to reduce to the MEP the discharge of pollutants from both private and public construction sites that fall within the City's jurisdiction. Should a site outside of Permitee's regulatory jurisdiction be discovered to be illicitly discharging into the MS4, the Permitee shall notify the RWQCB. The construction site management program shall include the following elements:

a. **Minimum Requirements.** For construction sites one acre or greater, the Permittee shall require construction permittees to submit a State Water Resources Control Board (SWRCB) "WDID number" (Waste Discharge Identification number) as proof of application for coverage pursuant to the SWRCB General Construction Storm Water Permit. Construction permittees must also submit a SWPPP to the City for approval prior to commencing construction. The City shall implement a program to control runoff from applicable construction sites within its jurisdiction. The program shall ensure that the following minimum requirements are effectively implemented at applicable construction sites:

   i) Sediments generated at the project site shall be controlled using adequate source control and/or structural BMPs;

   ii Construction-related materials and wastes shall be retained at the project site to avoid discharge to the MS4 and waters of the state;

   iii) Unauthorized non-storm water runoff shall be contained at the project site; and

   iv) Erosion from slopes and channels shall be controlled by implementing an effective combination of erosion control (source control) and other BMPs as described in the San Francisco Regional Water Quality Control Board's Erosion and Sediment Control Field Manual, the California Stormwater Quality Association's Construction Stormwater BMP Handbook, or equivalent manual.

b. **Inventory of active construction projects.** The Permittee shall develop and implement an effective system to track grading permits and active construction projects. The system shall identify basic site information (e.g. owner, location, contractor, etc.), status (active, complete), size in acres, proximity to natural and man-

made hydrologic features, required inspection frequency, project start and anticipated completion dates. The Permittee shall develop the inventory within one year of permit adoption and update this inventory as new projects within its jurisdiction are initiated or on a monthly basis. Outputs from the system shall be available to Regional Board upon request.

c. **Minimum construction BMPs.** All construction projects shall implement the following BMPs unless the BMP is not practicable. If a BMP is not practicable, a detailed justification shall be included with the approved SWPPP.
   - Stabilized construction entrance
   - Scheduling of grading activities to minimize bare graded areas during the rainy season
   - Downslope sediment controls (e.g., sediment logs)
   - Concrete truck washouts
   - Storm drain inlet protection
   - Protection of slopes and channels
   - Good housekeeping practices (e.g., trash management, proper material storage, etc.).

   The Permittee may designate additional BMPs as minimum BMPs at construction sites. The Permittee shall revise and distribute within 1 year of permit adoption a brochure describing the minimum construction BMPs to be implemented at construction sites. This brochure shall be distributed during the SWPPP review stage and during inspections, if necessary.

d. **Verification of permits and plans.** Prior to issuing a grading or building permit for a construction site one acre or more, the Permittee shall
   i. Require proof that a Notice of Intent (NOI) for coverage under the General Construction Permit has been submitted, if applicable.

   ii. Require submittal of a storm water pollution prevention program (SWPPP) to the Permittee that contains, at a minimum, the following:

      1) A vicinity map showing nearby roadways, the construction site perimeter, and the geographic features and general topography surrounding the site;

      2) A site map showing the construction project in detail, including the existing and planned paved areas and buildings; general topography both before and after construction; drainage patterns across the project area; and anticipated storm water discharge locations (i.e., the receiving water, a conduit to receiving water, and/or drain inlets);

      3) A detailed, site-specific listing of the potential sources of storm water pollution;

4) A description of the type and location of erosion and sediment control BMPs to be employed at the site;

5) The name and telephone number of the qualified person responsible for implementing the SWPPP; and

6) Certification/signature by the landowner or an authorized representative.

iii. Review the SWPPP for compliance with the Permittee's ordinances and this Order.

e. **Inspections.** The Permittee shall inspect all active construction sites within City jurisdiction, a minimum of once a month during the wet season (1 October to 30 April) to ensure compliance with local ordinances and this Order. During the remainder of the year, the Permittee shall inspect all active construction sites a minimum of once every other month. The Permittee shall inspect high priority construction sites a minimum of once a week during the wet season. These inspections shall commence within the first permit year. The Permittee shall establish criteria for high priority sites in the SWMP, which at a minimum shall consider the following factors:

- Project size
- Soil erosion potential
- Proximity to waters of the State and 303(d) listed water bodies
- Previous violations of City of Salinas storm water ordinances.

At a minimum, all projects greater than five acres shall be considered high priority.

The inspections shall include a review of site erosion and sediment controls, BMP implementation plans, and/or SWPPPs. Records of the inspection shall be maintained. The inspectors shall use an inspection checklist, or equivalent, to document site conditions and deficiencies.

f. **Enforcement of construction site management program.** The Permittee shall enforce appropriate ordinances and permits at all construction sites as necessary to maintain compliance with this Order. The Permittee shall develop and implement a written escalating enforcement policy to ensure construction sites are brought into compliance. The Permittee's ordinances or other regulatory mechanisms shall contain sanctions to ensure compliance. Sanctions may include the following or their equivalent: Non-monetary penalties, stop work orders, fines, bonding requirements, and/or permit denials or suspension for non-compliance.

g. **Process to Refer Noncompliance and Non-filers to the Regional Board.** In the advent the Permittee has exhausted their use of sanctions and cannot bring a construction site or construction operator into compliance with their ordinances or

this Order, or otherwise deems the site to pose an immediate and significant threat to water quality, the Permittee shall provide oral notification to the Regional Board within five (5) business days of such determination. Such oral notification shall be followed by written notification within ten (10) business days of the incident.

For construction sites requiring coverage under the General Construction Permit, the Permittee shall refer non-filers (i.e., those projects that cannot demonstrate that they have submitted an NOI or received a WDID number) to the Regional Board within ten (10) business days of discovery. In making such referrals, the Permittee shall include, at a minimum, the following information:

- Project location;
- Developer;
- Estimated project size; and
- Records of communication with the developer regarding filing requirements.

h. **Training.** The Permittee shall provide annual training for employees in targeted positions (whose jobs or activities are engaged in construction activities including construction inspection and plan review staff) regarding the requirements of this Order. This training shall include erosion and sediment control installation and maintenance techniques, inspection procedures, enforcement procedures, and information on the requirements in the General Construction Permit including elements in an effective SWPPP.

III. Development Standards Component

a. The Permittee shall minimize the short and long-term impacts on receiving water quality from new development and significant redevelopment. In order to reduce pollutants in runoff flows from these sources to the MEP, the Permittee shall review and update its existing program, which shall, at a minimum, address the following:

i. The Permittee shall incorporate water quality and watershed protection principles into planning procedures and policies such as: the General Plan or equivalent plans (e.g., Comprehensive, Master, Community, and/or Specific Plans) to direct land use decisions and require implementation of consistent water quality protection measures for all development projects. Such water quality and watershed protection principles and policies shall consider the following:

1. Minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment and use on-site infiltration of runoff in areas with appropriate soils where the infiltration of storm water would not pose a potential threat to groundwater quality.

2. Implement pollution prevention methods supplemented by pollutant source controls, and if source controls are not practicable, by treatment controls. Where practical, use strategies that control the sources of pollutants or constituents to minimize the transport of storm water and pollutants offsite and into MS4s.

3. Preserve and, where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands and buffer zones.

4. Limit disturbances of natural water bodies and natural drainage systems caused by development within Permittee's jurisdictional authority, including roads, highways, and bridges.

5. Require developers to prepare and submit studies analyzing pre- and post-project pollutant loads (including sediment) and flows resulting from projected future development. Require incorporation of structural and non-structural BMPs to mitigate the projected increases in pollutant loads in runoff.

6. Identify, minimize, and regulate development in areas that are particularly susceptible to erosion and sediment loss, or establish development guidance that protects areas from erosion and sediment loss.

7. Implement source and/or treatment controls as necessary to protect downstream receiving water quality from increased pollutant loads in runoff flows from new development and significant redevelopment.

8. Control the post-development peak storm water run-off discharge rates and velocities to prevent or reduce downstream erosion, and to protect stream habitat.

ii. Prior to project approval and issuance of local permits for new development and significant redevelopment, the Permittee shall review the proposed project plan and require measures to ensure that all development is in compliance with the Permittee's storm water ordinances, local permits, and other applicable requirements.

b. **Development Standards Plan**. Within 1 year of permit adoption, the Permittee shall develop and submit for public review and comment and Executive Officer approval, a Development Standards Plan (DSP) that describes measures to reduce pollutant discharges to the MEP from all new development and significant redevelopment projects. Public review and comment will include a 30-day posting to the Regional Board website, with notification to interested parties of the draft's availability. Public comments must be addressed to the satisfaction of all prior to Executive Officer

approval. If comments cannot be satisfactorily addressed informally, then the public may request a hearing before the Regional Board on this issue.

The DSP must be consistent with the applicable portions of State Board Order WQ 2000-11. To ensure consistency with Order WQ 2000-11, the DSP shall provide the following information:

i. A description of existing Development Standards, if any, including project categories, BMP requirements and numeric sizing criteria;

ii. A comparison of existing development standards to the requirements established under State Board Order WQ 2000-11 and/or other applicable directives; and

iii. A description of the proposed modifications to the Development Standards to ensure that, at a minimum, they are consistent with the requirements of State Board Order WQ 2000-11 and this Order.

Within one year of approval of the DSP, the Permittee shall amend, or adopt if needed, its own local Development Standards, including amendment of ordinances as needed.

c. **Review of Plans.** Upon amendment or adoption of local Development Standards, the Permittee shall ensure that all new development and significant redevelopment projects falling under the priority project categories listed below are reviewed and conditioned for compliance with the Development Standards. The local Development Standards shall apply to all priority projects or phases of priority projects that do not have approval by the City Engineer, permit for development or construction, an approved special permit, or an approved tentative map by the adoption date for the local Development Standards. Development Standards shall apply as follows:

i. *Priority Development Project Categories*: Development Standards requirements shall apply to all new development and significant redevelopment projects within the Permittee's jurisdictional authority and falling under the priority project categories listed below. The term "significant redevelopment" is defined as the creation or addition of at least 5,000 square feet of impervious surfaces on an already developed site. Significant redevelopment includes, but is not limited to expansion of a building footprint, or replacement of a structure; replacement of impervious surface that is not part of a routine maintenance activity; and land-disturbing activities related to structural or impervious surfaces. Where significant redevelopment results in an increase of less than 50 percent of the impervious surfaces of a previously existing development, and the existing development was not subject to Development Standards, the BMP design standards discussed below apply only to the addition, and not to the entire development. Priority Development Project Categories are listed below:

1. Home subdivisions with ten housing units or more. This category includes single-family homes, multi-family homes, condominiums, and apartments.

2. Commercial developments. This category is defined as any development on private land that is not for heavy industrial or residential uses where the impervious land area for development is 100,000 square-feet or more. The category includes, but is not limited to hospitals, laboratories and other medical facilities, educational institutions, recreational facilities, commercial nurseries, car wash facilities, mini-malls and other business complexes, shopping malls, hotels, office buildings, public warehouses, and other light industrial facilities.

3. Automotive repair shops. This category is defined as a facility that is categorized by one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534, or 7536-7539, where the total impervious area for development is 5,000 square feet or more.

4. Restaurants. This category is defined as a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812) and has 5,000 or more feet of impervious area.

5. Hillside developments 5,000 square feet or more of impervious area. This category is defined as any development that creates 5,000 square feet of impervious surface in an area with known erosive soil located in an area with natural slopes having a twenty-five percent or greater grade.

6. Parking lots exposed to rainfall that are 5,000 square feet or more, or with 25 or more parking spaces. This category is defined as an uncovered impervious area for the temporary parking or storage of motor vehicles used personally, for business, or for commerce.

7. Street, roads, highways, and freeways. This category includes any paved surface five acres or greater used by automobiles, trucks, motorcycles, and other vehicles.

8. Retail Gasoline Outlets. "Retail Gasoline Outlet" is defined as any facility engaged in selling gasoline with 5,000 square feet or more of impervious surface area.

ii. *BMP Requirements*: The Development Standards Plan shall include a list of recommended source and/or structural treatment control BMPs for all new development and significant redevelopment projects falling under the above

priority project categories or locations. At a minimum, Retail Gasoline Outlets shall be required to use the BMPs listed in the California Storm Water Quality Task Force, March 1997 BMP Guide for Retail Gasoline Outlets.

iii. *Numeric Sizing Criteria*: As a part of the DSP, the Permittee shall review their existing numeric sizing criteria for structural treatment BMPs and ensure that it is comparable to the following numeric sizing criteria:

1. Volume-based BMPs shall be designed to mitigate (infiltrate or treat) either:

   a) The volume of runoff produced from a 24-hour 85th percentile storm event, as determined from the local historical rainfall record; or

   b) The volume of runoff produced by the 85th percentile 24-hour rainfall event, determined as the maximized capture storm water volume for the area, from the formula recommended in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87, (1998); or

   c) The volume of annual runoff based on unit basin storage volume, to achieve 80 percent or more volume treatment by the method recommended in the California Stormwater Best Management Practices Handbook – New Development and Redevelopment, (2003).

2. Flow-based BMPs shall be designed to mitigate (infiltrate or treat) either:

   a) The maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity, as determined from the local historical rainfall record, multiplied by a factor of two; or

   b) The maximum flow rate of runoff, as determined from local historical rainfall records, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85th percentile hourly rainfall intensity multiplied by a factor of two.

iv. *Equivalent Numeric Sizing Criteria*: The Permittee may develop or use any equivalent numeric sizing criteria or performance-based standard for post-construction structural treatment BMPs as part of these requirements. Such equivalent sizing criteria may be authorized for use in place of the above criteria. In the absence of an equivalent numeric sizing criteria, the criteria contained above shall be implemented.

v. *Pollutants and Activities of Concern*: The DSP shall consider pollutants of concern or activities of concern in identifying appropriate BMPs for new

development or significant redevelopment projects. In selecting BMPs, the following shall be considered: (1) the target pollutants; (2) land use and pollutants associated with that land use type; (3) pollutants expected to be present on site at concentrations that would pose potential water quality concerns; and (4) changes in flow rates and volumes resulting from the development project and sensitivity of receiving waters to changes in flow rates and volumes.

vi. *Implementation Process*: The DSP shall describe the process used to implement the Development Standards and all proposed modifications to the process. The process shall also include identification of the roles and responsibilities of various municipal departments in implementing these standards, as well as any other measures necessary for the implementation of these standards.

vii. *Infiltration and Groundwater Protection*: To protect groundwater quality, the Permittee shall apply restrictions to the use of structural BMPs designed to primarily function as infiltration devices (such as infiltration trenches and infiltration basins). Such restrictions shall ensure that the use of such infiltration structural treatment BMPs shall not cause a violation of applicable groundwater quality standards.

viii. *Downstream Erosion*: The DSP shall include any existing criteria or proposed modifications to ensure that discharges from new development and significant redevelopment address the potential for downstream erosion and protect stream habitat. At a minimum, the Permittees' Development Standards process shall consider the need for measures to control peak storm water discharge rates and velocities in order to protect downstream erosion and stream habitat. Storm water discharge volumes and durations should also be considered in the Development Standards.

ix. *Waiver Provision*: The Permittee may provide for a project to be waived from the requirement of implementing structural treatment BMPs if infeasibility can be established as described below.

x. *Conflicts with Local Practices*: The DSP shall include a description of necessary modifications to existing codes and ordinances and an implementation schedule for these modifications.

d. **Regional Storm Water Mitigation Program**: The Permittee may apply to the Regional Board for approval of a regional or sub-regional storm water mitigation program to substitute in part or wholly for Development Standard requirements. Upon review and a determination by the Executive Officer that the proposal is technically valid and appropriate, the Regional Board may consider for approval such a program if its implementation will:

i. Result in equivalent or improved storm water quality;
ii. Protect stream habitat;
iii. Promote cooperative problem solving by diverse interests;
iv. Be fiscally sustainable via secured funding; and
v. Be completed in five years, including the construction and start-up of treatment facilities.

Nothing in this provision shall be construed as to delay the implementation of Development Standard requirements as required by this Order.

e. **Waiver Program:** Anytime during the term of the Order, the Permittee may propose a waiver program that would require any developers receiving waivers to transfer the savings in cost, as determined by the Permittee, to a storm water mitigation fund. Any proposed waiver program shall be subject to the approval of the Executive Officer. The Permittee may consider a waiver for projects where structural treatment BMPs are infeasible. The Permittee shall only grant a waiver when all appropriate structural treatment BMPs have been considered and rejected as infeasible. The Permittee shall notify the Regional Board within one month of each waiver issued and shall include the name of the person granting each waiver. Funds may be used for projects to improve urban runoff quality within the watershed of the waived project. At a minimum, a proposed waiver program shall identify the following:

i. The entity or entities that will manage (i.e., assume full responsibility for) the storm water mitigation fund;

ii. The range and types of acceptable projects for which mitigation funds may be expended;

iii. The entity or entities that will assume full responsibility for each mitigation project, including its successful completion; and

iv. How the dollar amount of fund contributions will be determined and managed.

f. **Maintenance Agreement and Transfer:** The Permittee shall require that all developments subject to Development Standards and site specific plan requirements provide verification of maintenance provisions for post-construction structural and treatment control BMPs. Verification shall include one or more of the following as applicable:

i. The developer's signed statement accepting responsibility for maintenance until the maintenance responsibility is legally transferred to another party; or

ii. Written conditions in the sales or lease agreement that require the recipient to assume responsibility for maintenance; or

iii. Written text in project conditions, covenants and restrictions for residential properties assigning maintenance responsibilities to a home owner's association, or other appropriate group, for maintenance of structural and treatment control BMPs; or

iv. Any other legally enforceable agreement that assigns responsibility for maintenance of structural or treatment control BMPs.

g. **California Environmental Quality Act Document Update:** The Permittee shall incorporate into its CEQA process, within one year of the effective date of this Order, procedures for considering potential storm water quality impacts and providing for appropriate mitigation when preparing and reviewing CEQA documents. The procedures shall require consideration of the following:

i. Potential impact of project construction on storm water runoff;
ii. Potential impact of project post-construction activity on storm water runoff;
iii. Potential for discharge of storm water from material storage areas, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas or loading docks, or other outdoor work areas;
iv. Potential for discharge of storm water to impair the beneficial uses of the receiving waters or areas that provide water quality benefit;
v. Potential for the discharge of storm water to cause significant harm on the biological integrity of the waterways and water bodies;
vi. Potential for significant changes in the flow velocity or volume of storm water runoff that can cause environmental harm; and
vii. Potential for significant increases in erosion of the project site or surrounding areas.

h. **General Plan Update:** The Permittee shall do the following:

i. Evaluate and amend, revise, or update as necessary, its General Plan to include watershed and storm water quality and quantity management considerations and policies when any of the following General Plan elements are updated or amended: land use, housing, conservation, and open space.

ii. Provide the Regional Board with the draft amendment or revision when a listed General Plan element or the General Plan is noticed for comment in accordance with California Government Code § 65350 et seq.

i. **Targeted Employee Training:** The Permittee shall provide annual training for its employees in targeted positions (whose jobs or activities are engaged in development planning), regarding the requirements of this Order that affect development planning.

j. **Technical Guidance and Information for Developers**

i. The Permittee shall make Development Standards available to developers as they are adopted/approved.

ii. Within one year of adopting Development Standards, the Permittee shall make available in hardcopy and in addition may post on its website, new or amended technical guidance materials to the development community in the Permittee's jurisdiction for the siting and design of storm water quality BMPs. The technical material(s) shall at a minimum include:

1. Source and treatment control BMP design criteria for BMPs acceptable for use in the local area;

2. Peak flow control criteria to control peak discharge rates, velocities and duration in conformance with the numeric sizing criteria selected under C.5.c.iii above;

3. Expected pollutant removal performance ranges for the BMPs (or references to national databases, technical reports and/or scientific literature); and

4. Maintenance considerations.

IV. Commercial/Industrial Facilities Component

The Permittee shall develop and implement a commercial/industrial discharge management program to reduce to the MEP the discharge of pollutants from certain commercial and industrial operations within its jurisdiction. At a minimum, the program shall include:

a. **Identify and inventory all *industrial* facilities and activities.** By the end of the first year of the permit, the Permittee shall develop an inventory of all industrial facilities and activities that discharge to its MS4. The inventory shall include the facility name, address, nature of business or activity, SIC code(s) that best reflect the principal facility product or service, principle storm water contact, and whether statewide General Industrial Permit coverage has been obtained. At a minimum, the inventory shall include:
- Municipal landfills (open and closed)
- Hazardous waste recovery, treatment, storage and disposal facilities
- Facilities subject to Section 313 of the Emergency Planning and Community Right-to-Know Act, 42 U.S.C. 11023
- Facilities subject to the statewide General Industrial Permit

- Industrial facilities tributary to a Clean Water Act Section 303(d) impaired water body, where a facility generates pollutants for which the water body is impaired;
- And any other industrial facility that either the Permittee or the Regional Board determines is contributing a substantial pollutant loading to the MS4.

The inventory shall be updated annually. The update may be accomplished through collection of new information obtained during field activities or though other readily available intra-agency informational databases (e.g., business licenses, pretreatment permits, sanitary sewer hook-up permits).

b. **Identify and inventory all *commercial* facilities and activities.** By the end of the first year of the permit, the Permittee shall develop an inventory of high risk commercial facilities and activities that discharge to its MS4. The inventory shall include the facility name, address, nature of business or activity, SIC code(s) that best reflect the principal facility product or service, and principle contact. At a minimum, the inventory shall include:
   - Restaurants
   - Retail Gasoline Outlets
   - Automotive Repair Facilities
   - Carpet Cleaners
   - Commercial Car Washes
   - Agricultural chemical dealers
   - And any other industrial facility that either the Permittee or the Regional Board determines is contributing a substantial pollutant loading to the MS4.

   The inventory shall be updated by the end of the third year of the new permit term, and annually thereafter. The update may be accomplished through collection of new information obtained during field activities or though other readily available intra-agency informational databases (e.g., business licenses, pretreatment permits, sanitary sewer hook-up permits).

c. **Establishment of minimum BMPs.** The Permittee shall designate a set of minimum BMPs designed to reduce the discharge of pollutants to the MEP. The minimum BMPs shall be industry or activity specific as appropriate. At a minimum, BMPs shall be developed for fuel storage and delivery, vehicle fueling and maintenance, equipment maintenance and washing. The minimum BMPs shall be produced within the second year of the permit.

d. **Requiring BMPs for all commercial/industrial facilities and activities.** The Permittee shall require the implementation of the designated minimum BMPs on all sites within the inventory identified in 3.a above. If particular minimum BMPs are infeasible at a specific site, the Permittee shall require the implementation of other equivalent BMPs. All minimum BMPs shall be required to be implemented at each site within four years of permit adoption. The Permittee shall also implement or

require any additional site specific BMPs as necessary to comply with this permit including BMPs that are more stringent than those required under the General Industrial Permit. The minimum BMPs shall be disseminated to the storm water contact for each industrial or commercial facility by the end of the third permit year and every other year thereafter. The Permittee shall take steps necessary to ensure that minimum BMPs are fully implemented within five years of permit adoption.

e. **Inspecting *industrial* facilities and activities.** The Permittee shall inspect all industrial facilities and activities identified in IV.b to ensure compliance with ordinances and this Order, including a review of BMP implementation plans and/or SWPPPs. All industrial facilities, shall be inspected once each year, commencing in the first permit year. Inspectors shall be trained to readily identify deficiencies, assess potential impacts to receiving waters, and evaluate the appropriateness and effectiveness of deployed BMPs and SWPPPs, if applicable. At a minimum, the inspectors shall ensure compliance with all local ordinances. Inspectors shall use a checklist, or equivalent, and photographs to document the site and BMP conditions. Records of all inspections shall be maintained a minimum of three years.

The Permittee need not inspect facilities that have been inspected by the Regional Board within the past 12 months.

f. **Inspecting *commercial* facilities and activities.** The Permittee shall prioritize a commercial facilities inspection list (taken from commercial facilities identified in II.A.3.b) by the end of the second year of the permit term. Inspection priority shall be based on facility type, location, compliance or compliant history, or other factors. The Permittee shall inspect a minimum of 20% of these facilities each year, commencing in the fourth year of the permit term. Inspectors shall be trained to readily identify deficiencies, assess potential impacts to receiving waters, and evaluate the appropriateness and effectiveness of deployed BMPs and SWPPPs, if applicable. At a minimum, the inspectors shall ensure compliance with all local ordinances. Inspectors shall use a checklist, or equivalent, and photographs to document the site and BMP conditions. Records of all inspections shall be maintained a minimum of three years.

g. **Facilities with no exposure to storm water runoff.** The Permittee may remove facilities from the industrial and commercial inventory if an inspection conducted under Part C.6.e or C.6.f reveals the facility's industrial or commercial processes are meet the requirements for a conditional exclusion for "no exposure" under 40 CFR §122.26(g), other than the requirements to complete, sign and submit a "no exposure" certification. The Permittee may not remove any facility from the industrial and commercial inventory if the Regional Board or State Board has determined that the facility causes, or has a reasonable potential to cause or contribute to, an in-stream excursion above an applicable WATER QUALITY STANDARDS, including beneficial uses.

g. **Enforcement of commercial/industrial discharge management program.** The Permittee shall enforce appropriate ordinances and permits at all commercial and industrial facilities as necessary to maintain compliance with this Order. The Permittee shall develop and implement a written progressive enforcement policy to ensure facilities are brought into compliance. The Permittee's ordinances or other regulatory mechanisms shall contain sanctions to ensure compliance. Sanctions may include the following or their equivalent: Non-monetary penalties, fines, bonding requirements, and/or permit denials or suspension for non-compliance. A copy of the progressive enforcement policy shall be included with the SWMP.

h. **Process to refer non-filers and noncompliance to Regional Board.** In the advent the Permittee has exhausted their use of sanctions and cannot bring a facility or activity compliance with their ordinances or this Order, or otherwise deems the facility or activity to pose an immediate and significant threat to water quality, the Permittee shall provide oral notification to the Regional Board within five (5) business days of such determination. Such oral notification shall be followed by written notification within 10 business days of the incident.

For industrial facilities requiring coverage under the General Industrial Permit, the Permittee shall refer non-filers (i.e., those projects that cannot demonstrate that they have submitted an NOI or received a WDID number) to the Regional Board within ten (10) business days of discovery. In making such referrals, the Permittee shall include, at a minimum, the following information:

- Facility name and location;
- Facility contact;
- Facility SIC code; and
- Records of communication with the facility regarding filing requirements.

i. **Training.** The Permittee shall provide annual training for employees in targeted positions (whose jobs or activities are engaged in industrial or commerical inspections) regarding the requirements of this Order. This training shall include storm water BMP installation and maintenance techniques, good housekeeping measures, inspection procedures, enforcement procedures, and information on the requirements in the General Industrial Permit including elements in an effective SWPPP.

V. Municipal Maintenance Component

Within the second year of the permit, the Permittee shall develop and implement a municipal maintenance program to reduce to the MEP the discharge of pollutants from all Permittee-owned facilities, roads, parking lots, municipal waste facilities, and the storm water collection system. The program shall include:

a. **Storm Water Collection System Inventory and Maintenance Schedules.** The Permittee shall develop a comprehensive inventory and map of all inlets to the MS4 and outlets (or outfalls) to receiving waters. Although not required, the Permittee is encouraged to establish the inventory in a GIS. The inventory shall include the location, type, maintenance requirements and maintenance schedules for:
   i. Each inlet to the MS4.
   ii. Each existing structural treatment control.
   iii. Each outfall to receiving waters.
   iv. The collection system pipes

   The inventory shall be developed and submitted to the Regional Board for review within 2 years of permit adoption.

b. **Ensure the storm drain system is properly operated and maintained.** Maintenance requirements include:

   i. All catch basins, inlets, structural controls and outlets shall be inspected and cleaned as necessary as per the maintenance schedules identified under a.i above, but in no case less than once per year.
   ii. The storm drain "hot spots" (to be defined in the City's Storm Water Management Plan) shall be inspected and cleaned as per the identified maintenance schedules.
   iii. Wastes, debris, and water removed during normal and emergency maintenance activities shall not be placed into the MS4. Decant from vactor trucks shall be discharged to the sanitary sewer or an appropriately designed dewatering facility.
   iv. Include BMPs to minimize infiltration of plastics and other trash into the storm drain system.

c. **Inventory and maintenance of Permittee owned facilities, roads, and parking lots.** The Permittee shall develop a comprehensive inventory and establish maintenance requirements and schedules and for all such areas. The inventory shall be developed within 180 days of permit adoption. This shall include:
   i. The development and implementation of minimum designated BMPs for Permittee-owned vehicle maintenance facilities, material storage facilities, and maintenance yards. The minimum designated BMPs shall be designated and fully implemented within one year of permit adoption.
   ii. The sweeping of all Permittee-owned roads quarterly. Permittee shall develop a maintenance schedule for cleaning trash, sediment, oil and other applicable pollutants from municipally-owned parking lots. The parking lot maintenance schedule shall be submitted with the Storm Water Management Program. Removed material, debris, and decant water shall be disposed of in such a manner as to eliminate the potential for storm water pollution.

d. **BMPs for municipal maintenance activities.** The Permittee shall designate and ensure the implementation of minimum BMPs for all municipal maintenance activities. Examples of such activities include, but are not limited to: paving and road repairs, saw cutting, concrete work, curb and gutter replacement, buried utility repairs and installation, vegetation removal, street and parking lot striping, flood channel cleaning, etc. The BMPs should be combined into a manual, or equivalent, so as to facilitate use by field staff. The minimum designated maintenance and housekeeping BMPs shall be developed and implemented within one year 90 days of permit adoption.

e. **Implement appropriate requirements for pesticide, herbicide, and fertilizer applications.** The Permittee shall implement BMPs to reduce the contribution of pollutants associated with the application, storage and disposal of pesticides, herbicides and fertilizers from municipal areas and activities to the MS4. Municipal areas and activities include, at a minimum, municipal facilities, public right-of-ways, parks, recreational facilities, golf courses, and landscaped areas.

Such BMPs shall include, at a minimum: (1) educational activities, permits, certifications and other measures for municipal applicators; (2) integrated pest management measures that rely on non-chemical solutions; (3) the use of native vegetation; (4) schedules for irrigation and chemical application; and (5) the collection and proper disposal of unused pesticides, herbicides and fertilizers. The minimum designated BMPs shall be developed and implemented within one year of permit adoption. By the fifth year of the permit term, the Permittee will eliminate all use of pesticides listed on the State Water Resources Control Board 303(d) list for the lower Salinas River section.

All Permittee employees or contractors applying restricted use pesticides shall be supervised by certified applicators. All Permittee employees applying non-registered pesticides, herbicides or fertilizers shall receive training on the BMPs annually. All Permittee employees and Permittee contractors shall verify that they have received, understand, and will abide by the Permittee's BMPs for pesticide, herbicide and/or fertilizer application guidelines.

f. **Develop and implement storm water pollution prevention plans.** The Permittee shall develop and implement storm water pollution prevention plans for all municipally-owned facilities within 18 months of permit adoption. At a minimum, SWPPPs shall be developed for facilities involved in vehicle or equipment maintenance, vehicle or equipment fueling, or chemical storage. The Permittee may develop template SWPPPs for facility types (i.e. Vehicle fueling site SWPPP), which may be modified as needed for individual sites. If required, such facilities will apply for coverage under the statewide General Industrial Permit.

g. **Municipal Inspections**. Inspections of all Permittee-owned municipal facilities and activities shall occur on an annual basis. Inspectors shall be trained to readily identify deficiencies and shall also evaluate the appropriateness and effectiveness of deployed BMPs and SWPPPs, if applicable. At a minimum, the inspectors shall ensure compliance with local ordinances and this permit. Inspectors shall use a checklist, or equivalent, and photographs to document site and BMP conditions. Records of all inspections shall be maintained. Inspections shall commence within year 2 of permit adoption.

h. **Annual Review**. The Permittee shall review their municipal maintenance facility inventory, maintenance procedures and schedules, lists of minimum BMPs, and inspection frequencies on an annual basis and revise any item determined to be less than satisfactory in reducing storm water pollution. All revisions shall be implemented within 90 days and reported in the next annual report.

i. **Training**. The Permittees shall provide annual training for employees in targeted positions (whose jobs or activities are engaged in municipal maintenance activities) regarding the requirements of this Order. The training shall include information on maintenance BMPs for typical maintenance activities, maintenance schedules, and record keeping. The training shall also include illicit discharge investigation, remediation and spill response procedures as described in Provision C.8.

VI. Illicit Discharge Detection and Elimination Component

The Permittee shall implement an ongoing program to investigate and remove illicit discharges and improper disposal into the MS4. The Permittee shall prohibit non-storm water discharges to the MS4, other than those authorized under a separate NPDES permit.

Discharges and flows from emergency fire fighting activities need not be addressed by the Permittee's illicit discharge management program unless such discharges and flows are determined by the Permittee, or the Regional Board, as significant source of pollutants to waters of the State.

The Permittee shall develop and implement an illicit discharge management program to reduce to the MEP the unauthorized and illegal discharge of pollutants to the MS4. The program shall include:

a. **Collection System Inventory and Map**. The Permittee shall use the map developed under C.7.a to identify priority areas for illicit discharge screening, including concentrated areas of industrial and commercial facilities. This shall include the mapping of industrial facilities identified in Part C.6.a. If feasible, the map should designate locations where illicit discharges or spills can be contained within the MS4 (e.g., locations where plugs or other diversions could be inserted). The map shall be

of sufficient detail so as to assist the Permittee with tracing illicit discharges. The collection system inventory and map shall be submitted to the Regional Board for review within the third year permit term.

b. **Illicit Discharge Reporting System.** The Permittee shall continue to operate a hotline telephone number to be used for all illicit discharge reporting. The telephone number shall be printed on all education, training, and public participation materials required under Part C.9, and clearly listed in the telephone book and listed as spill reporting or equivalent. The Permittee shall maintain a log of illicit discharge and spill calls. In all cases, individuals designated to answer calls shall be trained in proper emergency and non-emergency procedures.

c. **Illicit Discharge Identification.** The Permittee shall conduct drive-by inspections of the priority areas for illicit discharge screening at least quarterly. Drive-by inspections may be conducted by properly-trained City staff. Records of the drive-by inspections shall be maintained along with information describing all observed or believed discharges, their cause or responsible party, and actions taken to eliminate. In each subsequent year, the Permittee shall review this information determine if specific areas and/or facilities require drive-by inspections at an increased frequency. If so determined, the Permittee shall increase the frequency of inspections at the designated locations. Drive-by inspections shall commence within 180 days of permit adoption.

d. **Dry weather screening.** The Permittee shall develop written procedures for dry weather analytical and field screening monitoring (consistent with 40 CFR part 136), including field observations, monitoring, and analyses to be conducted during the dry season. The dry weather analytical and field monitoring program shall be designed to emphasize frequent, geographically widespread monitoring to detect illicit discharges and illegal connections. At a minimum, the procedures must be based on the following guidelines and criteria:

i. Collect samples for analysis according to the Monitoring and Reporting Plan, Attachment 5 of Order R3-2004-0135

ii. Dry weather analytical and field screening monitoring shall be conducted at each identified (Attachment 5) station four times per year during dry weather, including at least once between May 1st and September 30th of each year.

iii. If flow or ponded runoff is observed at a dry weather analytical monitoring station and there has been at least seventy-two (72) hours of dry weather, make observations and conduct the required field sampling (Attachment 5). Record general information such as time since last rain, quantity of last rain, site descriptions (i.e., conveyance type, dominant watershed land uses), flow estimation (i.e., width of water surface, approximate depth of water, approximate flow velocity, flow rate), and visual observations (i.e., odor, color, clarity,

floatables, deposits/stains, vegetation condition, structural condition, and biology).

v. The Permittee shall develop threshold levels for monitoring results whereby exceedance of the threshold will require follow-up investigations to be conducted to identify the source causing the exceedance.

vi. If the station is dry (no flowing or ponded runoff), the Permittee shall make and record all applicable observations.

e. **Contain, Control and Respond to Spills to the MS4.** The Permittee shall respond to, contain and clean up all sewage and other spills that are discharged into their MS4 from any source (including private laterals and failing sewage systems). Spill response teams shall contain and control entry of spills into the MS4 and contamination of surface water, ground water and soil to the maximum extent practicable. The Permittee shall coordinate spill prevention, containment and response activities throughout all appropriate departments, programs and agencies to ensure maximum water quality protection at all times.

The Permittee shall develop and implement a mechanism whereby they are notified of all sewage spills from private laterals and failing sewage systems that reach the MS4 (gutters, storm drains). The Permittee shall respond to, contain and clean up sewage from any such notification.

f. **Facilitate Disposal of Used Oil and Toxic Materials.** The Permittee shall coordinate with the Salinas Valley Solid Waste Authority (SVSWA) or other designate disposal company, who currently implements program(s) to facilitate the proper management and disposal of all used oil, vehicle fluids, toxic materials, and other household hazardous wastes. The Permittee shall, through its Public Education and Participation Component (described below) include educational activities, public information activities, and establishment of collection sites operated by the Permittee or a private entity. The program(s) shall be implemented within one year of permit adoption.

g. **Enforce the local ordinance to eliminate illicit discharges.** The Permittee shall use the progressive enforcement policy developed under Part C.4.f above with the intent to eliminate all known illicit discharges within the Permittee's jurisdiction, and enforce against all known responsible party(s). The Permittee shall use all appropriate sanctions to ensure compliance including, but not limited to, non-monetary penalties, and fines. The Permittee shall review the existing municipal ordinances and other regulations to ensure proper authority exists to implement the requirements listed in this part. If needed, all revisions must be made and adopted within two (2) years of permit adoption.

VII. Public Education and Participation Component

The Permittee shall implement a Public Outreach Program using any media appropriate to increase the knowledge of target businesses and communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience. The intended outcome of public outreach is a change in the behavior of targeted groups to reduce pollutant discharges in storm water runoff to the MS4 to the MEP. The Permittee shall incorporate a mechanism for public participation in the implementation of the SWMP (e.g., programs that engage the public in cleaning up creeks, removal of litter in river embankments, and storm drain stenciling). The Public Outreach Program, as presented in the SWMP, shall include at least the following components:

- Advertising;
- Media relations;
- Public service announcements;
- "How To" instructional material distributed in a targeted and activity-related manner;
- Business, community association, and environmental organization tie-ins; and
- Events targeted to specific activities and population subgroups.

To meet the SWMP objectives and requirements of this Order, at a minimum, public outreach shall include the following:

a. **Target Groups.** The Public Outreach Program shall target at least the following groups:

   i. Municipal departments and personnel
   ii. Construction site contractors, developers and landowners
   iii. Industrial owners and operators
   iv. Commercial owners and operators
   v. Residential community, general public, and school children
   vi. Communities and businesses with primary languages other than English
   vii. Quasi-governmental agencies and districts (e.g., educational institutions, water districts, and sanitation districts).

b. **Residential activities.** For residential communities, public outreach shall include the following activities:

   i. Automobile repair and maintenance;
   ii. Automobile washing;
   iii. Home and garden care and product use;
   iv. Disposal of household hazardous waste (e.g., paints and cleaning products);
   v. Disposal of pet waste;
   vi. Disposal of green waste; and

vii. Any other residential source that the Permittee determines may contribute a significant pollutant load to the MS4.

c. **Stenciling and signage.** The Permittee shall install signs and stencil storm drain inlets at selected high use public access points to creeks, channels and other relevant water bodies, particularly areas with a history of dumping problems within two years of permit adoption. Sign and stencil messages shall use language discouraging or prohibiting illegal dumping. Storm water protection postings shall be legible and maintained as necessary during the term of this Order.

d. **Media impressions.** The Permittee shall ensure that a minimum of 525,000 impressions per year are made on the general public about storm water quality issues via print, local TV access, local radio, or other appropriate media. Media outreach will commence in the second permit year.

e. **Classroom education.** The Permittee shall offer educational opportunities to a minimum of 75 percent of all school children in the third through sixth grades every two years on storm water pollution prevention through classroom presentations or other activities. Classroom education will begin the second year of the permit term.

f. **Business outreach.** The Permittee shall continue to implement a business outreach program to educate and inform business owners and operators about storm water regulations and BMPs. Business outreach shall be conducted not less than twice during the five-year term of this Order, with the first outreach contact for appropriate businesses to begin no later than one year after permit adoption.

Businesses targeted for outreach shall include those identified in the Commercial/Industrial Element. At a minimum, the business outreach program shall include (1) educating owners and operators about storm water regulations; (2) distributing and discussing educational materials regarding storm water pollution and BMPs; (3) providing owners and operators with suggestions to facilitate compliance with storm water regulations; and (4) explaining penalties for noncompliance.

g. **Small Construction Outreach.** The Permittee shall conduct outreach to residential and commercial builders with construction sites smaller than one acre. This program shall, at a minimum, educate this group of builders on (1) statutes and regulations prohibiting discharge of sediment and other pollutants from their sites and into MS4s; (2) guidance documents available for selecting and installing BMPs; and (3) penalties for noncompliance.

h. **Public Awareness Survey.** To monitor the effectiveness of the Public Outreach Program in increasing public awareness and changing attitudes about storm water pollution, the Permittee shall conduct public awareness surveys at a minimum

frequency of twice during the five-year term of this Order. Survey results and analysis of program effectiveness shall be presented in the Annual Reports.

The survey shall measure a respondent's knowledge regarding, at a minimum: 1) where storm water goes, 2) level of treatment provided, 3) types of pollutants and their causes, 4) the respondents activities that potentially affect water quality, and 5) practices available to the respondents to reduce pollution. The results of the survey shall be used to measure the effectiveness of the Permittee's SWMP and identify needed revisions and/or additional targeting of education and training.

i. **Annual Meetings.** Annually the Permittee shall conduct a publicly noticed presentation of the information to be included in the Annual Report and to report on the next year's activities.

VIII. Program Effectiveness

The Permittee shall assess the effectiveness of its SWMP in the Annual Reports. The assessment shall address specific direct and indirect measurements that the Permittee will use to track the long-term progress of its SWMP towards achieving improvements in receiving water quality. Direct and indirect measures of effectiveness shall include, but are not limited to, conformance with established performance standards, quantitative monitoring to assess the effectiveness of control measures, measurements or estimates of pollutant load reductions or increases, detailed accounting of SWMP accomplishments including a justification or reason for the level of accomplishment achieved, and funds expended or staff hours used.

At a minimum, the Permittee shall include measures to assess the effectiveness of the overall storm water management program and measures to assess each of the major program areas required in the SWMP.

The Permittee shall include proposed performance and effectiveness measures in the Revised SWMP submitted to the Regional Board for review (180 days after the effective date of this Order).

Annual Reports shall also include a compliance status update that summarizes the Permittee's compliance with the elements in this Order and the elements in the SWMP.

IX. Legal Authority

The Permittee shall include with the first Annual Report, due after the effective date of this Order, a verification that it possesses legal authority that satisfies the criteria listed above. The Permittee shall provide as evidence of authority, a list of all statutes, ordinances, permits, contracts, orders or inter-jurisdictional agreements that they contend demonstrate the adequacy of their legal authority.

a. The Permittee shall establish, maintain, and enforce adequate legal authority to control pollutant discharges into and from its MS4 through ordinance, statute, permit, contract or similar means. This legal authority must, at a minimum, authorize the Permittee to:

(1) Prohibit the contribution of pollutants in discharges of runoff associated with industrial and construction activity to its MS4 and regulate the quality of runoff from industrial and construction sites. This requirement applies both to industrial and construction sites which have coverage under the statewide general industrial or construction storm water permits, as well as to those sites which do not. Grading ordinances shall be upgraded and enforced as necessary to comply with this Order.

(2) Prohibit unauthorized non-storm water discharges, including but not limited to the following:

i. Sanitary sewage overflows except as authorized or in compliance with Waste Discharge Requirements, General Permits or their equivalent that may be established by the Regional Board, the State Board, or USEPA;

ii. Discharges of wash water resulting from the hosing off or cleaning of gas stations, vehicle repair services, or other types of automotive service facilities;

iii. Discharges resulting from the storage, cleaning, repair, or maintenance of any type of equipment, machinery, or facility including, but not limited to, motor vehicles, cement-related equipment, and portable toilet servicing;

iv. Discharges of wash water from mobile operations including, but not limited to, mobile vehicle washing, steam cleaning, power washing, and carpet cleaning;

v. Discharges of wash water from the cleaning of impervious surfaces in municipal, industrial and commercial areas including, but not limited to, parking lots, streets, sidewalks, driveways, patios, plazas, work yards and outdoor eating or drinking areas;

vi. Discharges of runoff from material storage areas containing chemicals, fuels, grease, oil, or other hazardous materials;

vii. Discharges of pool or fountain water containing chlorine, biocides, or other chemicals and discharges of pool or fountain filter backwash water;

viii. Discharges of sediment, pet waste, vegetation clippings, or other landscape or construction-related wastes;

ix. Discharges of food-related wastes (e.g., grease, fish processing, and restaurant kitchen mat and trash bin wash water);

x. Discharge of runoff from washing toxic materials from paved or unpaved areas; and

xi. Discharge of materials such as litter, landscape debris, construction debris, or any state or federally banned pesticides.

(3) Prohibit illicit connections to the MS4;

(4) Prohibit the discharge of spills, dumping, or disposal of materials other than storm water to its MS4;

(5) Use escalating enforcement mechanisms, including monetary fines, to obtain compliance with the Permittees' storm water ordinances, permits, contracts and orders;

(6) Prohibit the contribution of pollutants from one portion of the shared MS4 to another portion of the MS4 through interagency agreements with other local, state and federal agencies such as Caltrans. The RWQCB may assist in developing and negotiating interagency agreements to ensure that proximate MS4 communities are not discharging or allowing the discharge of pollutants into neighboring communities;

(7) Carry out inspections, surveillance, and monitoring necessary to determine compliance and noncompliance with this Order, local ordinances, and permits, including the prohibition of illegal discharges to the MS4. The Permittee must have authority to enter, sample, inspect, review records, and require regular reports and, as needed, relevant operational information from industrial facilities and construction sites discharging into its MS4;

(8) Require the use of BMPs to prevent or reduce the discharge of pollutants to MS4s; and

(9) Require that treatment control BMPs be properly operated and maintained.

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
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ATTACHMENT 5
MONITORING AND REPORTING PROGRAM REQUIREMENTS
ORDER NO. R3-2004-0135

FOR

THE CITY OF SALINAS
MUNICIPAL STORM WATER DISCHARGES
[Waste Discharge Identification No. 3 279906001]

Monterey County

A. GENERAL

1. This Monitoring and Reporting Program (MRP) is intended to ensure the Permittee (the City of Salinas, or "the City") is in compliance with requirements and provisions contained in Order R3-2004-0135 (hereafter "Order"). Revisions may be made under the authority of the Executive Officer at any time during the permit term, and may include a reduction or increase in the number of parameters to be monitored, the frequency of monitoring, or the number and size of samples collected. Refer to Table 1 for Receiving Water site alternative list.

2. This MRP is issued pursuant to the California Water Code Section 13267 and 13383. Because the Permittee operates facilities that discharge waste subject to storm water regulations, this MRP is necessary to ensure compliance with the Permittee's Order.

3. The Permittee shall not cease or reduce any monitoring required by this MRP unless and until the Regional Water Quality Control Board (Regional Board) or the Regional Board's Executive Officer issues a revised MRP.

4. The permittee shall implement the requirements of this MRP within ten days of the adoption of the Order. Requests for changes to this MRP may be initiated by the Executive Officer or the permittee. Any modifications, revisions, or amendments to the Monitoring Program shall be submitted to the Executive Officer no later than August 1 of each year for review and comment by Regional Board staff, and to

ensure Executive Officer approval of the modified, revised, or amended plan by September 1 of each year for implementation by October 1 of each year.

B. MONITORING PROGRAM

B.1. Purpose

a. The primary objectives of the Monitoring Program include:

- Providing data necessary to assess compliance with this Order;
- Measuring and providing feedback to improve the effectiveness of the Storm Water Management Program (SWMP) and implemented Best Management Practices (BMPs);
- Assessing the physical, chemical, and biological impacts of urban runoff on receiving waters;
- Characterizing urban runoff discharges;
- Identifying sources of pollutants; and
- Assessing the overall health and evaluating long-term trends in receiving water quality.

b. Ultimately, the results of the monitoring requirements outlined below should be used to refine the SWMP to reduce pollutant loadings and protect and enhance the beneficial uses of the receiving waters in the urbanized areas of the City of Salinas.

c. The Salinas monitoring program is designed to be complementary with the following: 1) The Monitoring and Reporting Program requirements for all dischargers enrolled under Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands, Order No. R3-2004-0117 (Agriculture Waiver Program); 2) the Monterey Bay Marine Sanctuary's "Urban Watch", "First Flush", and "Snapshot Day" sampling programs; and 3) Sampling for EPA Storm Water Phase II pollutants of concern.

d. The permittee is authorized to supplement their monitoring data with other monitoring sources outside the permit boundary, provided the monitoring conditions and sources are similar to those in the permit boundary. The permittee may not use supplemental data in lieu of performing monitoring required by this Monitoring and Reporting Program, but may use supplemental data to explain, confirm or otherwise augment the permittee's own monitoring.

e. To meet a monitoring requirement, the Permittee may support (financially or otherwise) another agency or monitoring program that will conduct the monitoring.

B.2. Monitoring Site Network

a. This MRP includes water quality, water toxicity, and sediment toxicity sampling of background water, receiving water, and urban discharge. Several criteria have been used to identify required monitoring locations. These include 1) Areas that collect runoff from large segments of the City; 2) Sampling sites that are representative of the City's land use types; 3) Storm drains that were identified as "high priority" in Part III of the City's Application for initial Storm Water Permit coverage; 4) Sites that characterize the primary receiving water bodies; 5) Sites that historically have water sampling data (per Central Coast Ambient Monitoring Program (CCAMP)); 6) Sites that complement the Agriculture Waiver sampling program. Sites may be modified or eliminated with Executive Officer approval.

b. Background (upstream) Water Quality site:

i. Salinas River upstream of the City. Sampling site may be located near the Davis Road crossing, upstream of the outfall (CCAMP site 309DAV). Purpose: To characterize background waters of Salinas River (upstream of City of Salinas discharge);

The Agriculture Waiver Program monitoring is designed to provide additional background data on Gabilan and Natividad Creeks, and the Reclamation Ditch (Alisal Creek), therefore sampling these incoming waters need not be duplicated in this monitoring program. However, if the Agriculture Waiver Program does not, for any reason, take or provide sampling at the three aforementioned sites, then the City of Salinas is responsible for conducting the sampling at these sites. The Gabilan, Natividad, and Reclamation Ditch sampling requirement only applies for years that the Agriculture Waiver Program does not conduct sampling (if this scenario occurs). In order for the Agriculture Waiver Program data to be of greatest use for comparison with City data, water quality samples should be collected on the same day for both programs. Regional Board staff are willing to help with coordination between the two groups.

c. Receiving (downstream) Water Monitoring sites

The purpose of the downstream sites is to characterize the impacts of the Permittee's discharge on each of the receiving water bodies. Receiving Water Monitoring sites include:

i. Salinas River immediately downstream of the City's discharge pipe to the Salinas River, near Davis Road storm drain discharge pipe;
ii. Reclamation Canal (Alisal Creek) CCAMP site 309ALD; and
iii. Alisal Slough at Davis Road.

d. Urban Discharge Sites

Urban discharge sites include storm drain outfalls numbered 7, 19, 32, and 52 on Figure 1.

e. Change in City Limits or Sphere of Influence

If the City limits or Sphere of Influence changes from that described in the Order, then the City must inform the Regional Board at the time that the CEQA study is initiated for this process. Additional monitoring sites may be added at the time of a future annexation by the City if Regional Board staff believe there is potential for significant impacts to receiving waters as a result of the annexation. The Regional Board Executive Officer may approve modifications to the Monitoring and Reporting Plan.

B.3. Monitoring Plan

The Permittee shall implement the Monitoring Program as follows:

a. Conventional Monitoring

i. Tables 1, 2, and 3, and the Sampling Requirements Flow Chart of this Monitoring and Reporting Program contain summaries of information to be collected and reported. The City shall collect and use conventional water quality monitoring data to assess the concentrations, instantaneous loads, and tributary inputs of urban pollutants, to evaluate the pollutants' impact on beneficial uses, to identify pollutant sources, and to assess and improve BMPs. Monitoring data shall be compared to existing numeric and narrative water quality objectives, when applicable. The information required by this paragraph shall be included in the Annual Report.

ii. Background Site, Receiving Water Sites and Urban Discharge Sites

a. Each year, Background, Receiving Water and Urban Discharge sites shall be sampled as described on Tables 1,2, and 3, and the Sampling Requirements Flow Chart. The Monitoring and Sampling Plan is staged, with the intention being to identify overall impacts to receiving waters (if any), to compare urban discharge to background (incoming) water quality, and to provide a method for identifying and eliminating

pollutant sources. The ultimate goal of this monitoring program is to result in source elimination.

b. **Wet season storm sampling** should target the **rising limb of the storm's hydrograph**. Whenever possible, monitoring events shall be conducted on the same day for all sites, starting with upstream sites first, and moving down the watershed. Because of the variable nature of storm water runoff, the Permittee is strongly encouraged to collect and analyze a time-series sample from each background and receiving water site. Ideally the time-series would include three (3) samples gathered from the same location at half hour increments. The three (3) samples may then be combined (composite sample) or analyzed separately. The Permittee may used trained volunteers to assist with sample collecting.

c. Samples shall be analyzed for the constituents listed in Tables 1, 2, and 3. Table 1 includes a "Background Site Alternative list" of sampling parameters, and criteria for implementation of the alternative sampling plan.

d. Because of the inherent difficulty in fully capturing an entire storm event, the Permittee shall report the portion of the storm event "captured" or during which samples were collected. Samples may be collected manually or automatically. Conventional water quality data will be evaluated on a regular basis to determine whether sites have problems, or if improvements are being detected.

e. The Permittee shall collect flow data at the time of sampling for all monitoring stations sampled during a given year. Flow may be estimated using U.S. Environmental Protection Agency (USEPA) methods[1] at sites where flow measurement devices are not in place. The Permittee shall use flow data, combined with cross sectional area of sample site, and pollutant concentrations to calculate pollutant loads (refer to Attachment 4, Section VIII. Program Effectiveness, and Section E.1.7 of this report).

f. Urban Discharge sites shall be visually inspected four times per year during the dry season (typically, but not prescriptively, April 15 through October 15) in order to monitor for non-storm water discharge. If non-storm water discharge is discovered, then all reasonable attempts should be made by field crew to immediately determine the source of the non-storm water discharge. If the source is not one of the exempt non-storm water discharges (refer to Discharge Prohibition A.5 of the Order), then proper protocol should be followed

[1] NPDES Storm Water Sampling Guidance Document, USEPA 833-B-92-001, July 1992

to eliminate the source as soon as possible. Protocol shall include an option of sampling the non-storm water discharge for laboratory analysis, if formal enforcement appears to be a required follow-up measure.

iii. If the Conventional Monitoring program reveals that Receiving Water site or Urban Discharge site discharges exceed: a) water quality objectives; b) CCAMP attention levels; c) Background site water quality measurements; or d) if sampling results exceed sampling ranges typical for the site, then the Permittee shall follow the investigative steps equivalent to those described in the Toxicity Reduction Evaluations, Section B.3.b.iii, below. Should receive water quality values exceed "Background Site Alternative list" (see Table 1, and B.3.a.ii.c, above) sample values, then the Permittee is also required to do additional sampling as described in the "Salinas Permit Sampling Requirements Flow Chart", included with this document.

b. Toxicity Testing and Assessment of Benthic Invertebrates

Toxicity testing and benthic invertebrate assessments shall be used to determine if urban pollutants are impacting beneficial uses. Because of the diversity of potential urban pollutants and the unknown synergistic or additive effects between various chemicals, and because laboratory methods to detect these chemicals are in some cases not readily available, impacts of toxic chemicals will be initially assessed using toxicity testing and bioassessment of benthic invertebrate communities. More detailed characterization, involving additional toxicity testing, chemical analysis, analysis of pesticide application data, and/or toxicity identification evaluations, will be required as necessary in areas where toxicity problems are documented.

i. Toxicity Testing

a. Background and Receiving Water sites shall be sampled for water toxicity once during the first runoff of the wet season (to correspond with rising limb of the runoff hydrograph), one more runoff event, and twice during the dry weather. Toxicity test requirements are listed on Table 3.

b. Background and Receiving Water sites shall be sampled for sediment toxicity as described in Table 3.

ii. Bioassessment

Rapid bioassessment for benthic invertebrate assemblages shall be conducted concurrently with spring sediment sampling at the Receiving water sites. All sampling methodologies shall be consistent with the CCAMP monitoring approach and the Surface Water Ambient Monitoring Program Quality Assurance Program Plan.

iii. Toxicity Reduction Evaluations (TRE)

The Permittee shall analyze samples to evaluate the extent and likely causes of toxicity in Receiving Water site (if found), and to provide information to support identification of practices that eliminate sources of toxicity or remove them to the MEP. Background site toxicity sampling shall be used for comparison to Receiving Water sites. If Receiving Water site sediment or water samples are found to be toxic during the Toxicity testing described above, the Permittee shall conduct a Toxicity Reduction Evaluation (TRE) described as follows:

a. The Permittee shall include all reasonable steps to identify the source(s) of toxicity and discuss appropriate BMPs to eliminate the causes of toxicity. Once the source of toxicity and appropriate BMPs are identified, the Permittee shall submit the TRE to the Executive Officer for approval.

b. At a minimum, the TRE shall include a discussion of the following items:

1. Geographical description of the problem area;
2. The potential sources of pollutant(s) causing toxicity;
3. Permittee's jurisdiction over the pollutant sources;
4. Recommended BMPs to reduce the pollutant(s) causing toxicity;
5. Proposed changes to the SWMP to reduce the pollutant(s) causing toxicity; and
6. Suggested follow-up monitoring to demonstrate that toxicity has been removed.

The Permittee does not need to prepare a TRE if the identified pollutant is already being addressed in the Permittee's SWMP. If this is the case, the toxicity found shall be noted and addressed through on-going implementation of the related pollutant control strategy.

The Permittee shall implement the recommended BMPs and take all reasonable steps necessary to eliminate toxicity.

The Permittee shall report on the development, implementation, and results of any TRE in the Annual Reports, beginning the year following the identification of each pollutant or pollutant class causing toxicity.

In cases of persistent toxicity problems, the Regional Board or its Executive Officer may require a Phase I Toxicity Identification Evaluations (TIE).

C. STANDARD MONITORING PROVISIONS

a. Representative Sampling [40 CFR 122.41(j)(1)]

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

b. Monitoring information [40 CFR 122.41(j)(3)]. Records of monitoring information shall include:

1. Date, location, and time of sampling or measurements;
2. Individual(s) who performed the sampling or measurements;
3. Date analyses were performed;
4. Individual(s) who performed the analyses;
5. The analytical techniques or methods used; and
6. Results of such analyses.

c. Test Procedures

All sampling, sample preservation, and analyses must be conducted according to test procedures under 40 CFR Part 136, unless other test procedures have been specified in this Order [40 CFR 122.41(j)(4)]. Chain of custody protocol shall be followed.

All chemical, bacteriological, and toxicity analyses performed in order to monitor compliance with this permit shall be by a laboratory certified by the State Department of Health Services for the constituent(s) being analyzed. Bioassay(s) performed in order to monitor compliance with this permit shall be in accord with guidelines approved by the State Water Resources Control Board and the State Department of Fish and Game. If the laboratory used or proposed for use by the discharger is not certified by the California Department of Health Services or, where appropriate, the Department of Fish and Game due to restrictions in the State's laboratory certification program, the discharger shall be considered in compliance with this provision provided: a) A quality assurance program is used at the laboratory, including a manual containing steps followed in this program that is available for inspections by the staff of the Regional Board; and b) Certification is pursued in good faith and obtained as soon as possible after the program is reinstated.

The Monitoring Report shall specify the analytical method used and the method detection limit for each pollutant.

All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy.

d. Monitoring and Records

The Permittee shall retain records of all monitoring information, including all calibration and maintenance of monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the Report of Waste Discharge and application for this Order, for a period of at least five (5) years from the date of the sample, measurement, report, or application. This period may be extended by request of the Regional Board or USEPA at any time and shall be extended during the course of any unresolved litigation regarding this discharge. [40 CFR 122.41(j)(2)] [California Water Code §13383(a)]

The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this Order shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than two years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by both. [40 CFR 122.41(j)(5)]

e. Monitoring Frequency [40 CFR 122.41(l)(4)(ii)]

If the Permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136, unless otherwise specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Annual Report.

f. Averaging Measurements [40 CFR 122.41(l)(4)(iii)]

Calculations for all limitations that require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this Order.

g. The Executive Officer or the Regional Board, consistent with 40 CFR 122.41, may approve changes to the Monitoring Program, after providing the opportunity for public comment.

D. QUALITY ASSURANCE PROGRAM PLAN (QAPP)

The Permittee shall prepare a Quality Assurance Program Plan within their Storm Water Management Plan, that describes how data will be collected and analyzed to ensure that data is consistent with State and Regional Board monitoring programs and is of high quality. Dischargers shall develop a Quality Assurance Program Plan (QAPP), consistent with the State's Surface Water Ambient Monitoring Program (SWAMP) QAPP and approved by the Regional Board's Quality Assurance Officer. A QAPP template is available through the State Water Resources Control Board's SWAMP website or upon request. All data collection shall be conducted utilizing field techniques consistent with

SWAMP. All laboratory analysis shall be conducted by a laboratory certified by the Department of Health Services. The QAPP will include location of sample site(s), description of analytical and analysis techniques, data quality objectives, and other standard quality assurance information.

E. REPORTING REQUIREMENTS

E.1. Annual Report

The Permittee shall submit, in both electronic and paper formats and no later than **October 1 of each year**, an Annual Report documenting the progress of the Permittee's implementation of the Storm Water Management Program (SWMP) and the requirements of Order R3-2004-0135. The Annual Report shall discuss each Permittee's status of compliance with the Order and the SWMP, including a compilation of deliverables and milestones completed during the previous fiscal year, a discussion of program effectiveness relative to performance standards defined in the SWMP, and a summary and analysis of water quality samples collected by the City, the Agriculture Waiver Program, the Central Coast Ambient Monitoring Program (if applicable sample data is available for the year), and any other pertinent water quality monitoring programs. In each Annual Report, the Permittee may propose pertinent updates, improvements, or revisions to the SWMP, which shall be complied with under this Order unless disapproved by the Executive Officer or acted upon in accordance with this Order.

The Annual Reports shall include:

1. An executive summary discussing the effectiveness of the SWMP to reduce storm water pollution to the maximum extent practicable (MEP) and to achieve compliance with water quality standards in receiving waters;
2. A summary of activities conducted by the Permittee (required by 40 CFR 122.42(c);
3. Identification of BMPs and a discussion of their effectiveness at reducing urban runoff pollutants and flow, where applicable;
4. A map or maps showing all monitoring station locations and descriptions of each location;
5. A summary and analysis of monitoring results from the reporting year, including water quality samples collected by the City, the Agriculture Waiver Program, the Central Coast Ambient Monitoring Program (if applicable sample data is available for the year), and any other pertinent water quality monitoring programs (required by 40 CFR 122.42(c)(4)). Monitoring data shall be submitted to the Regional Board electronically and in hard copy. Electronic data shall be reported according to Regional Board electronic submittal guidelines, which will be available on the Regional Board website by March 1, 2005. Hard copy data reports shall be submitted with the Annual Report on October 1 of each year.

Electronic data shall also be reported by October 1 of each year;

6. Estimates of total pollutant loads attributable to urban runoff, and pollutant load reductions as a result of implementation of the storm water management program, based upon quantitative and/or qualitative data. Identification of water quality improvements or degradation (required by 40 CFR 122.42(c)(7);
7. Any Reports of Water Quality Exceedance prepared pursuant to Receiving Water Limitations described in Order R3-2004-0135 Section C.3.a, or Toxicity Reduction Evaluations prepared pursuant to Section B.3.b.iii of this MRP;
8. An assessment of the effectiveness of storm water controls including BMPs, and management programs and techniques;
9. A report of proposed modifications to the SWMP and/or Monitoring Program. This report shall include reasons for modifications, expected water quality benefits, and a time schedule for implementing modifications (required by 40 CFR 122.42(c)(2,3 and 5);
10. A summary (required by 40 CFR 122.42(c)(6)) describing:
    i. The number and nature of enforcement actions;
    ii. Inspections; and
    iii. Public education programs; and
11. A fiscal and staffing analysis progress report (required by 40 CFR 122.42(c)(3)), to include, at a minimum, the following information:
    i. The Permittee's storm water expenditures for the previous fiscal year;
    ii. The Permittee's storm water budget for the current fiscal year, including sources and any limitations on use of funds;
    iii. An evaluation of the implementation and adequacy of the storm sewer user fee;
    iv. A staffing analysis detailing future additional staff requirements needed to accomplish SWMP activities, along with a timeframe and plan to obtain adequate staffing, if necessary; and
    v. An estimation of the Permittee's budget for the next fiscal year, including sources and any limitations on use of funds.

E.2. Annual Work Plan

a. The Permittee shall submit a proposed Annual Work Plan with the Annual Report each year. The Annual Work Plan will include clearly defined tasks, responsibilities, and schedules for implementation of monitoring activities for the next fiscal year.

b. The Permittee shall include the following in its Annual Work Plan:

i. An annual budget summary applied toward implementing of the Permittee's SWMP. This summary shall identify the storm water budget for the applicable fiscal year using estimated percentages and written explanations, where necessary, for program management, including administrative costs and program Implementation. Where information is available and especially for those tasks

required by this Order, the Permittee shall provide an estimated percent breakdown of expenditures for the various program elements and tasks within these elements.

ii. A description of the source(s) of funds for the above budget, including any legal restrictions on the use of such funds.

F. Certification

The permittee shall be responsible for the submittal of all required information/materials needed to comply with this order in a timely manner. All such submittals shall be signed by a duly authorized representative under penalty of perjury, pursuant to federal regulations at 40 CFR 122.41(k). Each report shall contain the following completed declaration:

> I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility, of a fine and imprisonment for knowing violations.
>
> Executed on the ___ day of _____, 20_,
>
> at _____.
>
> (Signature)_____(Title)_____";

The Permittee shall mail the original of each annual report to:

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
895 AEROVISTA PLACE, SUITE 101
SAN LUIS OBISPO, CA 93401
Attention: Storm Water Program

A copy of each annual report shall also be mailed to:

REGIONAL ADMINISTRATOR
ENVIRONMENTAL PROTECTION AGENCY
REGION 9
75 Hawthorne Street
San Francisco, CA 94105

Attachments to Monitoring and Reporting Program:

Figure 1 – Urban Discharge Sites
Monitoring Tables 1, 2, 3, and 4
Sampling Requirements Flow Chart

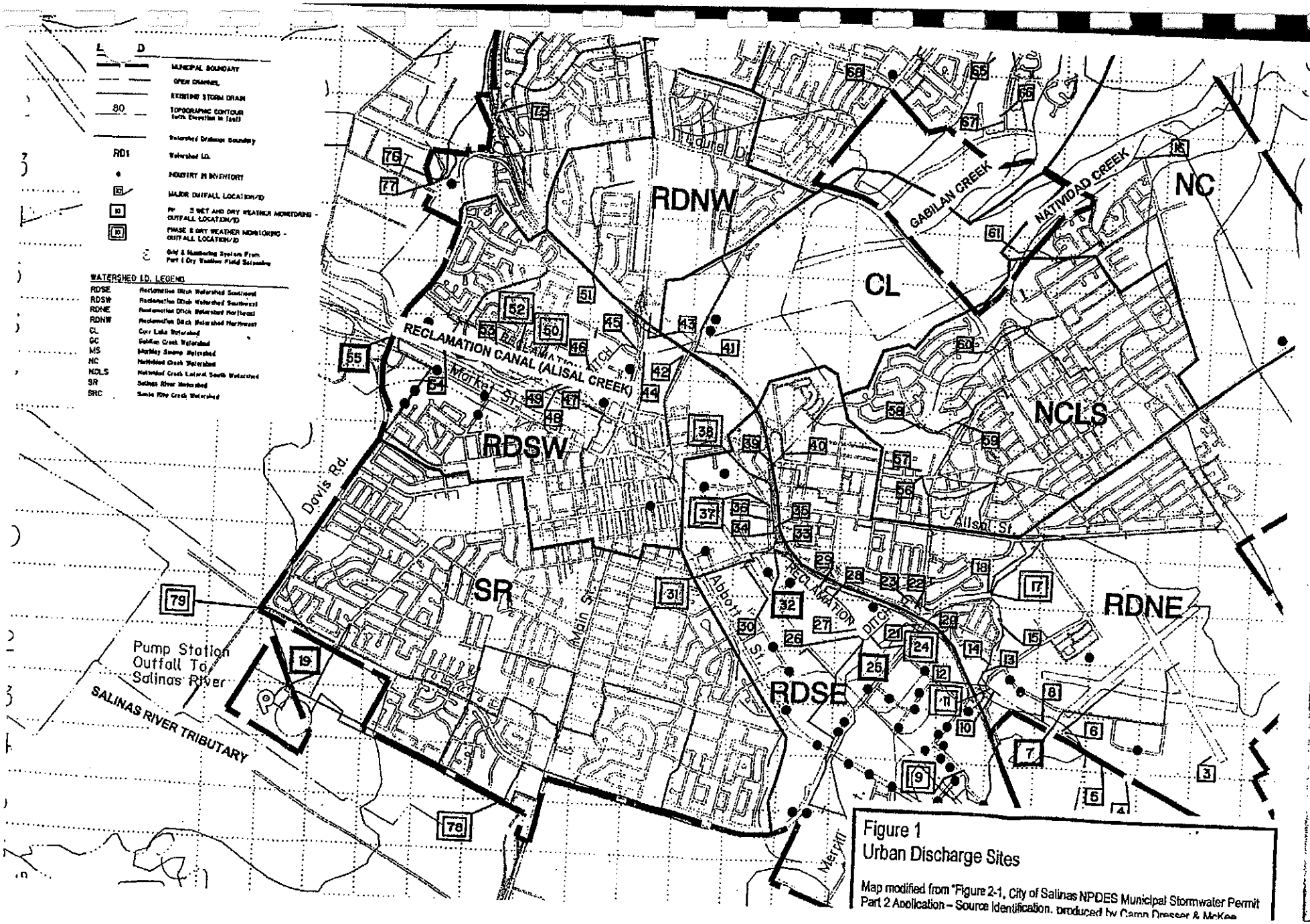


Figure 1
Urban Discharge Sites

Map modified from "Figure 2-1, City of Salinas NPDES Municipal Stormwater Permit Part 2 Application – Source Identification, produced by Camp Dresser & McKee

TABLE 1

Wet Weather Monitoring

Type of Monitoring	*Overall Study Objectives and Data Uses*	*Parameters Analyzed or Measurements Taken*	*Sampling Locations*	*Frequency of Sampling*
In-situ water quality measurements	Analyses of spatial and temporal variations in water quality	• pH • conductivity • turbidity • temperature • Flow • Cross sectional area	1. Background, Receiving Water sites 2. Urban Discharge sites as required (refer to Sampling Req. Flow Chart)	Twice per year, beginning in Permit year 2: 1. First storm water discharge event; and 2. One other time during wet season
Wet Weather – lab samples	• To characterize pollutant discharge from the City of Salinas. • To calculate pollutant loading rates during storm events.	• E. coli bacteria* • Total coliform* • Fecal coliform* • NH3 total • Nitrate as N • Orthophosphate as P • TDS • Total copper* • Total Organic Carbon or Oil&Grease* • Total zinc* • Turbidity	1. Background* and Receiving Water sites 2. Urban Discharge sites as required (refer to Sampling Req. Flow Chart) * If any of the asterisked parameters are non-detect for three consecutive years' samples at Background sites only, then they may be removed from the Background site constituent list.[4]	Twice per year, beginning in Permit year 2: 1. First storm water discharge event; and 2. One other time during wet season
Wet Weather – Background Site Alternative list. (see *note in above-row)	• To characterize background receiving water pollutant loads. • To measure impacts to receiving waters from Permittee's effluent during storm events.	• Flow • NH3 total • Nitrate as N • Orthophosphate as P • TDS • Turbidity (NTUs)	*Background sites – minimum sampling parameters. List must also include any of above-asterisked parameter if they were measurable in any of the three previous, consecutive sample years.	Twice per year, if allowed by conditions listed above (see asterisk): 1. First storm water discharge event; and 2. One other time during wet season

[4] Alterations in the wet weather sampling parameters shall not affect any other sampling component of this MRP.

TABLE 2

Dry Weather Effluent (Non-storm water discharges)

Type of Monitoring	*Overall Study Objectives and Data Uses*	*Parameters Analyzed or Measurements Taken*	*Sampling Locations*	*Frequency of Inspections and Sampling*
Field Sampling (In-situ water quality sampling with test kits or meters)	• To provide field crew with basis of determining source of non-storm water flow. • Field crew will follow up with immediate investigation and discharge elimination or enforcement if necessary. • Discharge samples taken if enforcement may be necessary.	• Ammonia as Nitrogen • conductivity • detergents • e. coli bacteria • Nitrate as N • Orthophosphate as P • pH • total chlorine • trash (visual description of amount/type) • turbidity (measured in NTUs) • flow • temperature	Urban Discharge sites	1. Visual inspections conducted four (4) times during the dry season to determine presence of non-storm water discharges. 2. All reasonable efforts must be taken to identify non-storm water discharges, and eliminate prohibited non-storm water discharges. 3. In-situ water quality sampling to be conducted once per year if required as a result of previous wet season lab results. See "Sampling Requirements Flow Chart" for requirements.
Field Observations		• odor • oil sheen • color		

TABLE 3
Toxicity Studies

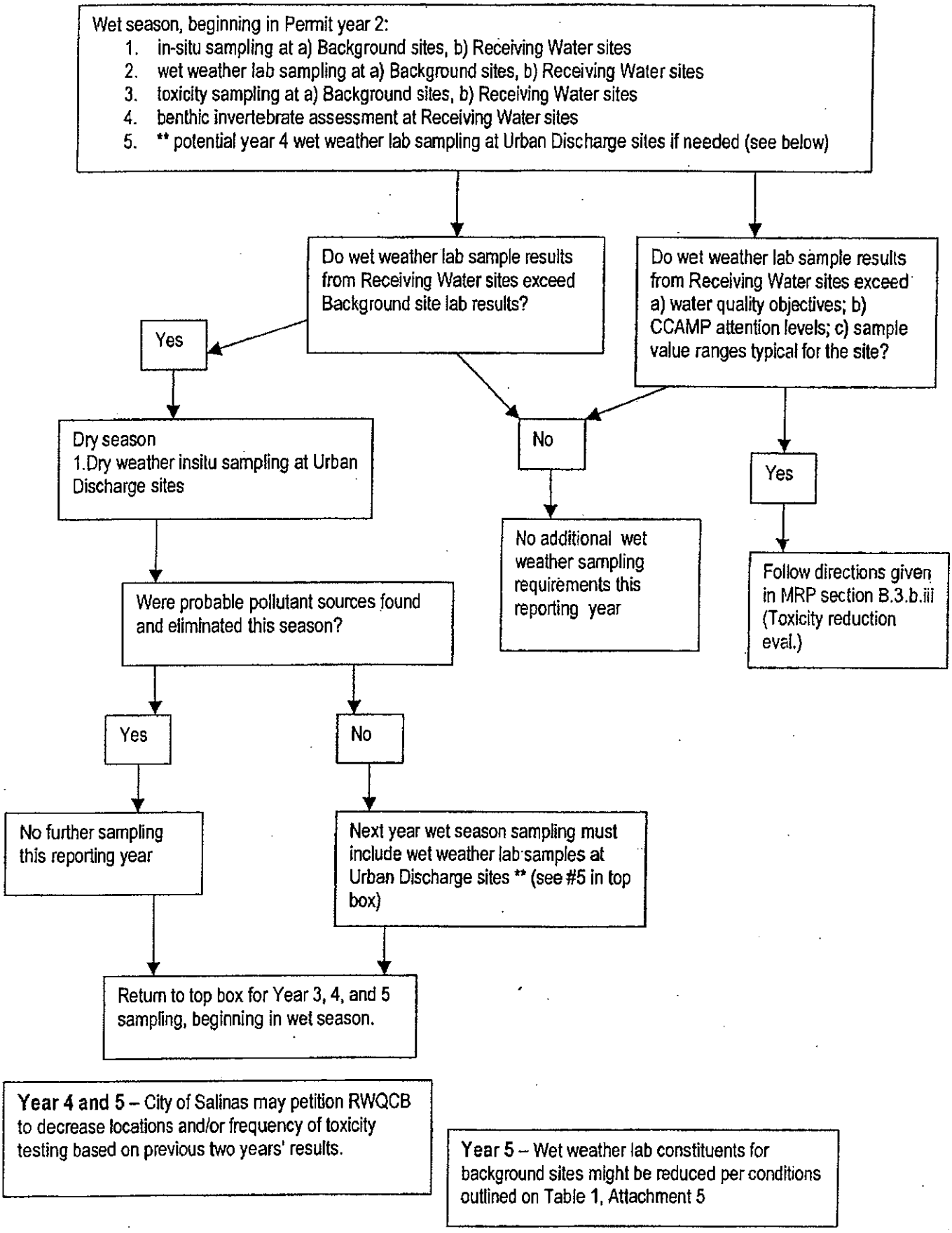
Type of Monitoring	*Overall Study Objectives and Data Uses*	*Parameters Analyzed or Measurements Taken*	*Sampling Locations*	*Frequency of Sampling*
Water Toxicity[1]	To determine whether the City of Salinas' storm water discharge is potentially impacting beneficial uses.	*Ceriodaphnia dubia* (U.S. EPA 7-day chronic survival and reproduction test) *Pimephales promelas* (U.S. EPA 7-day chronic survival and growth test) *Selanastrum capricomutum* (U.S.EPA 96-hour survival and growth)	Background and Receiving water sites	Four times per year beginning in Permit year 2: 1. First storm water discharge event (peak discharge event), and one other storm water runoff event; and 2. Two other sampling times during the dry season 3. City may petition RWQCB to reduce frequency and/or locations in Permit years 4 or 5
Sediment toxicity[2]	To determine whether the City of Salinas' storm water discharge is potentially impacting beneficial uses.	Composite sample tested for toxicity to *Hyalella azteca* (10-day survival and growth test)	Background and Receiving water sites	Once during Spring (March 1 – April 30), concurrent sediment and benthic invertebrate sampling, beginning in Permit year 2
Benthic invertebrate assessment[3]	To directly determine trends in living system-beneficial uses downstream of the City.	California Rapid Bioassessent Protocols	Receiving water sites	Once during Spring (March 1 – April 30), concurrent sediment and benthic invertebrate sampling, beginning in Permit year 2

[1] USEPA. 2002. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition. Office of Water, Washington, D.C., EPA-821-R-02-013.
[2] USEPA. 1994. Methods for Measuring the Toxicity and Bioaccumulation of Sediment-Associated Contaminants with Freshwater Invertebrates. Office of Research and Development, Washington, D.C.
[3] California Aquatic Bioassessment Laboratory, 2003. California Stream Bioassessment Procedure. Water Pollution Control Laboratory, California Department of Fish and Game.

Table 4 Wet Weather Sampling Specifications			
Constituent	Units	Sample Type	Reporting Limit
Coliform, fecal	mpn/100 ml	Grab	<20mpn/100ml[5]
Coliform, total	mpn/100 ml	"	<20mpn/100ml[4]
Conductivity	US	In situ	1 uS
Copper, total recoverable	ug/L	"	2
e. coli bacteria	mpn/100 ml	"	<20mpn/100ml[4]
NH3, total (total ammonia)	mg/L	"	0.1 mg/L
Nitrate as N	mg/L	"	0.1 mg/L
Orthophosphate as P	mg/L	"	0.01 mg/L
Petroleum hydrocarbons - Oil and Grease	ug/L	"	5ug/L
Petroleum hydrocarbons - Total Organic Carbon	mg/L	"	1 mg/L
pH	pH Units	In situ	
Temperature	°C	In situ	
Total dissolved solids (TDS)	mg/L	"	10 mg/L
Turbidity	NTUs	"	0.5 NTU
Zinc, total	ug/L	Grab	5ug/L
Flow	CFS		

[5] Minimum level - MDLs must be lower than or equal to the minimum levels. If a particular minimum level is not attainable in accordance with procedures set forth in 40 CFR 136, the lowest quantifiable concentration of the lowest calibration standard analyzed by a specific analytical procedure may be used instead.

Salinas Permit Sampling Requirements Flow Chart



ATTACHMENT 6

Due Dates Required by Order No. 2004-0135 and Attachments to the Order		
Item	**Time elapsed from Permit issuance**	**Other due date**
A. One-time only commitments (to be completed by the date/time shown)		
1. Review and modify SWMP	180 days from permit adoption	
2. Parking/road inventory and maintenance	180 days from permit adoption	
3. Demonstration of adequate legal authority	(10 months)	With first annual report, October 1, 2005; grading ordinance and interagency agreement in year 2
4. Develop a Quality Assurance Program within the Storm Water Management Plan	1st permit year	See Monitoring and Reporting Program, Section D
5. Inventory of active construction projects	1st permit year	
6. Inventory all industrial facilities	1st permit year	
7. Coordinate with SVSWA	1st permit year	
8. Development Standards Plan – new/re-development	1st permit year	
9. Implement storage and maintenance facility BMPs	1st permit year	
10. Minimum BMPs for pesticide, fertilizer, herbicide develop and implement	1st permit year	
11. Construction brochure of BMPs	1st permit year	
12. Develop SWPPPs for municipally-owned facilities	18 months from permit adoption	
13. Minimum BMPs for municipal maintenance develop and implement	2nd permit year	
14. Storm water system inventory	3nd permit year	Include with 4rd year annual report
15. Install signs prohibiting dumping	2nd permit year	
16. Amend or adopt City development standards to match Devel. Stds. Plan	2 years (+, depending on public comment time)	
17. Tech. Guide for development commun.	2 years (+, depending on public comment time)	

construction inspections, chemical application, maintenance facilities		
36. Update municipal facility inventory, maintenance procedures, and BMPs	180 days	Annually
37. Public Awareness Survey		1 times during permit term
38. Annual coordination meeting	3 months after 1st annual report (Jan. 2007)	Annually
C. Potential Time Commitments (conditional requirements)		
39. Refer construction and industrial non-compliance to RWQCB		Orally within five business days. Written notification within 10 business days
40. Refer construction non-filer to RWQCB		Within 10 business days
41. Grab sample of dry weather flow		Incident dependent
42. Respond to spills		Incident dependent
43. Revise local ordinance re: illicit discharges		If needed
44. Mark high visibility storm drains with "no dump"		By Permit year 2
45. Report of Water Quality Exceedances	90 days from discovery	
46. Revise SWMP to reflect RB-approved Report of Water Quality Exceedances changes to BMPs	30 days from RB approval of changes	

APPENDIX G

LandSet Engineers, Inc.

Preliminary Soil Engineering Investigation and Asphalt Pavement Design (April 2008) and Results of Percolation Testing (February 2009) (Under Separate Cover)

APPENDIX H

Engeo, Inc.

Sediment Transport Assessment and Evaluation Letter

(May 18, 2009, Revised June 17, 2009)

Project No.
8647.000.000

May 18, 2009
Revised June 17, 2009

Ms. Arminta Jensen
Ruggeri-Jensen-Azar
8055 Camino Arroyo
Gilroy CA, 95020

Subject: Salinas Ag-Industrial Center
Salinas, California

SEDIMENT TRANSPORT ASSESSMENT AND EVALUATION

References:

1. California Regional Water Quality Control Board San Francisco Bay Region Order No. R2-2007-025 Hydromodification Control Areas; Amendment Revising Order No. R2-2003-0021 For Alameda County, March 14, 2007.

2. Schaaf and Wheeler Consulting Engineers; Zone 9 and Reclamation Drainage Ditch Drainage System Operation Study; May 17, 1999.

3. United States Army Corps of Engineers. Hydraulic Stability of Natural Channels, EM 1110-2-1418, 1994.

4. Nixon, M., A study of the bankfull discharges of rivers in England and Wales: Institute of Civil Engineering Proceedings, Paper no. 6322, p. 157-174, 1959.

5. Simons D B, Albertson M L, ``Uniform water conveyance channels in alluvial materials". Journal of Hydraulic Engineering 86(5) 33 – 39, 1960.

Dear Ms. Jensen:

At your request, we have conducted this assessment and evaluation of sediment transport processes occurring downstream of the proposed Salinas Ag-Industrial Center located in Salinas, California (Figure 1). We understand that the project is currently proposing to discharge stormwater into an existing engineered reclamation ditch after providing water quality treatment and peak flood flow attenuation.

The purpose of this study is to evaluate the potential that the receiving channel could be adversely impacted by erosional processes which would be aggravated by hydrologic changes in flow volumes, durations of rates caused by concentrated discharge of detained rainfall runoff to the channel. Specifically the study is intended to address a requirement from the City of Salinas to *"Conduct and assessment incorporating sediment transport modeling across the range of channel forming flows that demonstrates to the City Engineer's satisfaction that the project flows and sediment reductions will not detrimentally affect the receiving water. Channel-forming flows include up to the 10-year event unless the assessment demonstrates otherwise."*

REGULATORY OVERVIEW

Generally, the intent of such requirements is that they apply to projects which are proposing to concentrate and discharge rainfall runoff directly into natural riparian systems, in order to mitigate downstream erosional or other geomorphic impacts caused by changes in hydrograph timing and duration of flow, currently termed "hydromodification". This concept is especially critical when new projects propose to increase watershed imperviousness and discharge concentrated stormwater flows into the headwater areas of small watersheds, where significant changes to flow regimes can cause detrimental channel scour downstream, increase sediment loads and may trigger creek bank stability issues.

As of 2009, such provisions have been adopted throughout the San Francisco Bay Area. However, the Bay Area counties that have adopted these provisions have also zoned watersheds into areas that are considered to be "low risk" for hydromodification impacts if there is "little likelihood that the cumulative impacts from new development could increase the net rate of stream erosion significantly", especially in low-lying coastal areas. Low-risk sites are often defined as those which discharge into hardened and/or engineered channels that directly connect to the Bay/Delta or channels where the gradient is so low that the channel is dominated by deposition rather than transport or erosion sediment processes. We note that sites categorized as "low risk" under many current San Francisco Bay Area standards are therefore exempt from the requirement to incorporate hydromodification controls or provide sediment transport studies in order to receive water quality certifications.

PROJECT OVERVIEW:

We understand the Salinas Ag-Industrial Center Project intends to develop approximately 257 acres of agricultural land in the Salinas Area (Figure 2). The project is partially located within the City of Salinas limits, with the remaining portion of the project being located in unincorporated Monterey County. We understand from the project Civil Engineer, Ruggeri Jensen-Azar & Associates that the project proposes to discharge excess stormwater into an existing reclamation ditch located parallel to Abbott Street to the northeast of the site in the City of Salinas. We also understand that the project intends to attenuate peak stormwater runoff and enhance water quality in various detention and stormwater treatment areas throughout the site, prior to discharge into the reclamation ditch. We therefore expect a certain level of flow control from the proposed detention structures which should assist in mimicking pre-development flow rates in the receiving water channel at higher storm recurrence intervals after the project is completed.

The reclamation ditch is a manmade channel which drains portions of the Salinas Valley north of the Salinas River through the Castroville area where it joins the Tembladero Slough. The drainage course is over 10 miles from the site to the Monterey Bay. It is not until the confluence with the Old Salinas River approximately ½-mile from the Monterey Bay that the channel joins what appears to be a natural fluvial system (Figure 3).

SITE GEOMORPHIC RECONNAISSANCE:

A site reconnaissance was performed in February 13, 2009 after a typical winter storm that produced about ½ inch of rainfall during the previous 24-hour period. Water flowing in the channel appeared to be about 3 to 4 feet deep and the level of flow was slowing dropping during our site visit. The reconnaissance covered approximately 2 miles of the reclamation ditch extending from the proposed storm drain discharge points, downstream to the Salinas urban area. The reaches of the existing reclamation channel that are discussed below have been identified on the attached Site Plan, Figure 2.

Reach 1

From the location where the existing 48-inch diameter storm discharges into the channel to about 4000 feet to the north (down stream) the channel is typically about 12 feet deep, and 10 feet wide at the base of the channel. Side slope gradients are typical about 1½:1 and are bare of vegetation. Farming is active adjacent to the channel and the fields are plowed and disked to top of bank. Loose soil is cast over top of bank and covers the channel banks. Soil exposed on the channel banks consists of dark brown silty clay.

No indications of bank erosion were observed in this section of channel at the time of our site visit. Some localized slumping of soil on the banks was observed that appeared to be due to the loose soil that has been pushed over the bank by farming operations.

Water in the channel was brown in color appeared to have very high turbidity. As the water level dropped a coating of silt and clay was observed on the channel bank that was about ¼ inch thick.

No flow was observed from the existing 48-inch diameter storm drain pipe into the reclamation channel. Flow from the existing 74-inch diameter pipe into the reclamation channel appeared to be very small to non-existent.

Reach 2

The second reach has been widened sometime during the last 10 years. The base of the channel is about 30 feet wide. Recently placed spoils piles were observed where sediment had been removed from the low flow channel. Channel side slopes have highly variable slope gradients and vary from bare to vegetated. Exposed soils consisted primarily of silty clay with some older silty sand terrace deposits. No indications of bank scour were observed in this reach.

Reach 3

This reach has a channel base width of about 10 feet and side slopes have gradients of about 2:1. Channel banks are well vegetated with weeds and grasses. No indications of recent bank scour were observed in this reach.

Reach 4

This reach extends from the Airport Blvd Culvert to the Highway 101 culvert. This reach has a channel base width of about 10 to 15 feet. Channel banks are well vegetated with weeds and grasses. No indications of bank scour were observed except for two localized sections of the low flow channel at the outer bends in the channel alignment.

Conclusions

Following a relative small storm event:

- A considerable amount of sediment appears to be entering the existing reclamation channel due to farming practices in the area.

- Based on our reconnaissance, clearing of sediment from the channel appears to be performed as a maintenance operation.

- It does not appear that erosion of the channel banks is occurring except at outer bends of the low flow channel meanders.

SURVEY AND RECLAMATION DITCH GRADIENT INFORMATION

Ruggeri-Jensen-Azar performed a limited Global Positioning System survey to assess the existing reclamation channel bed slope downstream of the proposed Salinas Ag-Industrial Center. Based on the survey performed, we estimate the gradient of the channel near the complex to be approximately 0.002 ft/ft which is similar to the gradient shown on the USGS quadrant map near the project. We note that the bed slope calculated by the Schaaf and Wheeler (S&W) in their hydraulic assessment of the reclamation ditch furnished in Appendix 'A' estimates an average gradient of 0.0008 ft/ft in the reach of the slough where the proposed project is located. We therefore estimate the average channel bed slope to be no steeper than 0.002 ft/ft in the area where the Uni-Kool project is proposed.

Moreover, we estimate the channel to be approximately 103,500 feet to the confluence with the Old Salinas River near the Monterey Bay. Given project elevations of approximately 60 ft mean sea level, we expect an average channel gradient of approximately 0.0006 ft/ft in the reclamation ditch between the project and the confluence point. However, it is typical for channel gradients to increase as they approach headwaters of the watershed in which they are located.

SEDIMENT TRANSPORT ASSESSMENT - VELOCITY

According to the S&W Hydrologic Engineering Center - River Analysis System (HEC-RAS) analysis performed for the reclamation ditch average velocities are approximately between 2-3 feet per second for a 10-year recurrence interval storm in open portions of the channel which

is below established erosion thresholds for silty clay materials as defined by the United States Army Corps of Engineers in Reference 3. We would therefore expect channel velocities for the range of channel forming flows for which hydromodification impacts are concerned (up to the 10-year event), to be negligible in terms of scour based on average channel velocities. Results of the study are furnished in Appendix 'A'.

SEDIMENT TRANSPORT ASSESSMENT – EQUILIBRIUM BED SLOPE

The concept of an equilibrium slope is based on the experience that alluvial channels freely adjust their bed slope profile in response to changing sediment loads and flow 'regimes' in order to optimize sediment transport. The equilibrium slope for a channel is thus the theoretical bed slope at which the sediment transporting capacity of the reach is equal to the sediment supply. Therefore, if a fluvial system is operating at this bed slope, the channel should transport the bedload sediment supplied from upstream without net erosion or deposition.

In terms of an overall geomorphic assessment of erosion potential for the reclamation ditch, we estimate that the "equilibrium slope" of the channel is actually steeper than the slope of 0.002 ft/ft estimated in the reach of this study, meaning that the channel, as currently configured, is dominated by depositional processes rather than erosional or transport processes.

The equilibrium slope for a channel is customarily determined in part by using empirical or process-based 'regime' equations which are generally based on a single discharge known as the 'bankfull discharge'. Regime equations have been developed from regression analyses derived from large data sets of actual river and creek systems to determine an equilibrium slope for various watershed conditions and sediment loads.

For the determination of the equilibrium slope of the engineered flood control channel, two regime equations were selected that were developed for similar bed material found in the engineered flood control (references 4 and 5). Bankfull discharge was estimated as 150 cubic feet per second per the S&W study.

The results of our determination are summarized in the table below.

EQUILIBRIUM SLOPE DETERMINATION

Source	Bankfull Discharge [ft^3/sec]	Bankfull Discharge [m^3/sec]	Equation	Slope [%]	Weight
Nixon (1959)	150	10.48	$Q^{-0.1}$	0.79	50%
Simons and Albertson (1960)	150	10.48	$0.00675Q^{-0.40}$	0.26	50%
Weighted Average Regime Equations			100%	0.53	

In summary, we conclude based on the above analysis that a bed slope of 0.0053 ft/ft is the approximate equilibrium slope for the reclamation ditch based on flow and sediment transport characteristics for similar channels. Because the existing bed slope of the channel is no steeper than 0.002 ft/ft, we opine that the existing channel gradient is too flat to support the transport of bedload sediment and thus we would expect the channel to be globally dominated by depositional as opposed to erosional or equilibrium sediment transport processes.

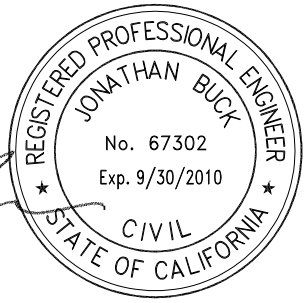
CONCLUSION

In summary, the purpose of this study is to evaluate the erosion potential of the downstream receiving water into which the proposed Salinas Ag-Industrial Center proposes to discharge concentrated rainfall runoff in terms of downstream hydromodification impacts. The downstream receiving waters convey excess rainfall runoff to the Monterey Bay by means of an engineered reclamation ditch with an extremely low gradient, low estimated velocities, and the channel is characterized as having a sediment depositional transport regime.

The project is therefore located in a portion of a watershed that should be considered "low-risk" in terms of potential hydromodification management impacts based on the characteristics of the downstream receiving waters in which the project proposes to discharge. The project flows and on-site sediment reduction will not detrimentally affect the receiving water. We therefore conclude that the project impact and the cumulative impact from the proposed Salinas Ag-Industrial Center development on the net rate of downstream erosion is less than significant. We are pleased to have been of service to you on this project and are prepared to consult further with you and your design team as necessary.

Sincerely,

ENGEO Incorporated



Jonathan D. Buck, PE
jdb/rps/cjn: sediment

Raymond Skinner, CEG

Attachments: Figures
Appendix A

FIGURES

N

0 FEET 2000

0 METERS 1000

BASE MAP SOURCE: MS STREETS AND TRIPS

ENGEO Expect Excellence

VICINITY MAP

SALINAS AG - INDUSTRIAL CENTER

SALINAS, CALIFORNIA

PROJECT NO.: 8647.000.000		FIGURE NO. 1
DATE: MAY 2009		
DRAWN BY: PC	CHECKED BY: RPS	

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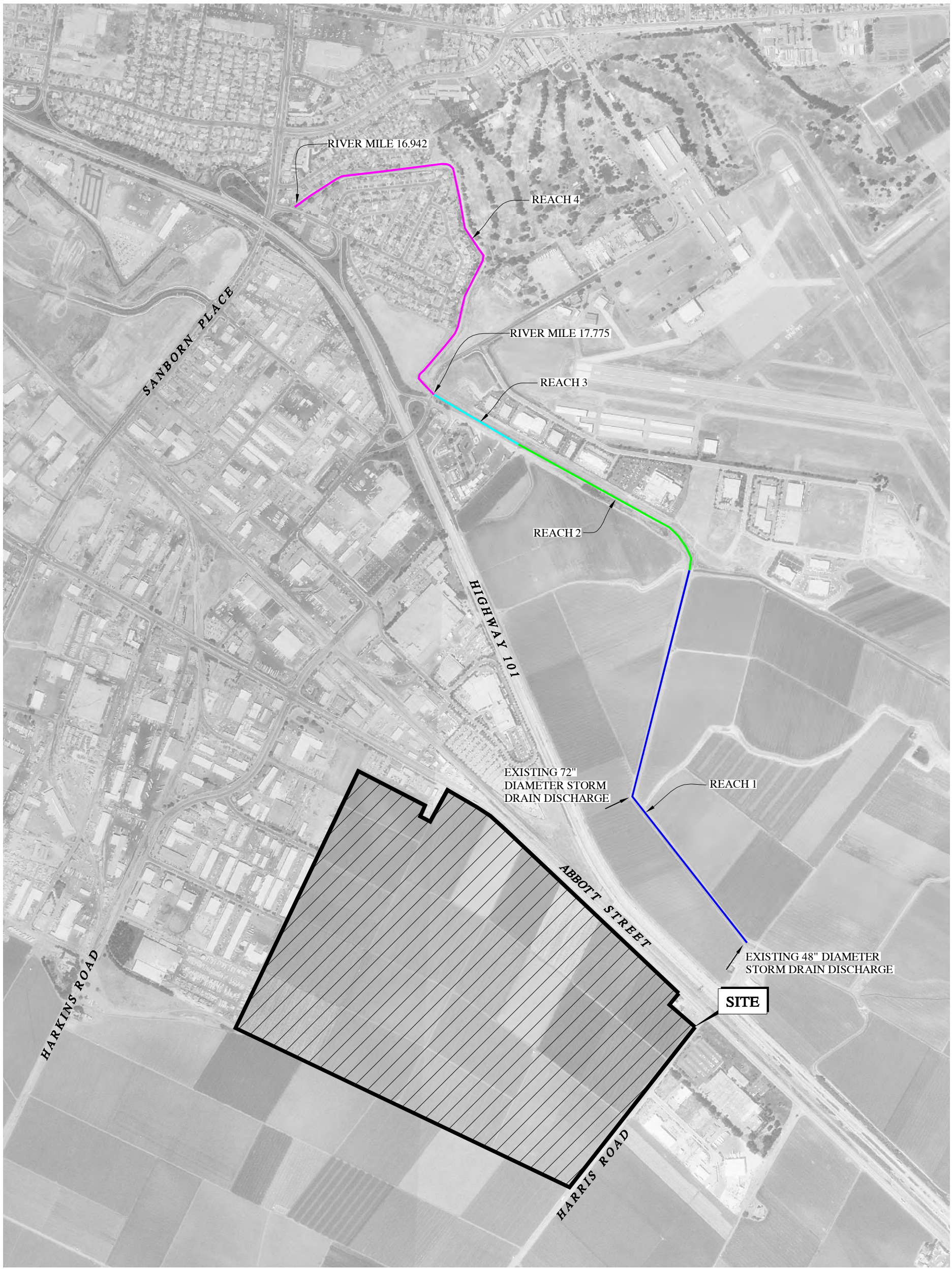
ORIGINAL FIGURE PRINTED IN COLOR



N

0 FEET 1000

0 METERS 500

BASE MAP SOURCE: USGS

ENGEO Expect Excellence

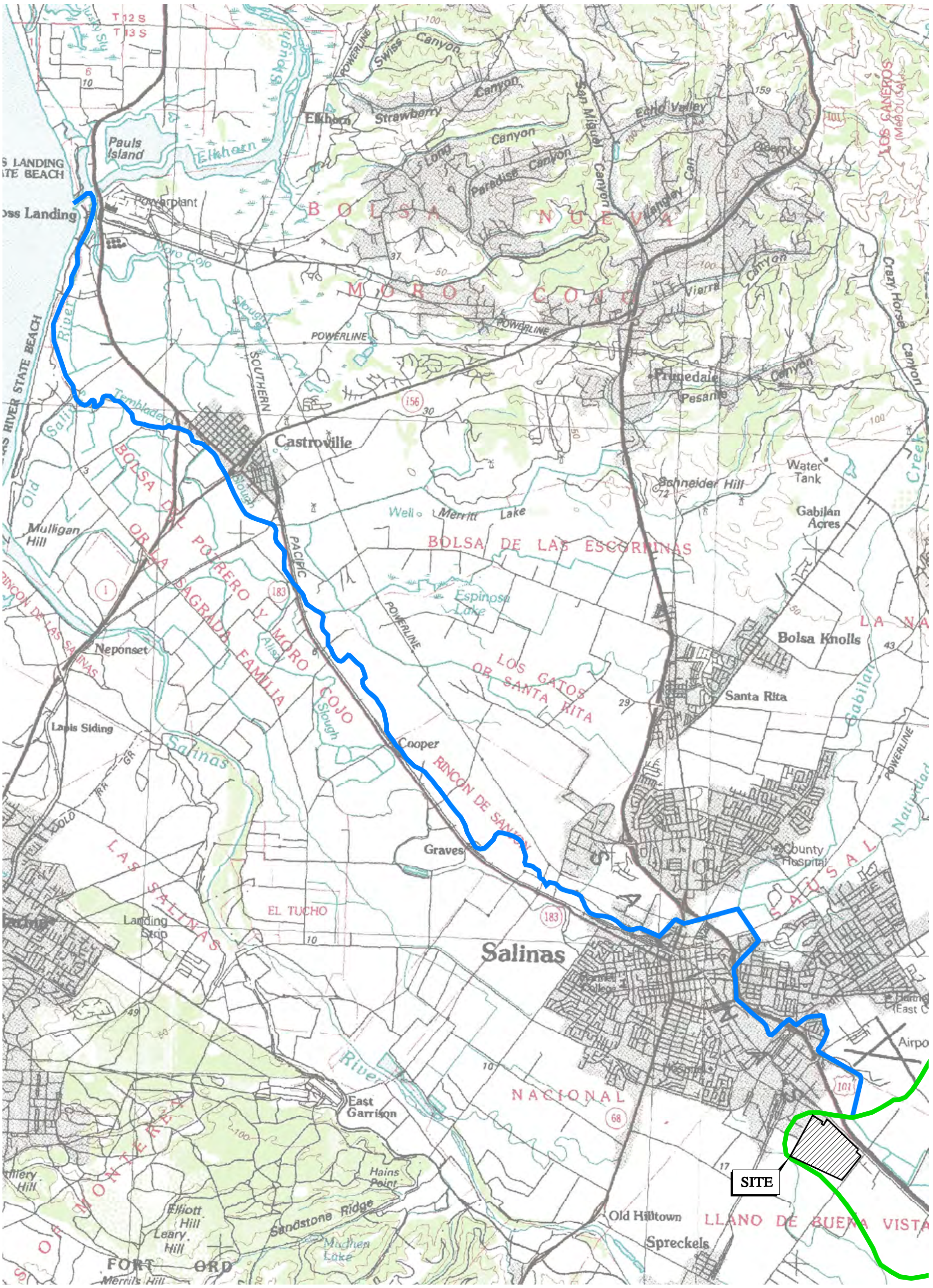
SITE PLAN

SALINAS AG - INDUSTRIAL CENTER

SALINAS, CALIFORNIA

PROJECT NO.: 8647.000.000	FIGURE NO 2
DATE: MAY 2009	
DRAWN BY: PC	CHECKED BY: RPS

ORIGINAL FIGURE PRINTED IN COLOR



EXPLANATION

APPROXIMATE LOCATION OF DRAINAGE COURSE

APPROXIMATE LOCATION OF WATERSHED BOUNDARY

N

0 FEET 6000

0 METERS 3000

BASE MAP SOURCE: USGS

ENGEO Expect Excellence

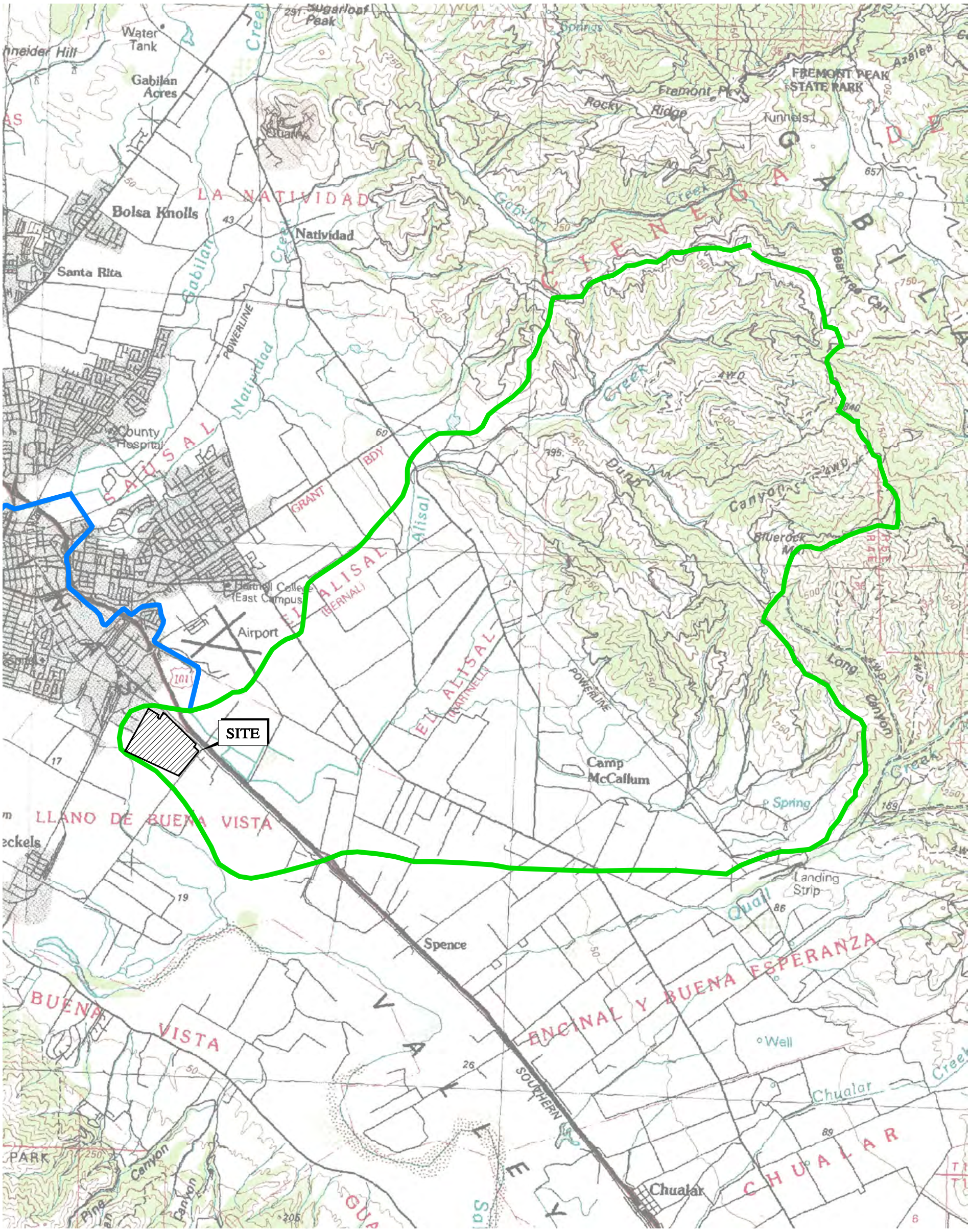
DOWNSTREAM DRAINAGE COURSE

SALINAS AG - INDUSTRIAL CENTER

SALINAS, CALIFORNIA

PROJECT NO.: 8647.000.000	FIGURE NO. 3
DATE: MAY 2009	
DRAWN BY: PC	CHECKED BY: RPS

ORIGINAL FIGURE PRINTED IN COLOR



N

0 FEET 6000

0 METERS 3000

EXPLANATION

APPROXIMATE LOCATION OF DRAINAGE COURSE

APPROXIMATE LOCATION OF WATERSHED BOUNDARY

BASE MAP SOURCE: USGS

ENGEO Expect Excellence

WATERSHED BOUNDARY

SALINAS AG - INDUSTRIAL CENTER

SALINAS, CALIFORNIA

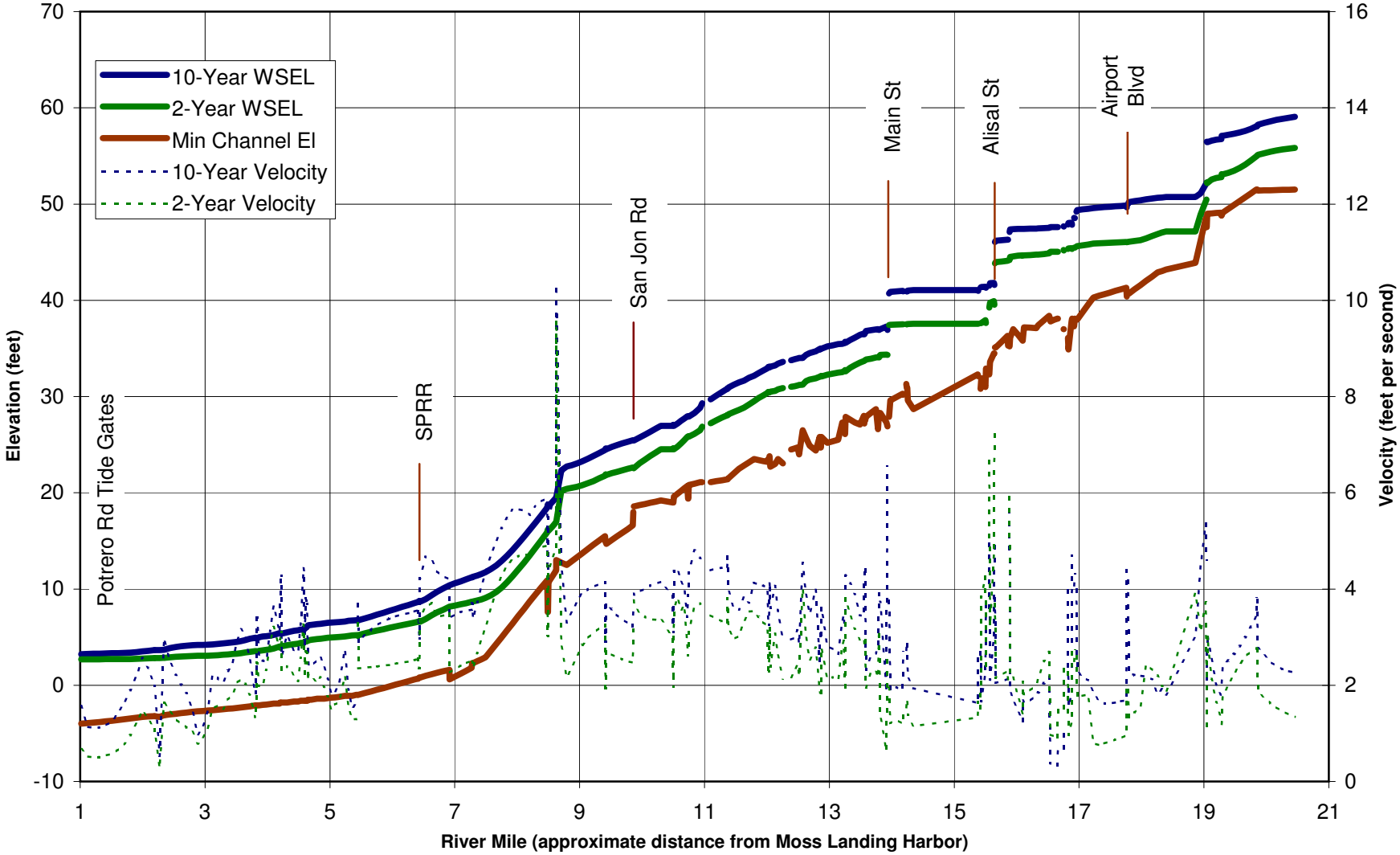
PROJECT NO.: 8647.000.000	FIGURE NO. 4
DATE: MAY 2009	
DRAWN BY: PC	CHECKED BY: RPS

ORIGINAL FIGURE PRINTED IN COLOR

APPENDIX A

HEC-RAS Analysis Schaaf and Wheeler, 1999

Reclamation Ditch Water Surface and Velocity Profiles



PUBLIC SERVICES PLAN & FISCAL IMPACT ANALYSIS

SALINAS AG-INDUSTRIAL CENTER

JULY 8, 2009

Prepared for
City of Salinas

Prepared by
Applied Development Economics
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APPLIED DEVELOPMENT ECONOMICS

CONTENTS

EXECUTIVE SUMMARY OF PROJECT IMPACTS AND MITIGATIONS

This report analyzes and describes the public services and facilities impacts of the proposed annexation and development of 257.3 acres with agricultural-industrial and agricultural support uses as proposed in the Salinas Ag-Industrial Center Specific Plan (Specific Plan). The project will generate about 4,100 jobs when fully developed. Currently, with the exception of one parcel totaling approximately 17 acres located within the City of Salinas' jurisdictional boundaries, the entire site is located within the County of Monterey's boundaries. Under the Specific Plan, it is anticipated that the site will be developed for the following uses: approximately 90 acres to be used for Major Agricultural Processing, and approximately 145 acres to be used for Minor Agricultural Processing and all other ancillary retail and office uses. Although these are the probable development levels, actual development could vary from these estimates.

This report analyzes the ongoing municipal services needs and costs, the fiscal impact of development, the need for project mitigations, and the capital facilities financing necessary to support infrastructure required of the development under the Salinas Ag-Industrial Center Specific Plan. The report discusses potential funding sources, including regular tax revenues and City charges related to ongoing service provision, and development impact fees and potential funding sources required to mitigate infrastructure costs associated with the project. Below is a summary of the findings contained in this analysis.

Municipal Service Requirements

Based on current City service standards, most of the increased service demands as a result of anticipated development under the Salinas Ag-Industrial Center Specific Plan could be handled by existing City staff, although calls for service and some City costs will increase. The Police Department will see the greatest increase in service demands, including offsite traffic enforcement. **As noted in the analysis, all City costs would be covered by tax revenues generated by the development, and no unfunded City costs have been identified.** The following are the major public service needs and costs.

- Police Department-an additional three Full Time Equivalent (FTE) personnel would be required which would result in an additional total annual cost of about $504,000, including equipment and supplies. This cost would be covered by tax revenues generated by the project.
- Fire/EMS Department-the development will be served by the existing fire station in South Salinas, but would generate occasional demands for emergency medical services (EMS) and fire inspection activities. The level of demand from the project would not require additional personnel but would generate estimated costs of

about $27,100 per year on average. This cost would be covered by tax revenues generated by the project, as well as direct charges for the services.

- Engineering and Transportation Department services are estimated to see a cost impact of about $142,500 per year for planning and engineering services above those directly funded by building permit and plan check fees. It is not anticipated that the Department would need additional staff to absorb this impact. This cost would be covered by tax revenues generated by the project.
- General Government includes many administrative and non-departmental services that provide generalized public services such as City Manager's Office, Human Resources, City Attorney, Finance, and others. It is estimated there would be a cost of about $119,500 per year spread across these departments, but not necessarily an increased staffing need. This cost would be covered by tax revenues generated by the project.
- There is not anticipated to be a major impact to Maintenance Services; however, the specific plan proposes the creation of a Landscape and Lighting District to handle maintenance costs that do occur, consistent with City policy.

Funding for Municipal Services

In current dollars ($2008) the cost for providing public services for the Ag-Industrial Center Specific Plan is projected to be about $793,000 per year, which represents the aggregate of service costs listed under Municipal Service Costs above. The development is projected to generate approximately $2.1 million annually in tax and fee revenue, not counting entitlement fees and building permits. Measure V funds would increase this amount by approximately $106,000 for a total revenue projection associated with the project of about $2.2 million annually. However, Measure V is currently scheduled to sunset in 2016, and the estimated $106,000 would not be available after that point unless Measure V is renewed by the voters. Thus, the net fiscal impact of the Ag-Industrial Center project would be a net fiscal surplus of about $1.4 million until 2016 and about $1.3 million after that.

Capital Improvements

The project developers would fund onsite infrastructure improvements to build the project. In addition, the project would be subject to an estimated $16.9 million in existing development impact fees, including City fees for traffic, sanitary sewer, storm drainage, street trees and annexation fees. This total also includes estimated sanitary sewer fees for the Monterey Regional Water Pollution Control Agency and regional traffic fees as recommended by TAMC and adopted by the City.

Jobs/Housing Balance

The Ag-Industrial project will create an estimated 4,142 jobs. This figure is estimated based on studies conducted for the General Plan Update in 2001 regarding actual employment rates for specific types of non-residential land uses in Salinas. Combining the employment intensive Ag-Industrial Center with existing jobs, the ratio of jobs to housing units in Salinas would improve from 1.15 to 1.25 jobs per housing unit.

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PROJECT DESCRIPTION

The proposed Salinas Ag-Industrial Center (Ag-Industrial Center) is located on approximately 257 acres of undeveloped land. Approximately 16.8[1] acres of the proposed Ag-Industrial site is incorporated and lies within the current Salinas City limits. According to the 2006 *Greater Salinas Area Memorandum of Understanding* and current City policies, development of the property will require amendment of the City's adopted *Sphere of Influence* and annexation to the City of Salinas, and will be the subject of a specific plan that defines the allowable ag-industrial uses.[2]

This report analyzes and describes the public services, public facilities, and fiscal impacts of the proposed annexation and development of the 257 Ag-Industrial Center in the City of Salinas. The analysis is predicated on review of the specific service expansions needed to serve the project area. The report also documents the extent to which existing facilities and staffing levels are sufficient to extend service to the area, and itemizes the additional facilities and service capacities needed to provide services to the full development. This report also analyzes whether the revenues from the potential development would exceed the costs for additional personnel and facilities needed to service the growth in ag-industrial facilities.

This report reflects a fiscal analysis of City costs and revenues associated with the new development in order that the City can demonstrate it has the resources to support the completed project for the *Monterey County Local Agency Formation Commission* (LAFCO) *Annexation* application process. The report also begins the preliminary discussion of the financing plan for ongoing municipal services operation and maintenance costs as well as the construction or enhancement of infrastructure and facilities to support the Ag-Industrial Center development.

The *Specific Plan* identifies two main land use types within the project area: Major Agricultural Processing and Minor Agricultural Processing.

- Major Agricultural Processing – approximately 90 net acres and includes but is not limited to, vegetable packing plants, industrial rendering facilities, canneries, meat packing plants, and cooling facilities.
- Minor Agricultural Processing – approximately 145 net acres including the Abbott Street frontage area. This designation includes all facilities specializing in the design, manufacture, fabrication, assembly, maintenance and repair of tools, equipment, and vehicles used in growing, cultivating, harvesting, processing, packaging and transporting of agricultural commodities and products.

---

[1] Allowable uses under the Specific Plan are limited to agriculture related uses, but also allow for commercial, retail, and office use in the 16.8 acres within the incorporated City limits.
[2] EMC Planning.

- Abbott Street Frontage Zone-approximately 17 acres of the plan area are currently within the City's jurisdiction and would not require annexation. This area would be zoned as General Industrial and would be the only area where non-agriculture related uses will be allowed, although both Major and Minor Agricultural Processing would also be allowed in this area. Up to 326,700 square feet of total building space would be allowed, and it is anticipated this area would see agricultural support and ancillary retail and office uses, such as equipment sales and service and other product and supplier sales offices.

The analysis is based on the probable development scenario in the specific plan, which would include about 4.33 million sq.ft. of building space, and generate approximately 4,142 jobs (Table1). For purposes of calculating service demands and tax revenues, ADE has estimated real estate and land use characteristics for the project, including a total assessed value at buildout of approximately $458 million. This is based on a review of prevailing real estate prices for agriculture related properties and land uses in the area, from which we determined an estimated ag-industrial space assessed value of approximately $100 per square foot. Assessed values for office and retail uses are estimated at $200 and $150 per sq.ft., respectively.

TABLE 1
PROJECT CHARACTERISTICS

				Assessed Value		Taxable Sales
LAND USE	**Acres**	**Sq. Ft.**	**Employment**	**Per Sq. Ft**	**Total**	**Per Sq. Ft.**
Major Ag. Proc.						
Ag-Industrial	90.0	1,176,120	1,350	$100	$117,612,000	
Minor Ag. Proc.						
Ag-Industrial	130.0	2,831,400	1,950	$100	$283,140,000	
Ancillary Office	7.5	163,350	545	$200	$32,670,000	$30
Ancillary Retail	7.5	163,350	297	$150	$24,502,500	$100
Street ROW	22.0					
Total	**257**	**4,334,220**	**4,142**		**$457,924,500**	

Source: ADE, Inc. Employment numbers are based on the Salinas General Plan analysis of actual employment densities in Salinas: ADE, *Salinas General Plan Update Background Economic Report*, June 25, 2001. p.11.

In terms of taxable sales, we estimate the ancillary retail development would generate about $100 per sq.ft. in taxable sales per year, mostly for sales of equipment and supplies. The office space would generate much less at about $30 per sq.ft. It is possible the ag-industrial could also generate some sales taxes, also through sales of farm equipment or other machinery. However, we did not attempt to project potential tax revenues from this.

FISCAL SETTING

The City General Fund operating revenues for the FY 08-09 are estimated at $77.7 million (Table 2). The City has also budgeted the use of more than $4 million in reserves for General Fund expenditures. A further shortfall of $10.45 million would be realized if the City did not have Measure V[3] funds available, which in FY 08-09 is budgeted at $10.45 million. Anticipating the long-term effect of dramatically reducing public service programs and expenditures, Measure V was drafted as a 10 year limited duration sales and use tax increase with strict oversight and a sunset date of 2016.

Total General Fund expenditures are budgeted at $92.7 million, including use of reserves and accumulated capital projects funds for a variety of capital improvement projects as well as operating expenses. About $11.5 million of the difference between revenues and expenditures reflect capital expenditures using funds previously accumulated for specific projects.

TABLE 2
SALINAS GENERAL FUND AND MEASURE V BUDGETS, FY 2008-2009

GENERAL FUND		BUDGET
REVENUES		
	Property Taxes	$14,720,000
	Motor Vehicle In-Lieu	$12,450,000
	Sales Tax	$24,100,000
	Utility Users Tax	$8,900,000
	Hotel - Motel Tax	$1,600,000
	Property Transfer Tax	$250,000
	Business License Tax	$4,300,000
	Franchise Fees	$3,610,000
	Licenses & Permits	$1,108,500
	Fines & Penalties	$112,500
	Investment Earnings	$661,000
	Other Agencies	$1,583,500
	Fees for Services	$4,161,700
	Other Revenue	$120,000
SUBTOTAL GENERAL FUND		**$77,676,700**
MEASURE V FUND REVENUE		**$10,450,000**
RESERVES		**$4,602,100**
TOTAL REVENUES		**$92,728,800**
EXPENDITURES		
	General Government	$12,484,200
	Police	$38,749,900
	Fire and EMS	$16,105,700
	Development and Engineering	$6,453,600
	Maintenance Services	$10,217,200
	Recreation and Parks	$3,987,700
	Library	$4,502,000
	Housing	$228,500
SUBTOTAL GENERAL & MV FUND EXPENDITURES		**$92,728,800**

Source: City of Salinas Adopted Operating Budget 2008-2009.

[3] Measure V was approved by Salinas voters in November 8, 2005 in response to concern over the declining economic conditions and the City's fiscal stability. The measure was put before Salinas voters as a result of the reduction in City General Fund funded programs and services from 2003 to 2006.

Despite Measure V, the City anticipates needing to allocate reserves over the next three fiscal years to maintain existing service levels, address rising personnel and service costs, and maintain fiscal stability in the coming years of economic decline or the City will continue to show a General Fund deficit.

PUBLIC SERVICE COSTS AND REVENUES

The City has established service level standards in its General Plan which were used in conjunction with the City's FY 08-09 budget to estimate the costs associated with municipal service provision (See Appendix A). With the passage of Measure V, the City has been increasing City personnel and upgrading equipment and facilities to better meet these standards. The service analysis in this report is based on a review of current departmental levels expressed in the 2008-09 City budget analysis. In summary, we estimate the City may need to add three additional police personnel, and would experience an additional total cost of about $793,000 across all City Departments. The tax revenue generated by the project would cover these costs, and no unfunded City costs have been identified.

In calculating the service costs, as well as some of the incidental revenues generated by the project, ADE has used a service population approach that allocates half as much of the service activity to the business sector as to the residential population. This follows the assumption that service demands for the residential population generally occur during non-working hours (16 hours per day) while the employment base occupies an eight-hour shift. The City's population is about 150,900 and jobs in the City total 49,141[4]. The City's service population is therefore about 175,500 (population plus 50 percent of the jobs). The job base represents about 14 percent of the service population, and the per capita costs and revenues are allocated to the business sector on this basis and estimated for the proposed project based on the number of jobs it will create.

MUNICIPAL SERVICES REQUIREMENTS

General Government

This category includes the City Manager's Office, City Clerk, Human Resources, Community Safety and Neighborhood Services, Finance/Information Systems, and the City Attorney as well as Non-Departmental services. Total General Fund expenditures for General Government functions are approximately $13.3 million, which represents approximately 15 percent of the General Fund budget. The potential increase in personnel and expenditures as a result of the increased service level demands under the Ag-Industrial Center Specific Plan is an estimated General Fund cost of approximately $119,500, calculated as a 15 percent overhead rate on the other City service costs included in the analysis. This cost would be covered by tax revenues generated by the project and is not anticipated to increase City staffing levels.

[4] Population obtained from State Department of Finance and employment figure from AMBAG.

Police

Police Services represents the greatest portion of General Fund expenditures. Total General Fund expenditures for Police Department services are approximately $39 million, which represents approximately 43 percent of the General Fund budget. Although no residential population growth is associated with the Salinas Ag-Industrial Center, there will be an estimated 4,142 workers occupying approximately 4.3 million square feet of business space. This will put additional demand on police services, mainly during the weekday business hours but also during off hours for burglaries and vandalism among other potential types of incidents. Moreover, traffic generated by the project will result in traffic enforcement incidents and the need for EMS service on occasion. Based on a per capita analysis of the project needs for police protection, an estimated three FTE's would be required to service the additional ag-industrial and commercial development. The estimated personnel and related equipment costs would be about $504,000. This cost would be covered by tax revenues generated by the project.

Fire and EMS

Fire services costs of approximately $16 million represent approximately 17 percent of the City's General Fund expenditures. Salinas Fire Department staff has indicated that the project could be served by the existing local fire station until such time as a new fire station is constructed in the southern portion of the City. The industrial nature of the project, however, will increase calls for service for possible hazard materials inspections, regular inspections for fire safety as well as EMS calls. Given the size of the project, we estimate the costs of such activity to be about $27,100 per year, which would be covered by tax revenues generated by the project as well as direct charges for some of the services.

Development, Engineering and Permit Services

These Departments include the City's planning, building, engineering, permitting, and code enforcement activities. Total General Fund expenditures for these functions total $5.8 million. The Ag-Industrial Center project has paid for a number of these services to date through a funding agreement with the City and will continue to pay for such services through additional payments and through regular planning, entitlement, and inspection fees and permits levied by the City. However, as a whole, only one-third of the Department's activities are directly funded by fees and permits and it is anticipated that the project will indirectly impact City planning and engineering efforts that are funded through the General Fund. It is estimated that these indirect costs would total about $142,500 per year, but would likely diminish over time once the project is built and operating and would not require additions to City staffing levels. In any case, these costs would be covered by tax revenues generated by the project.

Maintenance Services

Maintenance Services includes the City's solid waste service, facilities maintenance, and maintenance of parks, street landscaping, fleet vehicles, streets, street lights, and traffic signals. Total General Fund expenditures for these functions are about $10 million, but the City also has enterprise funds for Industrial Waste, Sanitary Sewer, NPDES Storm Sewer Maintenance, and NPDES Street Sweeping with total expenditures of $4.9 million. The enterprise funds have dedicated revenues and it is City policy to establish Landscape and Lighting Districts (LLD) or Benefit Assessment Districts to fund other onsite maintenance costs. The specific plan proposes the creation of an LLD for the project. Specific costs for these services have not been determined at this time but we do not anticipate a significant General Fund impact from these activities.

FUNDING FOR MUNICIPAL SERVICES

The cost of services to fund the plan outlined in the Public Services Plan above is projected to be approximately $793,000 at the time of project completion, with the greatest portion of the cost for providing police services. As will be discussed in the section below, the development is projected to generate approximately $2.1 million in tax revenue and various municipal charges for services. Measure V funds would increase this amount by about $0.1 million, for a total revenue impact of $2.2 million (Measure V is currently scheduled to sunset on April 1, 2016). Therefore, the net fiscal impact of development completed under the Ag-Industrial Center Specific Plan development would be an estimated surplus of $1.4 million. If Measure V is allowed to sunset without renewal, the surplus would be reduced to $1.3 million.

Annexation and development of the Ag-Industrial Center will generate a number of revenues for the City of Salinas, including property taxes, sales taxes, and a variety of other taxes and fees. Property and sales tax revenues included in the analysis have been projected using specific tax rates or methodologies that mirror the actual revenues to be generated by the proposed project. The projections are based on assumed assessed valuations for the properties and the estimated taxable sales coming from the proposed industrial and ancillary uses under the Ag-Industrial Center Specific Plan. Similarly, revenues from the utility users tax and the business license tax are estimated based on records of existing revenues provided by the City.

Other revenues in the analysis have been projected on a per employee basis under the assumption that future businesses will generate these revenues at about the same rate as the existing similar businesses in Salinas. The methodology for this approach is explained in the introductory section of this chapter above.

Property Tax

The base property tax paid by property owners, equal to one percent of assessed value under Proposition 13, is allocated to a wide range of local taxing agencies, including County government, special service districts, local school districts and other agencies. The City of Salinas does not currently receive any tax from most of the project

property, except for the 17 acres currently within the City limit along Abbott Street. When the property is annexed to the City, however, a portion of the tax that is currently allocated to some of the existing taxing agencies will shift to the City.

The City's share of the property tax would be subject in part to the tax sharing agreement between the City of Salinas and the County of Monterey.[5] With adjustments for the State ERAF revenue shift, the County Auditor estimates that, upon annexation, the City will receive 36.64 percent of the County's property tax share from the area. In addition, the City would receive the future property tax share that would otherwise go to the County Library and the Salinas Rural Fire Protection District, since the City would commence providing these services when annexation occurs. The calculations of the property tax share for the City are shown in Table 3.

TABLE 3
SALINAS AG-INDUSTRIAL SPECIFIC PLAN
PROPERTY TAX RATES AND ALLOCATION METHODOLOGY

	TRA 057-030
Monterey County-Wide Rate	0.293289
City Share [a]	36.64%
City Share	0.107461
Remaining County Share	**0.185828**
Special District Tax Rates to City	
County Library (Service provided by City)	0.027064
Rural Fire District (Service provided by City)	0.130903
City Tax Rate	0.265428
Less: 19% City ERAF Loss	-0.050431
City Net Property Tax Rate	**0.214996**

Source: Julie Aguero, Property Tax Manager, County of Monterey.
[a] The City share is a function of the existing tax sharing agreement which allocates the City 43.84 percent and adjustments to account for the ERAF shift.

The assessed value of the project parcels is projected to increase to a total of approximately $457.9 million at buildout, and as a result would generate approximately $973,500 in property tax revenue to the City of Salinas (see Table 4). The County of Monterey would continue to receive property taxes at full buildout of the new project (approximately 11.5 percent of the one percent base tax after the ERAF shift), which would help to fund County services to the site.

Motor-Vehicle-in Lieu

This is a state subvention of vehicle registration fees to local government. However, the State now pays this subvention (at a two-thirds level) in the form of added property tax revenues. Future increases in the revenues to local government are based on annual changes to assessed value. The ag-industrial development would increase the

[5] Master Tax Agreement Between the City of Salinas and the County of Monterey, adopted by the City on April 8, 2008.

City's assessed value substantially, and future increases in Motor-vehicle-in-lieu revenues for the City have been projected as a function of this increase in assessed value.

Sales Tax and Measure V Funds

Salinas receives base sales tax at the rate of one percent of taxable sales within the City jurisdiction. In addition, through Measure V the City generates an additional 0.05 percent sales and use tax for every taxable purchase. For purposes of this analysis, we anticipate that the Abbott Street Frontage would be developed in support uses including ancillary retail and office space. The businesses in this space may include equipment and supplies vendors, and sales offices for a variety of agricultural industry types of businesses. Some of this business activity would generate transactions subject to sales or use tax. We estimate the commercial space would generate an average of about $100 per sq.ft. in taxable sales per year. The office space would generate much less at about $30 per sq.ft. Together, these portions of the project should generate about $212,000 in regular sales taxes, plus as much as $106,000 in Measure V funds. It is possible the ag-industrial businesses could also generate some sales taxes through sale of farm equipment or other machinery. However, we did not attempt to project potential tax revenues from this.

Utility Users Tax

The City receives revenue from a six percent tax placed on public utilities usage. The tax on electric power usage is capped at $2,000 per year, which affects some of the larger industrial users such as those planned for the Ag-Industrial Center. ADE reviewed tax collection records from Salinas during the past year and developed estimates of average utility tax payments for the type of businesses planned for the Center. Based on the assumption that there would be about six major industrial users in the ag-processing sites, and a variety of smaller operations in the commercial and office areas, we estimate the total utility taxes from the project would be about $100,600 per year.

Business License Tax

These fees are paid annually by the companies that would occupy the commercial and industrial space developed under the Ag-Industrial Center Specific Plan, so the revenues would occur annually. For retail businesses, the tax is based on the businesses' gross receipts, while for most other types of businesses it is a function of the employment in each businesses. An estimated $184,500 would be paid in business license taxes by the companies doing business at the site.

Franchise Fees

Franchise fees are paid by utility franchises for the right to operate within the City. Salinas generates franchise fees for gas and electric, garbage, cable television, and towing services, generally based on a rate established by the City. An estimated $40,800 in franchise fee revenue will be generated by the additional businesses generated under the Ag-Industrial Center Specific Plan.

Licenses and Permits

Animal, bicycle, building, development, and transportation permit fee revenues fall under this category. The first two categories are not pertinent to the proposed project. Building and development related fees are paid only once when each commercial building is built, so the revenues would occur only during the build-out phase of the project and they would help support the city staff in the Planning and Building Division needed to process the development within the Plan Area, as discussed earlier in regards to the Engineering and Transportation Department costs. (Separate development impact fees are paid and fund capital improvements necessary to provide infrastructure related services to the project, and will be discussed later in this report.) Therefore, other future incidental license and permit fees paid by businesses under the Ag-Industrial Center Specific Plan beyond the initial development phase are estimated to be a negligible $561 annually.

Charges for Service

City departments charge user fees for a number of special services provided to residents and businesses in Salinas. A portion of these are development related, such as plan check fees, permit fees and inspection fees. As explained above under permit revenues, these kinds of fees that are paid only once during the development process are not included in the analysis. However, other fees are charged on an ongoing basis, particularly for fire and police department services, which may pertain to the ag-industry development. It is estimated the businesses in the Plan Area would pay about $38,700 annually in charges for services.

Investment Earnings

The City receives a small amount of interest on its bank accounts. This revenue is estimated in this analysis to be approximately 1.4 percent of total revenues.

Other Revenues

Other revenue categories such as fines and penalties, miscellaneous revenues, and traffic safety fund revenues are also projected on a per employee basis.

CONCLUSION

Table 4 below breaks out the fiscal impacts by the component land uses – agricultural industry, retail, and office - as indicated in the Specific Plan. The agriculture related industry will generate a net fiscal surplus of approximately $1.0 million due mainly to the regular and motor vehicle related property tax, as well as anticipated revenues for the utility users' tax and the business license tax. The ancillary retail portion of the proposed development is projected to result in a net fiscal surplus of approximately $261,000, due mainly to anticipated taxable sales activity. The ancillary office portion of the proposed development is projected to contribute a net fiscal surplus of approximately $141,000, which is dependent in part on those businesses generating some taxable sales from sales offices associated with ag-related businesses.

The net benefits of the retail and office space include about $106,000 in sales tax revenues generated by Measure V, which is currently scheduled to sunset in 2016. If this measure, or a similar one, is not renewed after that date, the sales tax from the proposed project will be reduced. However, the project would still generate a net benefit of $1.3 million per year for the City.

In conclusion, the project would generate sufficient revenue to cover General Fund service impacts. In addition, the Specific Plan will establish a Landscape and Lighting District to fund maintenance services, which are not estimated in this analysis. Therefore, no additional financial mitigation is needed to implement the public services plan in terms of funding annual operations and maintenance services. Funding for capital facilities related to the project is addressed in the next chapter, and is planned to be completed primarily through payment of development impact fees.

It is important to recognize that this analysis addresses the direct costs and revenues of the project only. A job creation project such as the Salinas Ag-Industrial Center will also create indirect benefits for other businesses in Salinas and in the region, and help to create other jobs and income through economic multiplier effects. These economic benefits would also carry additional fiscal benefit for Salinas and surrounding communities, which are not quantified in this report.

TABLE 4
NET FISCAL IMPACT OF THE PROPOSED DEVELOPMENT

REVENUES	Ag-Industrial	Ancillary Commercial	Ancillary Office	Total All Land Uses
Property Tax	$851,994	$52,092	$69,456	$973,542
Vehicle Lic. In-lieu Prop. Tax	$461,151	$28,195	$37,594	$526,940
Total Sales Tax	$0	$163,350	$49,005	$212,355
Utility Users Tax	$70,164	$10,758	$19,723	$100,645
Business License Tax	$144,380	$16,335	$23,823	$184,538
Franchise Fees (incl Royalty)	$32,536	$2,928	$5,368	$40,832
Licenses & Permits	$447	$40	$74	$561
Fines & Penalties	$1,058	$95	$175	$1,328
Investment Earnings	$13,552	$2,353	$1,790	$17,695
Fees for Services	$30,820	$2,774	$5,085	$38,679
General Fund Subtotal	**$1,606,101**	**$278,921**	**$212,092**	**$2,097,115**
Measure V	$0	$81,675	$24,503	$106,178
TOTAL REVENUES	**$1,606,101**	**$360,596**	**$236,595**	**$2,203,292**
EXPENSES				
General Government	$90,073	$15,025	$14,392	$119,490
Police	$411,713	$32,554	$59,683	$503,950
Fire/EMS	$21,598	$1,944	$3,564	$27,106
Development & Engineering	$74,456	$50,202	$17,888	$142,546
TOTAL EXPENSES	**$597,841**	**$99,725**	**$95,527**	**$793,093**
NET (COST) / REVENUE	**$1,008,260**	**$260,872**	**$141,068**	**$1,410,199**

Source: ADE, Inc.

CAPITAL FACILITIES FINANCING

The previous discussion addressed ongoing revenues to fund operation and maintenance costs for public services and facilities. This chapter describes the facilities and services that will be financed through impacts fees or special assessments, especially focusing on the ability to fund the off-site infrastructure capital facilities necessary to service the ag-industrial project site.

The Specific Plan (RJA, July 2009, p. 9-12) indicates "site-development improvements will be financed and constructed by the Individual Developers, since most of the required improvements are associated with specific parcels and are not shared by other parcel/users. Some infrastructure costs may be reimbursable by the City through the use of impact fees, reimbursements for infrastructure over-sizing, area of benefit fees, area specific fees, dedications, or exactions. Other financing options include special assessment districts, and landscape and lighting maintenance districts (LLMD)."

DEVELOPMENT IMPACT FEES

The development will be subject to a number of development impact fees to pay for infrastructure and improvements needed to mitigate project impacts on public services and facilities. This section outlines the current fees that pertain to the project.

As shown in Table 5, the Ag-Industrial project would pay existing development impact fees totaling an estimated $16.9 million to the City and to the Monterey Regional Water Pollution Control Agency (MRWPCA). The specific calculations for these fees are shown in Tables 6 - 10.

TABLE 5
ESTIMATES OF APPLICABLE DEVELOPMENT FEES FOR THE AG-INDUSTRIAL CENTER

City Traffic Impact Fees	$6,197,620
Regional Traffic Impact Fees	$3,935,388
Sanitary Sewer Fees*	$5,091827
Storm Drain Fees	$1,267,500
Street Tree Fees	$126,208
City Annexation	$282,000
Total Development Fees	**$16,900,948**

Source: ADE, Inc.
* Additional capacity charges for the Industrial Wastewater System may be required but are currently undetermined.

TABLE 6
CITY TRAFFIC IMPACT FEES

Total Non Residential Sq. Ft.	4,334,220
Divided by 1000	4,334
Trip Rate 5/1000	21,670
Per Trip Fee	$286
Total Traffic Impact Fees	**$6,197,620**

Source: ADE, Inc.

TABLE 7
REGIONAL TRAFFIC FEES

Land Use	Fee	Sq. Ft.	Total
Industrial/Ag	$0.92	4,007,520	$3,666,881
Office-General	$1.43	163,350	$233,100
Retail	$5.82	163,350	$951,335
Subtotal			**$4,851,317**
City Discount			-$915,928
Total			**$3,935,388**

Source: ADE Inc., based on the Regional Development Impact Fee Worksheet provided by the Transportation Agency for Monterey County.

TABLE 8
SANITARY SEWER FEES

Total Sanitary Sewer Projected Flow (MGD)	0.50
MRWPCA Sanitary Sewer Fee	$9.88
Total MRWPCA Sanitary Sewer Fees	**$4,940,000**
City Fee per initial 4,000 sq.ft.	$1,311
6 development phases - initial 4,000 sq.ft.	$7,866
City Fee per add'l 100 sq.ft.	$3.34
Additional Total Sq.ft.	4,310,220
Fees for Additional/100 sq.ft.	$143,961
Total City Fees	**$151,827**
Total Non-res Sanitary Sewer Fees	**$5,091,827**

Source: ADE, Inc.

TABLE 9
STORM DRAIN FEES

Total Non Residential Acreage	235
Fee per Acre	$5,394
Total Non Residential Storm Drain Fees	**$1,267,590**

Source: ADE, Inc.

TABLE 10
STREET TREE FEES

Lineal Footage Frontage	29,600
Lineal Footage Frontage/ 60'	493
Fee per Lineal Feet	$256
Total	**$126,208**

Source: ADE, Inc.

INDUSTRIAL WASTEWATER TREATMENT SYSTEM

The City of Salinas owns and maintains an industrial wastewater treatment system, which processes effluent from food processors and other industrial uses in the City. The City's industrial wastewater master plan consultant, CDM, has determined that the wastewater treatment plant will require expansion in order to serve the full development of the Ag-Industrial Specific Plan and future anticipated projects to be developed. The City has developed an interim solution to handle additional capacity and has committed to accommodate all future projects (including the Ag-Industrial Center) while improvements to its treatment plant are completed. As part of the interim solution, the City is negotiating the use of a shunt that will connect additional

capacity industrial wastewater flows to the MRWPCA sanitary sewer treatment plant. The cost of this system is estimated at about $229,000; however, the means of funding this cost has not been determined at this time. The Ag-Industrial Specific Plan would need to participate in funding measures ultimately determined by the City to finance the expansion of the treatment plant. Such measures may include increased user fees, increased connection charges, or other public financing mechanisms.

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JOBS TO HOUSING BALANCE

A continued jobs to housing balance is essential to a socially, economically, and environmentally healthy community. Achieving a better balance of incomes and home ownership opportunities is an important goal in the City of Salinas General Plan.

The State of California's goal is for every community to achieve a 1.5 jobs to housing ratio relationship, which is based on the estimate that there are 1.5 workers in every household within a given community. Theoretically, this ratio means that each resident in a community should be able to find a job in the community in which they reside, thereby reducing commuting and air quality impacts and other environmental degradation as a result of residential and commercial sprawl. It is implied that communities with a jobs to housing ratio of less than 1.5 should try to attract more jobs, and communities with a jobs to housing ratio of greater than 1.5 should be developing more housing units. At this time the State's jobs to housing ratio goals are not mandates. Obvious distinctions between California communities indicates that the state jobs to housing ratio of 1.5 may or may not be attainable, and therefore should be viewed primarily as a benchmark for comparison.

There are approximately 49,580[6] jobs in Salinas, which represents 25 percent of Monterey County's total of 195,102[7] jobs. An estimated 43,138 residential dwelling units exist in Salinas, which represents 30 percent of Monterey County's total 143,268 housing units. Currently, Salinas provides 1.15 jobs per housing unit compared to a 1.36 jobs to housing ratio for Monterey County as a whole.

When evaluating the effect of the proposed project on the jobs/housing balance, it is important to consider the underlying goal of providing employment opportunities for the local labor force. The Ag-Industrial project will create an estimated 4,142 jobs. Combining the employment intensive Ag-Industrial Park with existing jobs, the ratio of jobs to housing units in Salinas would improve to 1.25 jobs per housing unit.

The City is also anticipating significant growth under the proposed Salinas Future Growth Area (FGA) where approximately 11,609 new residential units and 4,049 jobs are projected to be developed. With this level of development, the FGA project would have an internal jobs to housing ratio of 0.35. Assuming growth under both the FGA and the Ag-Industrial Specific Plan, the City's jobs to housing ratio decreases from the existing 1.15 ratio to 1.06, mainly as a result of the housing intensive land uses under the FGA buildout.

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[6]Based on AMBAG's Monterey Bay Area 2008 Regional Forecast using 2005 baseline data.
[7]Based on AMBAG's Monterey Bay Area 2008 Regional Forecast using 2005 baseline data.

Table 11 below indicates the jobs to housing ratio under four circumstances: the City of Salinas existing land uses; the City of Salinas existing land uses and the assumed buildout of the Ag-Industrial Specific Plan; the City of Salinas existing land uses and the assumed buildout of the FGA; and finally the existing land uses, the assumed buildout of the FGA and the development of the Ag-Industrial Park together.

TABLE 11
SALINAS JOBS TO HOUSING BALANCE RATIO

	Employment[1]	Housing Units[1]	Ratio
Existing Ratio	49,580	43,138	1.15
Projected Under the Ag-Industrial Park	4,142	0	
Subtotal-Existing and Ag-Industrial Park	53,722	43,138	1.25
Projected Under the Salinas FGA	4,049	11,609	
Subtotal-Existing and Salinas FGA	53,629	54,747	0.98
Total-Existing, Ag-Industrial, and FGA	**57,771**	**54,747**	**1.06**

Source: ADE and AMBAG Monterey Bay Area 2008 Regional Forecast.
[1]Employment and housing data shown represents an extrapolation based on AMBAG's 2008 regional forecast data using the 2005 baseline.

The Ag-Industrial project would significantly improve the existing jobs/housing balance of the City and would provide a job base to help support the additional labor force from the FGA as well.

APPENDIX A: PROVISION OF PUBLIC SERVICES AND INFRASTRUCTURE

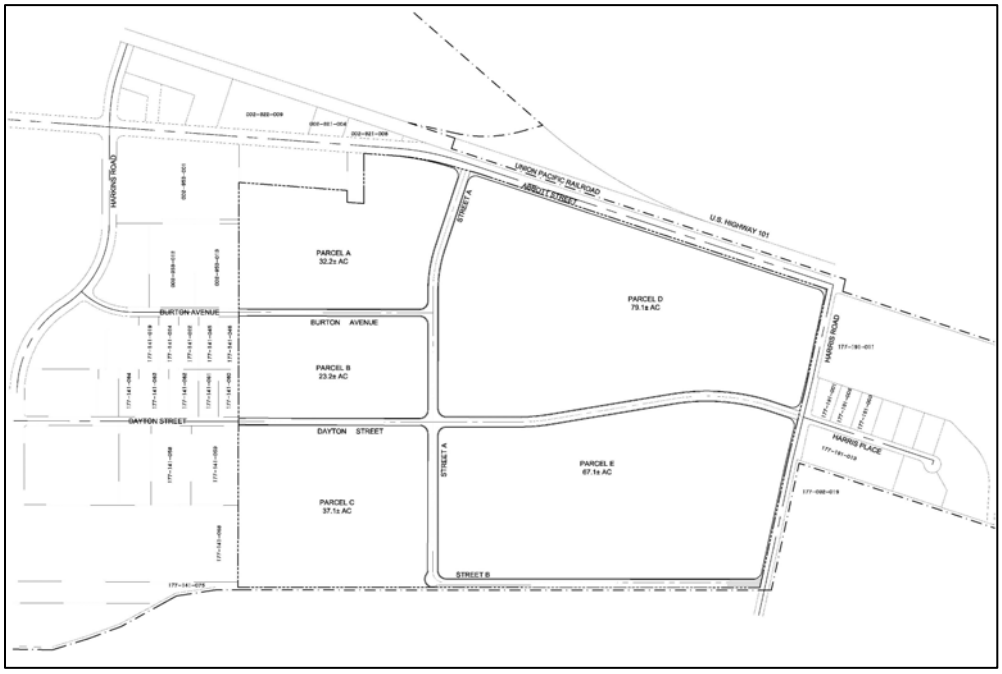
The information in Table A-1 below provides the service standards adopted in the City of Salinas General Plan. The Salinas Ag-Industrial Center Specific Plan is subject to these standards.

TABLE A-1
PUBLIC SERVICES AND FACILITIES SERVICE STANDARDS

Public Service / Facility	Service Standard
Fire Protection and Emergency Services	Fire protection facilities necessary to provide a 6-minute response from receipt of 911 call for arrival of first company 90 percent of the time.
Police Protection	Police facilities to provide an adequate level of service as determined by the City
Water Supply, Treatment, and Distribution	New development to provide its fair share of water improvements consistent with the adopted Water Master Plan and Urban Water Management Plan. If proposed development is not consistent with the Water Master Plan and/or Urban Water Management Plan, or if the Plans are out of date, the Plans will need to be updated to reflect the proposed project and identify necessary improvements. Project proponents will be responsible for paying their proportional cost of updating the Plan.
Landfill	Ten (10) years of capacity for any landfill(s) serving a proposed project.
Sewer Treatment and Distribution	New development to provide its fair share of sewer improvements consistent with the adopted Sewer and Drainage Master Plan. If proposed development is not consistent with the Sewer and Drainage Master Plan, or if the Plan is out of date, the Plan will need to be updated at the project proponent's expense to reflect the proposed project and identify necessary improvements.
Flood Control/Stormwater Drainage	New development to meet the City's Stormwater Development Standards which incorporate both Federal NPDES requirements and Flood Control requirements of the City.
Circulation	Level of Service (LOS) D or better for all roadways and intersections determined by Vehicle Delay calculations in accordance with the latest version of the Highway Capacity Manual, Transportation Research Board.

Source: City of Salinas General Plan

Salinas Ag-Industrial Center



Traffic Impact Analysis

Final Draft Report

Prepared For

Uni-Kool Partners
395 W. Market Street
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July 6, 2009

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SUMMARY OF PROJECT IMPACTS AND RECOMMENDED IMPROVEMENTS

This traffic impact analysis evaluated the anticipated impacts from the increase in traffic that would be generated by the implementation of the Salinas Ag-Industrial Center project. Ten traffic scenarios were assessed in the traffic analysis. They were as follows:

1. Existing Non-Harvest Season
2. Existing Harvest Season
3. Background No Project
4. Existing Plus Project Phase 1
5. Background Plus Project Phase 1
6. Background Plus Project Buildout
7. 2030 Cumulative No Project No Interchange
8. 2030 Cumulative No Project With Interchange[1]
9. 2030 Cumulative Plus Project No Interchange
10. 2030 Cumulative Plus Project With Interchange[1]

The purpose of this summary is to identify the significant impacts the proposed project would have on the regional and local road network within the study area, and to address how those impacts will be mitigated. The recommended improvements identified in this report would bring operations at the study intersections and road segments into conformance with the level of service standards of the applicable agencies and would reduce significant impacts to less than significant (unless otherwise noted).

Only five of the ten traffic scenarios include traffic that would be generated by the proposed project. They are as follows:

1. Existing Plus Project Phase 1
2. Background Plus Project Phase 1
3. Background Plus Project Buildout
4. 2030 Cumulative Plus Project No Interchange[1]
5. 2030 Cumulative Plus Project With Interchange[1]

The following traffic scenarios were compared to determine project and cumulative project impacts:

Project Impacts

Existing Harvest Season	⇛	Existing Plus Project Phase 1
Background No Project	⇛	Background Plus Project Phase 1
Background No Project	⇛	Background Plus Project Buildout

[1] The term "Interchange" in the analysis scenarios refers to the future Harris Road interchange, which is discussed in Chapter 8 of this report.

Cumulative Project Impacts (Year 2030 Scenarios)

Cumulative No Project No Interchange ⇛ Cumulative Plus Project No Interchange
Cumulative No Project With Interchange ⇛ Cumulative Plus Project With Interchange

A summary of project impacts and recommended improvements (RI) by traffic scenario is provided below. **Only scenarios that include project traffic are included in this summary. Recommended improvements #1 to #26 pertain to deficiencies under existing non-harvest, existing harvest, and background no project traffic scenarios (non of which include the proposed project).** The name of each intersection and road segment is followed by its study intersection/road segment number, the jurisdiction under which it falls, and the corresponding level of service standard in parenthesis.

Existing plus Project Phase 1

Intersections

RI #1. SR 68 / Blanco Road (Int. #1, Caltrans, LOS Standard C) – Signalized. This intersection operates at an overall LOS D during the AM and PM peak hours under existing harvest season conditions and would continue to do so under existing plus project phase 1 traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The same improvements recommended under existing harvest season conditions would be recommended under existing plus project phase 1 conditions. They are as follows:

1. *Add a second northbound SR 68 left-turn lane.*
2. *Convert the northbound SR 68 right-turn to a free right-turn. This will require a receiving lane on eastbound Blanco Road.*
3. *Add a third westbound Blanco Road left-turn lane. This will require a receiving lane on southbound SR 68.*
4. *Convert the westbound Blanco Road shared through/right-turn lane to a through lane.*
5. *Add a dedicated westbound Blanco Road right-turn lane.*
6. *Adjust signal timing and include right-turn overlap phasing on the southbound, eastbound and westbound approaches.*

Improvements 1, 4 and 5 are included in the City of Salinas TFO (#59). Improvements 2, 3 and 6 would also be required to improve operations to an acceptable level of service. It is proposed that the City add these improvements to the City of Salinas TFO. If the City adds improvements 2, 3 and 6 to the City of Salinas TFO, the payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection. If the City does not add these improvements to the TFO, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program for improvements 2, 3 and 6 would not exist, the impact would remain significant and unavoidable.

The City will need to consider several challenges at this intersection. For example, widening the south leg of the intersection to accommodate a third receiving lane on southbound SR 68 may require the relocation of PG&E electrical equipment located

on the southeast corner of the intersection, and the addition of a westbound right-turn lane would require the reconfiguration of the parking lot on the northeast corner of the intersection. For these reasons, the City must determine whether or not the recommended improvements are feasible.

RI #2. Cooper Road / Blanco Road (Int. #37, Monterey County, LOS Standard C) – Stop Controlled (SB). The worst approach at this intersection operates at LOS F during the AM and PM peak hours under existing harvest season conditions and would continue to do so under existing plus project phase 1 traffic conditions. Per the Monterey County significance criteria the project would have a significant impact at this intersection. The same improvements recommended under existing harvest season conditions would be recommended under existing plus project phase 1 conditions. They are as follows:

1. *Widen and restripe southbound Cooper Road to one left-turn lane and one right-turn lane.*
2. *Add a median acceleration lane on the east leg of the intersection to facilitate southbound left-turns.*

The County is considering a westbound Blanco Road right-turn lane at this intersection. Although it would improve operations at this intersection, the intersection would operate at an acceptable level of service without a dedicated westbound right-turn lane; therefore, it has not been included in the analysis.

Improvements at this intersection are not currently included in any fee program. This intersection operates deficiently under existing conditions and is within the County's responsibility and jurisdiction. The County should include the preceding improvements at this intersection in their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

If the County adopts an impact fee program that includes these improvements prior to project implementation, payment of the fee will mitigate this impact to a less than significant level. If the County does not adopt an impact fee program including these improvements prior to project implementation, then the project will be responsible for its pro-rata fair-share of these improvements as mitigation as provided in Section 3 of the Agreement Regarding Supplement to the Final Program EIR for the Salinas Future Growth Area between the City of Salinas and the County of Monterey (March 27, 2008). In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (the County) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

RI #3 & RI #21. Davis Road / Blanco Road (Int. #38, Monterey County, LOS Standard C) – Signalized. This intersection operates at an overall LOS D during the PM peak hour under existing harvest season conditions and would continue to do so under existing plus project phase 1 traffic conditions. Per the Monterey County significance criteria the project would have a

significant impact at this intersection. The same improvements (RI #3) recommended under existing harvest season conditions would be recommended under existing plus project phase 1 conditions. They are as follows:

1. *Convert the northbound Davis Road shared through/right-turn lane to a through lane.*
2. *Add a dedicated northbound Davis Road right-turn lane.*
3. *Add a second southbound Davis Road left-turn lane.*
4. *Add a second southbound Davis Road right-turn lane.*
5. *Add a third eastbound Blanco Road left-turn lane.*
6. *Convert the eastbound Blanco Road shared through/right-turn lane to a through lane.*
7. *Add a dedicated eastbound Blanco Road right-turn lane.*
8. *Convert southbound and westbound right-turns to overlap phasing.*

In addition to the improvements recommended under existing harvest season conditions, the following background no project improvements (RI #21) would also be recommended under existing plus project phase 1 conditions:

1. *Add a second southbound Davis Road through lane.*
2. *Add a second westbound Blanco Road left-turn lane.*
3. *Convert the southbound Davis Road right-turn to a free right turn.*

Improvements at this intersection are included in the City's TFO (#26, #41) and the TAMC Regional Traffic Impact Fee (#8). In addition, the County should include these improvements in their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

If the County adopts an impact fee program that includes these improvements prior to project implementation, payment of the fee will mitigate this impact to a less than significant level. If the County does not adopt an impact fee program including these improvements prior to project implementation, then the project will be responsible for its pro-rata fair-share of these improvements as mitigation as provided in Section 3 of the Agreement Regarding Supplement to the Final Program EIR for the Salinas Future Growth Area between the City of Salinas and the County of Monterey (March 27, 2008). In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (the County) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

<u>RI #4. U.S. 101 / Spence Road (Int. #44, Caltrans, LOS Standard C) – Stop Controlled (WB).</u> The worst approach at this intersection operates at LOS F during the AM and PM peak hours under existing harvest season conditions and would continue to do so under existing plus project phase 1 traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The same improvements recommended under existing harvest season conditions would be recommended under existing plus project phase 1 conditions. They are as follows:

1. *Eliminate intersection and construct frontage road system.*

   Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar. This would result in the elimination of this intersection. Payment of the TAMC fee will mitigate project impacts at this intersection.

RI #10. Sanborn Road / Fairview Avenue-U.S. 101 NB Offramp (Int. #6, Caltrans, LOS Standard C) – Stop Controlled (EB & WB). Under existing harvest season conditions this intersection operates at an overall LOS F during the PM peak hour, and the worst approach operates at LOS E and LOS F during the AM and PM peak hours, respectively. Under existing plus project phase 1 traffic conditions it would continue to operate the same, with the exception of the worst approach during the AM peak hour, which would degrade to LOS F. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The same improvements recommended under existing harvest season conditions would be recommended under existing plus project phase 1 conditions. They are as follows:

1. *Consider signalizing the intersection, although gaps are created by the signal at the Sanborn Road / U.S. 101 SB Ramps intersection.*
2. *Lengthen the southbound Sanborn Road left turn-lane pocket.*

   Improvements along the Sanborn Road corridor are included in the City of Salinas TFO (#32 and #37). The payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection.

RI #11. Sanborn Road / Elvee Drive-U.S. 101 SB Ramps (Int. #8, Caltrans, LOS Standard C) – Signalized. This intersection operates at LOS C during the AM peak hour and LOS D during the PM peak hour under existing harvest season conditions. Under existing plus project phase 1 conditions it would degrade to LOS D during the AM peak hour and continue to operate at LOS D during the PM peak hour. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The same improvements recommended under existing harvest season conditions would be recommended under existing plus project phase 1 conditions. They are as follows:

1. *Close Elvee Drive at Sanborn Road and extend the north end to Work Street.*

   Improvements along the Sanborn Road corridor and the extension of Elvee Drive to Work Street are included in the City of Salinas TFO (#37 and #66). The payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection.

RI #12. Sanborn Road / Work Street-Terven Avenue (Int. #9, City of Salinas, LOS Standard D) – Signalized. This intersection operates at LOS E during the PM peak hour under existing harvest season conditions and would continue to do so under existing plus project phase 1 conditions. Per the City of Salinas significance criteria the project would have a significant impact at this intersection. The same improvements recommended under existing harvest season

conditions would be recommended under existing plus project phase 1 conditions. They are as follows:

1. *Restripe eastbound Work Street to accommodate two left-turn lanes and one shared through/right.*
2. *Widen and restripe westbound Terven Avenue to accommodate two left-turn lanes and one shared through/right.*
3. *Convert east-west split phasing to protected left-turn phasing.*
4. *Adjust signal timing.*

Improvements along the Sanborn Road corridor are included in the City of Salinas TFO (#37). The payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection.

RI #13. Airport Boulevard / De la Torre Street (Int. #12, Caltrans, LOS Standard C) – Signalized. This intersection operates at LOS D during the AM and PM peak hours under existing harvest season conditions. Under existing plus project phase 1 conditions it would continue to operate at LOS D during the AM peak hour and would degrade to LOS F during the PM peak hour. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The same improvements recommended under existing harvest season conditions would be recommended under existing plus project phase 1 conditions. They are as follows:

1. *Reconstruct the northbound ramps as planned by the Airport Boulevard interchange project.*

Improvements at this intersection are funded by Caltrans (#0318) and the City of Salinas TFO (#32 and #38). The payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection.

RI #14. Airport Boulevard / Terven Avenue (Int. #13, Caltrans, LOS Standard C) – Signalized. This intersection operates at an overall LOS D during the AM peak hour and LOS E during the PM peak hour under existing harvest season conditions. Under existing plus project phase 1 conditions it would continue to operate at LOS D during the AM peak hour and would degrade to LOS F during the PM peak hour. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The same improvements recommended under existing harvest season conditions would be recommended under existing plus project phase 1 conditions. They are as follows:

1. *Reconstruct the southbound ramps as planned by the ultimate configuration of Airport Boulevard interchange project.*

Improvements at this intersection are planned but not fully funded as Phase 2 of the Caltrans Airport Boulevard interchange project (#0318). Improvements at this intersection are included in the City of Salinas TFO (#32 and #38). The payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection.

RI #15. Harkins Road / Hansen Street (Int. #15, City of Salinas, LOS Standard D) – Signalized. This intersection operates at an overall LOS D during the AM and PM peak hours under existing harvest season conditions. Under existing plus project phase 1 conditions it would continue to operate at LOS D during the AM peak hour and would degrade to LOS F during the PM peak hour. Per the City of Salinas significance criteria the project would have a significant impact at this intersection. The same improvements recommended under existing harvest season conditions would be recommended under existing plus project phase 1 conditions. They are as follows:

1. *Restripe northbound Harkins Road to accommodate one left-turn lane, and one shared left/through/right lane on the northbound approach. These improvements would require reconstruction of the existing intersection and traffic signal.*
2. *Restripe the eastbound Hansen Street approach to one shared left/through lane and two right-turn lanes.*
3. *Modify the signal.*

These improvements are not needed from a level of service standpoint until existing plus project phase 1 conditions. However, they are recommended under existing harvest season traffic conditions due to long queues observed in the field. While the preceding improvements would enhance traffic operations at this intersection, it should be noted that the extensive queuing is caused by traffic congestion at the U.S. 101 / Airport Boulevard interchange, which is planned for improvements through a Caltrans PSR (#0318) and the City of Salinas TFO (#32 and #38).

It is proposed that the City add these improvements to the City of Salinas TFO. If the City adds these improvements to the City of Salinas TFO, payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection. If the City does not add these improvements to the TFO, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program would not exist, the impact would remain significant and unavoidable.

RI #16. Harkins Road / Dayton Street (Int. #18, City of Salinas, LOS Standard D) – Stop Controlled (WB). This intersection operates at an overall LOS A during the AM and PM peak hours under existing harvest season conditions and would continue to do so under existing plus project phase 1 conditions. The worst approach operates at LOS B during the AM and PM peak hours under existing harvest season conditions and would also continue to do so under existing plus project phase 1 conditions. Per the City of Salinas significance criteria the project **would not** have a significant impact at this intersection.

Although this intersection operates at an acceptable level of service during the AM and PM peak hours under existing harvest season traffic conditions, and would continue to do so under existing plus project phase 1 conditions, improvements are recommended due to the high volume of southbound left-turning vehicles in the AM peak hour. They are as follows:

1. *Restripe to add a southbound Harkins Road left-turn lane.*

Improvements at this intersection are not included in any fee program and no mitigation is required of the project at this intersection. However, the project is proposing to implement this improvement to enhance safety at this intersection.

RI #22. Merrill Street / Abbott Street (Int. #42, City of Salinas, LOS Standard D) – Stop Controlled (NB). This intersection operates at an overall LOS A during the AM and PM peak hours and the worst approach operates at LOS C and LOS E during the AM and PM peak hours, respectively, under existing harvest season conditions. Under existing plus project phase 1 conditions it would continue to operate at an overall LOS A during the AM and PM peak hours, and the worst approach would degrade to LOS D and LOS F during the AM and PM peak hours, respectively. Per the City of Salinas significance criteria the project would have a significant impact at this intersection. The same improvements recommended under background no project conditions would be recommended under existing plus project phase 1 conditions. They are as follows:

1. *Signalize the intersection.*
2. *Add eastbound Abbott Street left-turn lane.*
3. *Add westbound Abbott Street left-turn lane.*

Improvements at this intersection are not included in the City of Salinas TFO. It is proposed that the City add these improvements to the City of Salinas TFO. If the City adds these improvements to the TFO, payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection. If the City does not add these improvements to the TFO, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program would not exist, the impact would remain significant and unavoidable.

RI #23. Skyway Boulevard / E. Alisal Street (Int. #43, City of Salinas, LOS Standard D) – Stop Controlled (NB & SB). This intersection operates at an overall LOS B during the AM and PM peak hours and the worst approach operates at LOS E and LOS D during the AM and PM peak hours, respectively, under existing harvest season conditions. Under existing plus project phase 1 conditions it would operate at an overall LOS C and LOS B during the AM and PM peak hours, respectively, and the worst approach would degrade to LOS F during the AM peak hour and would continue to operate at LOS D during the PM peak hour. Per the City of Salinas significance criteria the project would have a significant impact at this intersection. The same improvements recommended under background no project conditions would be recommended under existing plus project phase 1 conditions. They are as follows:

1. *Signalize the intersection.*

Improvements along E. Alisal Street are included in the City of Salinas TFO (#36). Payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection.

RI #27. Airport Boulevard / Hansen Street (Int. #14, City of Salinas, LOS Standard D) – Stop Controlled (NB & WB). This intersection operates at an overall LOS A during the AM and PM peak hours under existing harvest season conditions and would continue to do so under existing plus project phase 1 conditions. The worst approach at this intersection operates at LOS C during the AM peak hour and LOS E during the PM peak hour under existing harvest season conditions and would degrade to LOS F during the AM and PM peak hours under existing plus project phase 1 conditions. Per the City of Salinas significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under existing plus project phase 1 conditions:

1. *Add a second westbound Hansen Street right-turn lane.*

Improvements at this intersection are not included in the City of Salinas TFO. It is proposed that the City add this improvement to the City of Salinas TFO. If the City adds this improvement to the City of Salinas TFO, the payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection. If the City does not add this improvement to the TFO, then the project will be responsible for its pro-rata fair-share of this improvement. In that event, because an established improvement program would not exist, the impact would remain significant and unavoidable.

RI #28. Harkins Road / Abbott Street (Int. #16, City of Salinas, LOS Standard D) – Signalized. This intersection operates at an overall LOS D during the AM and PM peak hours under existing harvest season conditions. Under existing plus project phase 1 conditions it would degrade to LOS E during the AM peak hour and continue to operate at LOS D during the PM peak hour. Per the City of Salinas significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under existing plus project phase 1 conditions:

1. *Add a second southbound Harkins Road left-turn lane.*
2. *Convert the westbound Abbott Street right-turn to right-turn overlap phasing.*

Improvements at this intersection are not included in the City of Salinas TFO. It is proposed that the City add these improvements to the City of Salinas TFO. If the City adds these improvements to the City of Salinas TFO, the payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection. If the City does not add these improvements to the TFO, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program would not exist, the impact would remain significant and unavoidable.

RI #29. Harris Road / Harris Place (Int. #23, before annexation: Monterey County, LOS Standard C, after annexation: City of Salinas, LOS Standard D) – Stop Controlled (EB & WB). A fourth (west) leg would be constructed at this intersection with the implementation of the proposed project. The project applicant is proposing to design this intersection with the following lane configurations and traffic controls:

1. *Signalize intersection.*
2. *Northbound Harris Road approach: One left-turn lane, one shared through/right lane.*
3. *Southbound Harris Road approach: One left-turn lane, one through lane, one right-turn lane.*
4. *Eastbound Harris Place approach: One left-turn lane, one shared through/right lane.*
5. *Westbound Harris Place approach: One shared left/through/right lane.*

If the intersection is designed with these lane configurations and traffic controls, the project will not have a significant impact at this location.

RI #30. Street A Project Road / Abbott Street (Int. #27, City of Salinas, LOS Standard D) – Future Project Intersection. This intersection will be created with the implementation of the proposed project. The project applicant is proposing to design this intersection with the following lane configurations and traffic controls:

1. *Signalize intersection.*
2. *Northbound Street A Project Road approach: Two left-turn lanes, one right-turn lane.*
3. *Eastbound Abbott Street approach: Two through lanes and one right-turn lane.*
4. *Westbound Abbott Street approach: One left-turn lane and two through lanes.*

If the intersection is designed with these lane configurations and traffic controls, the project will not have a significant impact at this location.

RI #31. Harris Road / Street B Project Road (Int. #34, before annexation: Monterey County, LOS Standard C, after annexation: City of Salinas, LOS Standard D) – Future Project Intersection. This intersection will be created with the implementation of the proposed project. The project applicant is proposing to design this intersection with the following lane configurations and traffic controls:

1. *One-way stop control (EB Street B Project Road approach).*
2. *Northbound Harris Road approach: One left-turn lane and one through lane.*
3. *Southbound Harris Road approach: One through lane and one right-turn lane.*
4. *Eastbound Street B Project Road approach: One left-turn lane and one right-turn lane.*

If the intersection is designed with these lane configurations and traffic controls, the project will not have a significant impact at this location.

Road Segments

RI #5. Blanco Road between Cooper Road and Davis Road (Seg. #3a, Monterey County, LOS Standard C). This road segment operates at LOS E during the AM and PM peak hours under existing harvest season conditions and would continue to do so under existing plus project phase 1 traffic conditions. Per the Monterey County significance criteria the project **would not** have a significant impact on this road segment. The same improvements recommended under existing harvest season conditions would be recommended under existing plus project phase 1 conditions. They are as follows:

1. *Widen and upgrade this segment of Blanco Road from a 2-lane rural road to a 4-lane divided arterial with left-turn lanes.*

   Improvements on this road segment are included in the City of Salinas TFO (#26 and #41). No mitigation is required of the project under existing plus project phase 1 conditions.

RI #6. Davis Road between Blanco Road and Ambrose Drive (Seg. #4b, Monterey County, LOS Standard C). This road segment operates at LOS E during the AM and PM peak hours under existing harvest season conditions and would continue to do so under existing plus project phase 1 traffic conditions. Per the Monterey County significance criteria the project **would not** have a significant impact on this road segment. The same improvements recommended under existing harvest season conditions would be recommended under existing plus project phase 1 conditions. They are as follows:

1. *Widen and upgrade this segment of Davis Road from a 2-lane rural road to a 4-lane expressway.*

   Improvements on this road segment are included in the TAMC fee (#8). No mitigation is required of the project under existing plus project phase 1 conditions.

RI #7. SR 156 between Castroville Boulevard and U.S. 101 (Seg. #17b, Caltrans, LOS Standard C). This road segment operates at LOS D during the AM peak hour and LOS E during the PM peak hour under existing harvest season conditions and would continue to do so under existing plus project phase 1 traffic conditions. Per the Caltrans significance criteria the project **would not** have a significant impact on this road segment. The same improvements recommended under existing harvest season conditions would be recommended under existing plus project phase 1 conditions. They are as follows:

1. *Widen and upgrade this segment of SR 156 from a 2-lane rural road to a 4-lane freeway.*

   Improvements on this road segment are included in the TAMC fee (#3). No mitigation is required of the project under existing plus project phase 1 conditions.

RI #8. U.S. 101 Northbound Weaving Segment between Hartnell Rd. and Abbott St.(Seg. #26, Caltrans, LOS Standard C). This road segment operates at LOS D during the AM peak hour and LOS E during the PM peak hour under existing harvest season conditions and would continue to do so under existing plus project phase 1 traffic conditions. Per the Caltrans significance criteria the project **would not** have a significant impact on this road segment. The same improvements recommended under existing harvest season conditions are recommended under existing plus project phase 1 conditions. They are as follows:

1. *Prohibit right-turns from westbound Hartnell Road connector to U.S. 101 and relocate them to the existing northbound onramp at Hartnell Road. This improvement would effectively eliminate the study weaving section.*
2. *Convert Hartnell Road to one-way traffic (in the northwest direction) between the Hartnell Road connector and the Hartnell Road onramp.*

3. *Relocate the existing driveway to a residence on Hartnell Road near U.S. 101 to the intersection of Hartnell Road and the northbound on-ramp to U.S. 101.*
4. *Prohibit left-turns from the Hartnell Road connector onto southbound U.S. 101 at the U.S. 101/Hartnell Road connector intersection.*

Improvements along this segment of U.S. 101 are included in the TAMC fee (#7). No mitigation is required of the project under existing plus project phase 1 conditions.

RI #9. U.S. 101 Northbound Weaving Segment between Airport Blvd. and Fairview Ave. (Seg. #28, Caltrans, LOS Standard C). This road segment operates at LOS D during the PM peak hour under existing harvest season conditions and would degrade to LOS E under existing plus project phase 1 traffic conditions. Per the Caltrans significance criteria the project would have a significant impact on this road segment. The same improvements recommended under existing harvest season conditions would be recommended under existing plus project phase 1 conditions. They are as follows:

1. *Reconstruct the northbound ramps at the Airport Boulevard interchange as planned by the Airport Boulevard Interchange Project.*

Improvements along this segment of U.S. 101 are planned as part of the Caltrans Airport Boulevard reconstruction project (#0318) and are included in the City of Salinas TFO (#38). Payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection.

RI #17. SR 183 between Espinosa Road and Salinas City Limits (Seg. #18a, Caltrans, LOS Standard C). This road segment operates at LOS D during the AM and PM peak hours under existing harvest season conditions. Under existing plus project phase 1 conditions it will continue to operate at LOS D during the AM peak hour but will degrade to LOS E during the PM peak hour. Per the Caltrans significance criteria the project would have a significant impact on this road segment under existing plus project phase 1 conditions. The same improvements recommended under existing harvest season conditions would be recommended under existing plus project phase 1 conditions. They are as follows:

1. *Widen and upgrade this segment of SR 183 from a 2-lane rural road to a 4-lane expressway.*

This road segment is within the responsibility and jurisdiction of Caltrans, and not the City of Salinas. Improvements on this road segment are not included but should be added to the TAMC fee. If these improvements are added to the TAMC fee prior to project implementation, payment of the TAMC fee will mitigate project impacts on this road segment to a less than significant level. If these improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and

should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

RI #24. Airport Boulevard between Terven and De La Torre Street (Seg. #2b, Caltrans, LOS Standard C). This road segment operates at LOS A and LOS C during the AM and PM peak hours, respectively, under existing harvest season conditions. Under existing plus project phase 1 conditions it would degrade to LOS F during the PM peak hour. Per the Caltrans significance criteria the project would have a significant impact on this road segment. The same improvements recommended under background no project conditions would be recommended under existing plus project phase 1 conditions. They are as follows:

1. *Widen and upgrade this segment of Airport Boulevard from a 2-lane arterial to a 4-lane divided arterial.*

Improvements along this road segment are included in the City of Salinas TFO (#38). Payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts on this road segment. Improvements on this road segment are also planned but not fully funded as Phase 2 of the Caltrans Airport Boulevard interchange project (#0318).

Background plus Project Phase 1

Intersections

RI #18. Sanborn Road / Fairview Ave.-U.S. 101 NB Offramp (Int. #6, Caltrans, LOS Standard C) – Stop Controlled (EB & WB). This intersection would operate at an overall LOS F during the AM and PM peak hours under background no project conditions and would continue to do so under background plus project phase 1 conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The same improvements recommended under background no project conditions are recommended under background plus project phase 1 conditions. They are as follows:

1. *Existing harvest season improvements. In addition:*
2. *Add an eastbound U.S. 101 Offramp right-turn lane.*
3. *Add a third northbound Sanborn Road through lane.*
4. *Add a third southbound Sanborn Road through lane.*

Improvements along the Sanborn Road corridor are included in the City of Salinas TFO (#32 and #37). Payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection.

RI #19. Sanborn Road / Elvee Drive-U.S. 101 SB Ramps (Int. #8, Caltrans, LOS Standard C) – Signalized. This intersection would operate at LOS C and LOS E during the AM and PM peak hours, respectively, under background no project conditions. Under background plus project phase 1 conditions it would degrade to LOS D during the AM peak hour and continue to operate at LOS E during the PM peak hour. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The same improvements recommended under

background no project conditions are recommended under background plus project phase 1 conditions. They are as follows:

1. *The same improvements recommended under existing harvest season conditions. In addition:*
2. *Widen the southbound U.S. 101 offramp to accommodate two left-turn lanes, one shared through/right turn lane, and one dedicated right-turn lane.*

Improvements along the Sanborn Road corridor are included in the City of Salinas TFO (#32, #37 and #66). In addition, this intersection is within the responsibility and jurisdiction of Caltrans. Improvements at this intersection should be added to the TAMC fee. If they are, payment of the TAMC fee would mitigate project impacts at this intersection to a less than significant level. If improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of the improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

RI #20. U.S. 101 / Hartnell Road Connector (Int. #26, Caltrans, LOS Standard C) – Stop Controlled (WB). This intersection would operate at an overall LOS A during the AM and PM peak hours under background no project conditions and would continue to do so under background plus project phase 1 conditions. The worst approach at this intersection would operate at LOS F and LOS D during the AM and PM peak hours, respectively, under background no project conditions. Under background plus project phase 1 conditions it would continue to operate at LOS F during the AM peak hour and would degrade to LOS E during the PM peak hour. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The same improvements recommended under background no project conditions are recommended under background plus project phase 1 conditions. They are as follows:

1. *Eliminate intersection and construct frontage road system.*

Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar. This would result in the elimination of this intersection. Payment of the TAMC fee will mitigate project impacts at this intersection.

RI #32. SR 68 WB Ramps / Spreckels Boulevard (Int. #3, Caltrans, LOS Standard C) – Stop Controlled (SB). The worst approach at this intersection would operate at LOS D and LOS E during the AM and PM peak hours, respectively, under background no project conditions. Under background plus project phase 1 conditions the worst approach would degrade to LOS D and LOS F during the AM and PM peak hours, respectively. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under background plus project phase 1 conditions:

1. *Convert intersection to all-way stop control.*

The project is responsible for funding this improvement.

RI #33. Sanborn Road / Work Street-Terven Avenue (Int. #9, City of Salinas, LOS Standard D) – Signalized. This intersection would operate at an overall LOS D and LOS E during the AM and PM peak hours, respectively, under background no project conditions. Under background plus project phase 1 conditions, it would degrade to LOS E during the AM peak hour and would continue to operate at LOS E during the PM peak hour. Per the City of Salinas significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under background plus project phase 1 conditions:

1. *The same improvements recommended under existing harvest season conditions. In addition:*
2. *Convert northbound Sanborn Road shared though/right-turn lane to a through lane.*
3. *Add a northbound Sanborn Road right-turn lane*
4. *Add a third southbound Sanborn Road through lane.*

Improvements along the Sanborn Road corridor are included in the City of Salinas TFO (#37). The payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection.

RI #34. Blanco Road-Sanborn Road / Abbott Street (Int. #10, City of Salinas, LOS Standard D) – Signalized. This intersection would operate at an overall LOS D during the AM and PM peak hours under background no project conditions. Under background plus project phase 1 conditions, it would continue to operate at LOS D during the AM peak hour and would degrade to LOS E during the PM peak hour. Per the City of Salinas significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under background plus project phase 1 conditions:

1. *Convert eastbound Abbott Street shared left/through lane to a through lane.*
2. *Add a second eastbound Abbott Street left-turn lane.*
3. *Convert westbound Abbott Street shared left/ through lane to a through lane.*
4. *Add a second westbound Abbott Street left-turn lane.*
5. *Convert east-west split phasing to protected left-turn phasing.*

Improvements at this intersection are not included in the City of Salinas TFO. It is proposed that the City add these improvements to the City of Salinas TFO. If the City adds these improvements to the City of Salinas TFO, the payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection. If the City does not add these improvements to the TFO, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program would not exist, the impact would remain significant and unavoidable.

SR 68 / Hunter Lane (Int. #2, Caltrans, LOS Standard C) – Stop Controlled (WB). This intersection would operate at an overall LOS A during the AM and PM peak hours and the worst approach would operate at LOS F and LOS E during the AM and PM peak hours, respectively, under background no project conditions and would continue to do so under background plus project phase 1 conditions. Per the Caltrans significance criteria, the project would have a significant impact on this intersection.

This intersection is within the responsibility and jurisdiction of Caltrans, and not the City of Salinas. Improvements along this corridor should be added to the TAMC fee. If they are, payment of the TAMC fee would mitigate project impacts at this intersection to a less than significant level. If improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of the improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

Options for improving operations at this intersection include consolidating access points and eliminating left-turns into and out of the driveways and minor intersections along SR 68 between Foster Road and Blanco Road, or the installation of a median barrier that would to allow left-turns into the minor streets but prevent left-turns out. These options would improve safety and the levels of service at the intersections along the corridor but would result in traffic diversions and the need to accommodate U-turns along the corridor. As pointed out by Monterey County Department of Public Works staff, the corridor merits a systems analysis to address these impacts, which is beyond the scope of this study. Caltrans should consider commissioning a systems analysis of the corridor.

It should be noted that installation of a traffic signal would improve operations at this intersection to an acceptable level of service. However, it would also have an adverse impact on the through traffic on SR 68 and could cause an increase in rear-end collisions. As a result, a traffic signal is not recommended for this intersection.

SR 68 / Hitchcock Road (Int. #39, Caltrans, LOS Standard C) – Stop Controlled (EB). This intersection would operate at an overall LOS A during the AM and PM peak hours and the worst approach would operate at LOS C and LOS F during the AM and PM peak hours, respectively, under background no project conditions and would continue to do so under background plus project phase 1 conditions. Per the Caltrans significance criteria, the project would have a significant impact on this intersection.

This intersection is within the responsibility and jurisdiction of Caltrans, and not the City of Salinas. Improvements along this corridor should be added to the TAMC fee. If they are, payment of the TAMC fee would mitigate project impacts at this intersection to a less than significant level. If improvements are not added to the

TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of the improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

Options for improving operations at this intersection include consolidating access points and eliminating left-turns into and out of the driveways and minor intersections along SR 68 between Foster Road and Blanco Road, or the installation of a median barrier that would to allow left-turns into the minor streets but prevent left-turns out. These options would improve safety and the levels of service at the intersections along the corridor but would result in traffic diversions and the need to accommodate U-turns along the corridor. As pointed out by Monterey County Department of Public Works staff, the corridor merits a systems analysis to address these impacts, which is beyond the scope of this study. Caltrans should consider commissioning a systems analysis of the corridor.

It should be noted that installation of a traffic signal would improve operations at this intersection to an acceptable level of service. However, it would also have an adverse impact on the through traffic on SR 68 and could cause an increase in rear-end collisions. As a result, a traffic signal is not recommended for this intersection.

Road Segments

RI #25. Blanco Road between Davis Road and Alisal Street (Seg. #3b, City of Salinas, LOS Standard D). This road segment would operate at LOS D and LOS F during the AM and PM peak hours, respectively, under background no project conditions and would continue to do so under background plus project phase 1 conditions. Per the City of Salinas significance criteria the project would have a significant impact on this road segment. The same improvements recommended under background no project conditions are recommended under background plus project phase 1 conditions. They are as follows:

1. *Widen this segment of Blanco Road from a 3-lane arterial to a 4-lane divided arterial.*

Improvements along this road segment are included in the City of Salinas TFO (#41). Payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts on this road segment.

RI #26. Davis Road between Hitchcock Road and Blanco Road (Seg. #4a, Monterey County, LOS Standard C). This road segment would operate at LOS D and LOS E during the AM and PM peak hours, respectively, under background no project conditions and would continue to do so under background plus project phase 1 conditions. Per the Monterey County significance criteria the project **would not** have a significant impact on this road segment. The same

improvements recommended under background no project conditions are recommended under background plus project phase 1 conditions. They are as follows:

1. *Widen and upgrade this segment of Davis Road from a 2-lane rural road to a 4-lane expressway.*

   Improvements along this road segment are included in the TAMC fee (#4). No mitigation is required of the project under background plus project phase 1 conditions.

RI #35. U.S. 101 between Sanborn Road and John Street (Seg. #20h, Caltrans, LOS Standard C). This road segment would operate at LOS C during the AM and PM peak hours under background no project conditions. Under background plus project phase 1 conditions, it would continue to operate at LOS C during the AM peak hour and would degrade to LOS D during the PM peak hour. Per the Caltrans significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under background plus project phase 1 conditions:

1. *Widen this segment of U.S. 101 to a 6-lane freeway.*

   The widening of U.S. 101 to a 6-lane freeway through the City of Salinas is included in the City of Salinas TFO (#32). Payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts on this road segment.

RI #36. U.S. 101 Southbound Weaving Segment between Hartnell Road and Abbott Street (Seg. #27, Caltrans, LOS Standard C). This road segment would operate at LOS A and LOS C during the AM and PM peak hours, respectively, under background no project conditions. Under background plus project phase 1 conditions, it would continue to operate at LOS C during the AM peak hour and would degrade to LOS D during the PM peak hour. Per the Caltrans significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under background plus project phase 1 conditions:

1. *Prohibit southbound U.S. 101 left-turns onto eastbound Hartnell Road by closing the median at the U.S. 101/Hartnell Road intersection.*

   Improvements along this segment of U.S. 101 are included in the TAMC fee (#7). Payment of the TAMC fee will mitigate project impacts on this road segment.

RI #37. U.S. 101 Southbound Weaving Segment between Airport Boulevard and Sanborn Road (Seg. #29, Caltrans, LOS Standard C). This road segment would operate at LOS C and LOS B during the AM and PM peak hours, respectively, under background no project conditions. Under background plus project phase 1 conditions, it would degrade to LOS D during the AM peak hour and would continue to operate at LOS B during the PM peak hour. Per the Caltrans significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under background plus project phase 1 conditions:

1. *It is recommended that a third through lane be added along southbound U.S. 101 between the Sanborn Road and Airport Boulevard interchanges. When combined with*

the existing two through lanes and one auxiliary lane, this would result in a total of four travel lanes within the weaving section. Implementation of this improvement would result in acceptable weaving operations.

Improvements along this segment of U.S. 101 are included in the City of Salinas TFO (#38). Payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts on this road segment.

RI #38. U.S. 101 Northbound Weaving Segment between Fairview Avenue and Sanborn Road (Seg. #30, Caltrans, LOS Standard C). This road segment would operate at LOS B and LOS C during the AM and PM peak hours, respectively, under background no project conditions. Under background plus project phase 1 conditions, it would continue to operate at LOS B during the AM peak hour and would degrade to LOS D during the PM peak hour. Per the Caltrans significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under background plus project phase 1 conditions:

1. *Construct a collector-distributor roadway between the northbound U.S. 101 ramps to and from Fairview Road and Sanborn Road.*

Improvements along this segment of U.S. 101 are included in the City of Salinas TFO (#32 and #37). Payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts on this road segment.

Background plus Project Buildout

Intersections

RI #39. Harris Road / Abbott Street (Int. #22, before annexation: Monterey County, LOS Standard C, after annexation: City of Salinas, LOS Standard D) – Signalized. This intersection would operate at an overall LOS C during the AM and PM peak hours under background no project conditions. Under background plus project buildout conditions, it would continue to operate at LOS C during the AM peak hour and would degrade to LOS D during the PM peak hour. Per the Monterey County significance criteria the project would have a significant impact at this intersection. However, this intersection will come under the jurisdiction of the City of Salinas as part of the annexation that will occur with the implementation of the proposed project and will be subject to a level of service standard D (per City of Salinas standards). Per the City of Salinas significance criteria, the project **would not** have a significant impact at this intersection.

Although the project would not have a significant impact at this intersection, due to the high volume of truck traffic associated with the project, the following improvements are recommended under background plus project buildout conditions:

1. *Add a second northbound Harris Road right-turn lane.*
2. *Add a second westbound Abbott Street left-turn lane.*

The project is proposing to implement these improvements.

Road Segments

RI #40. Abbott Street between Harris Road and Firestone Driveway (Seg. #1f, Monterey County, LOS Standard C). This road segment would operate at LOS B and LOS A during the AM and PM peak hours, respectively, under background no project conditions. Under background plus project buildout conditions, it would degrade to LOS E during the AM and PM peak hours. Per the Monterey County significance criteria, the project would have a significant impact at this intersection. The following improvements are recommended under background plus project buildout conditions:

1. *Widen and upgrade this segment of Abbott Street from a 3-lane arterial to a 4-lane expressway.*

   Improvements on this road segment are included in the TAMC fee (#7 and #10). Payment of the TAMC fee will mitigate project impacts on this segment.

RI #41. Harris Road between Harris Place and Abbott Street (Seg. #9b, before annexation: Monterey County, LOS Standard C, after annexation: City of Salinas, LOS Standard D). This road segment would operate at LOS B during the AM and PM peak hours under background no project conditions. Under background plus project buildout conditions, it would degrade to LOS D during the AM and PM peak hours. Per the Monterey County significance criteria, the project would have a significant impact on this road segment. However, this road segment will come under the jurisdiction of the City of Salinas as part of the annexation that will occur with the implementation of the proposed project and will be subject to a level of service standard D (per City of Salinas standards). Per the City of Salinas significance criteria, the project **would not** have a significant impact on this road segment.

Although the project would not have a significant impact on this road segment, due to the high volume of truck traffic associated with the project, the project applicant is proposing to implement the following improvements:

1. *Widen and upgrade this segment of Harris Road from a 2-lane rural road to a 4-lane divided arterial.*

   The project is proposing to implement these improvements.

2030 Cumulative Plus Project No Interchange

Intersections

RI #42. SR 68 WB Ramps / Spreckels Boulevard (Int. #3, Caltrans, LOS Standard C) – Stop Controlled (SB). This intersection would operate at an overall LOS F during the AM and PM peak hours, and the worst approach would also operate at LOS F during the AM and PM peak hours, under 2030 cumulative no project no interchange conditions, and would continue to do so under 2030 cumulative plus project no interchange conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The same improvements recommended under 2030 cumulative no project no interchange conditions would also be

recommended under 2030 cumulative plus project no interchange conditions. They are as follows:

1. *Signalize intersection.*
2. *Add a second westbound Spreckels Boulevard left-turn lane.*
3. *Continue westbound lane along Spreckels Boulevard.*

This intersection is within the responsibility and jurisdiction of Caltrans, and not the City of Salinas. Improvements at this intersection should be added to the TAMC fee. If they are, payment of the TAMC fee would mitigate project impacts at this intersection to a less than significant level. If improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of the improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

RI #43. SR 68 EB Offramp / Spreckels Boulevard (Int. #4, Caltrans, LOS Standard C) – Stop Controlled (NB). This intersection would operate at an overall LOS C and LOS A during the AM and PM peak hours, respectively, and the worst approach would operate at LOS E and LOS C during the AM and PM peak hours, respectively, under 2030 cumulative no project no interchange conditions. Under 2030 cumulative plus project no interchange conditions the overall LOS would degrade to E and the worst approach would degrade to LOS F during the AM peak hour. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The same improvements recommended under 2030 cumulative no project no interchange conditions would also be recommended under 2030 cumulative plus project no interchange conditions. They are as follows:

1. *Add a second westbound Spreckels Boulevard through lane.*
2. *Restripe northbound (Highway 68 offramp) left-turn lane to a shared left/right-turn lane.*
3. *Add a second eastbound Spreckels Boulevard receiving lane.*

This intersection is within the responsibility and jurisdiction of Caltrans, and not the City of Salinas. Improvements at this intersection should be added to the TAMC fee. If they are, payment of the TAMC fee would mitigate project impacts at this intersection to a less than significant level. If improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of the improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

RI #44. SR 68 EB Onramp / Spreckels Boulevard (Int. #5, Caltrans, LOS Standard C) – Stop Controlled (SB). This intersection would operate at an overall LOS A during the AM and PM peak hours, and the worst approach would operate at LOS E during the AM and PM peak hours under 2030 cumulative no project no interchange conditions. Under 2030 cumulative plus project no interchange conditions the overall LOS would continue to operate at LOS A and the worst approach would degrade to LOS F during the AM peak hour. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The same improvements recommended under 2030 cumulative no project no interchange conditions would also be recommended under 2030 cumulative plus project no interchange conditions. They are as follows:

1. *Add a second westbound Spreckels Boulevard through lane.*
2. *Add a second eastbound Spreckels Boulevard through lane.*

This intersection is within the responsibility and jurisdiction of Caltrans, and not the City of Salinas. Improvements at this intersection should be added to the TAMC fee. If they are, payment of the TAMC fee would mitigate project impacts at this intersection to a less than significant level. If improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of the improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

RI #45. U.S. 101 NB Ramps / Fairview Avenue (Int. #7, Caltrans, LOS Standard C) – Stop Controlled (NB). This intersection would operate at an overall LOS A and LOS D during the AM and PM peak hours, respectively, and the worst approach would operate at LOS C and LOS F during the AM and PM peak hours, respectively, under 2030 cumulative no project no interchange conditions. Under 2030 cumulative plus project no interchange conditions the overall LOS would degrade to LOS F during the PM peak hour. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The same improvements recommended under 2030 cumulative no project no interchange conditions would also be recommended under 2030 cumulative plus project no interchange conditions. They are as follows:

1. *Add an eastbound Fairview Avenue right-turn lane.*

This intersection improvement is equivalent to the road segment improvement (RI #85) recommended for road segment 5a (Fairview Road between Sanborn Road and the U.S. 101 northbound ramps). This improvement is not included in the City of Salinas TFO. It is proposed that the City add this improvement to the TFO. If the City adds this improvement to the TFO, the payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts at this intersection. If the City does not add this improvement to the TFO, then the project will be responsible for its pro-rata

fair-share of this improvement. In that event, because an established improvement program would not exist, the impact would remain significant and unavoidable.

RI #46 and RI #79. Sanborn Road / Elvee Drive-U.S. 101 SB Ramps (Int. #8, Caltrans, LOS Standard C) – Signalized. This intersection would operate at an overall LOS E and LOS F during the AM and PM peak hours, respectively, 2030 cumulative no project no interchange conditions. Under 2030 cumulative plus project no interchange conditions the overall LOS would degrade to LOS F during the AM peak hour and would continue to operate at LOS F during the PM peak hour. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The same improvements recommended under 2030 cumulative no project no interchange conditions (RI #46) would also be recommended under 2030 cumulative plus project no interchange conditions. They are as follows:

1. *Same as background no project improvements. In addition:*
2. *Add a third northbound Sanborn Road through lane.*
3. *Add a third southbound Sanborn Road through lane.*

In addition to RI #46, the following improvements (RI #79) are recommended under 2030 cumulative plus project no interchange conditions:

1. *Same as 2030 cumulative no project no interchange improvements. In addition:*
2. *Add a second southbound Sanborn Road left-turn lane.*

Improvements along the Sanborn Road corridor are included in the City of Salinas TFO (#32, #37 and #66). In addition, this intersection is within the responsibility and jurisdiction of Caltrans. Improvements at this intersection should be added to the TAMC fee. If they are, payment of the TAMC fee would mitigate project impacts at this intersection to a less than significant level. If improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of the improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

RI #47. Sanborn Road / Work Street-Terven Avenue (Int. #9, City of Salinas, LOS Standard D) – Signalized. This intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative no project no interchange conditions and would continue to do so under 2030 cumulative plus project no interchange conditions. Per the City of Salinas significance criteria the project would have a significant impact at this intersection. The same improvements recommended under 2030 cumulative no project no interchange conditions would also be recommended under 2030 cumulative plus project no interchange conditions. They are as follows:

1. *Same as background plus project phase 1 improvements. In addition:*
2. *Adjust signal timing.*

Improvements along the Sanborn Road corridor are included in the City of Salinas TFO (#37). Payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts at this intersection.

RI #48. Blanco Road-Sanborn Road / Abbott Street (Int. #10, City of Salinas, LOS Standard D) – Signalized. This intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative no project no interchange conditions and would continue to do so under 2030 cumulative plus project no interchange conditions. Per the City of Salinas significance criteria the project would have a significant impact at this intersection. The same improvements recommended under 2030 cumulative no project no interchange conditions would also be recommended under 2030 cumulative plus project no interchange conditions. They are as follows:

1. *Same as background plus project phase 1 improvements. In addition:*
2. *Convert the existing northbound Blanco Road-Sanborn Road right-turn into a free right-turn.*
3. *Add a third northbound Blanco Road through lane.*
4. *Convert the existing westbound Abbott Street right-turn into a free right-turn.*

These improvements would result in LOS E during the AM and PM peak hours under 2030 cumulative no project no interchange conditions, and LOS E and LOS F during the AM and PM peak hours, respectively, under 2030 cumulative plus project no interchange conditions. These improvements are not included in the City of Salinas TFO. It is proposed that the City add these improvements to the TFO. If the City adds these improvements to the TFO, the payment of traffic impact fees per the City of Salinas TFO will partially mitigate project impacts at this intersection (i.e., these improvements would reduce delay at the intersection but would not bring it within the City's level of service standard). If the City does not add these improvements to the TFO, then the project will be responsible for its pro-rata fair-share of these improvements. In either event, because an established improvement program would not exist, or an established program would exist but the improvements would not bring the intersection's operations up to the City's standards, the impact would remain significant and unavoidable.

The City will need to consider the challenges at this intersection. For example, it may be financially or politically impractical to acquire the necessary right-of-way to implement the recommended improvements. For these reasons, the City must determine whether or not the recommended improvements are feasible.

RI #49. Harkins Road / Hansen Street (Int. #15, City of Salinas, LOS Standard D) – Signalized. This intersection would operate at an overall LOS D and LOS E during the AM and PM peak hours, respectively, under 2030 cumulative no project no interchange conditions. Under 2030 cumulative plus project no interchange conditions it would degrade to LOS F during the AM and

PM peak hours. Per the City of Salinas significance criteria the project would have a significant impact at this intersection.
The same improvements recommended under 2030 cumulative no project no interchange conditions would also be recommended under 2030 cumulative plus project no interchange conditions. They are as follows:

1. *Same as existing plus project phase 1 improvements. In addition:*
2. *Convert the existing eastbound Hansen Street right-turn to include right-turn overlap phasing.*

These improvements would result in LOS D during the AM and PM peak hours under 2030 cumulative no project no interchange conditions, and LOS D and LOS E during the AM and PM peak hours, respectively, under 2030 cumulative plus project no interchange conditions. These improvements are not included in the City of Salinas TFO. It is proposed that the City add these improvements to the TFO. If the City adds these improvements to the TFO, the payment of traffic impact fees per the City of Salinas TFO will partially mitigate project impacts at this intersection (i.e., these improvements would reduce delay at the intersection but would not bring it within the City's level of service standard under 2030 cumulative plus project no interchange conditions). If the City does not add these improvements to the TFO, then the project will be responsible for its pro-rata fair-share of these improvements. In either event, because an established improvement program would not exist, or an established program would exist but the improvements would not bring the intersection's operations up to the City's standards, the impact would remain significant and unavoidable. While the preceding improvements would enhance traffic operations at this intersection, it should be noted that the extensive queuing is caused by traffic congestion at the U.S. 101 / Airport Boulevard interchange, which is planned for improvements through a Caltrans PSR (#0318) and the City of Salinas TFO (#32 and #38).

RI #50. Harkins Road / Hunter Lane (Int. #19, Monterey County, LOS Standard C) – Stop Controlled (EB). This intersection would operate at an overall LOS E and LOS A, and the worst approach would operate at LOS F and LOS C during the AM and PM peak hours, respectively, under 2030 cumulative no project no interchange conditions. Under 2030 cumulative plus project no interchange conditions, it would operate the same except for the overall level of service during the AM peak hour, which would degrade to LOS F. Per the Monterey County significance criteria the project would have a significant impact at this intersection. The same improvements recommended under 2030 cumulative no project no interchange conditions would also be recommended under 2030 cumulative plus project no interchange conditions. They are as follows:

1. *Convert to all-way stop control or signalize the intersection.*

The peak hour signal warrant and the all-way stop control warrant were assessed at this intersection under all traffic scenarios. The all-way stop control warrant is currently met under existing harvest season conditions, and the peak hour signal warrant would be met beginning under 2030 cumulative no project no interchange

conditions. Although the peak hour signal warrant would be met under 2030 conditions, the intersection would operate acceptably with all-way stop control. It is recommended that either all-way stop control or a signal be installed at this intersection.

Improvements at this intersection are not currently included in any fee program. This intersection would operate deficiently under 2030 cumulative no project no interchange conditions and is within the County's responsibility and jurisdiction. The County should include the preferred improvement at this intersection in their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

If the County adopts an impact fee program that includes the preferred improvement prior to project implementation, payment of the fee will mitigate this impact to a less than significant level. If the County does not adopt an impact fee program including the preferred improvement prior to project implementation, then the project will be responsible for its pro-rata fair-share of this improvement. In that event, because an established improvement program for this improvement would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that this improvement is within the responsibility and jurisdiction of another public agency (the County) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

RI #51. Hatton Avenue / Spreckels Boulevard (Int. #21, Monterey County, LOS Standard C) – Stop Controlled (SB). This intersection would operate at an overall LOS A and the worst approach would operate at LOS F during the AM and PM peak hours under 2030 cumulative no project no interchange conditions. Under 2030 cumulative plus project no interchange conditions, it would operate at an overall LOS B and the worst approach would continue to operate at LOS F during the AM and PM peak hours. Per the Monterey County significance criteria the project would have a significant impact at this intersection. The same improvements recommended under 2030 cumulative no project no interchange conditions would also be recommended under 2030 cumulative plus project no interchange conditions. They are as follows:

1. *Add a second eastbound Spreckels Boulevard through lane.*
2. *Add a second westbound Spreckels Boulevard through lane.*

The project will widen Harris Road to 4 lanes along the project frontage. This improvement will serve as the project's pro-rata fair share contribution to improvements along Harris Road and Spreckels Boulevard. Supporting calculations are included in Appendix X.

RI #52 and RI #81. Harris Road / Abbott Street (Int. #22, before annexation: Monterey County, LOS Standard C, after annexation: City of Salinas, LOS Standard D) – Signalized. This intersection would operate at an overall LOS D and LOS E during the AM and PM peak hours, respectively, under 2030 cumulative no project no interchange conditions. Under 2030 cumulative plus project no interchange conditions it would degrade to an overall LOS F during

the AM and PM peak hours. Per the City of Salinas significance criteria the project would have a significant impact at this intersection. The same improvements recommended under 2030 cumulative no project no interchange conditions (RI #52) would also be recommended under 2030 cumulative plus project no interchange conditions. They are as follows:

1. *Same as background plus project buildout improvements. In addition:*
2. *Convert the existing northbound Harris Road right-turn to include right-turn overlap phasing.*

In addition to RI #52, the following improvements (RI #81) are recommended under 2030 cumulative plus project no interchange conditions:

1. *Same as 2030 cumulative no project no interchange improvements. In addition:*
2. *Add second northbound Harris Road left-turn lane.*
3. *Convert the eastbound Abbott Street shared through/right-turn lane to a through lane.*
4. *Add an eastbound Abbott Street right-turn lane.*

The project's frontage improvements will serve as the project's pro-rata fair share contribution to improvements at this intersection.

RI #80. Harkins Road / Abbott Street (Int. #16, City of Salinas, LOS Standard D) – Signalized. This intersection would operate at an overall LOS E during the AM and PM peak hours under 2030 cumulative no project no interchange conditions. Under 2030 cumulative plus project no interchange conditions, it would degrade to LOS F during the AM and PM peak hours. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project no interchange conditions:

1. *Same as existing plus project phase 1 improvements. In addition:*
2. *Convert eastbound Abbott Street shared through/right to a through lane.*
3. *Add an eastbound Abbot Street right-turn lane with right turn overlap phasing.*
4. *Add a second westbound Abbott Street right-turn lane.*
5. *Convert southbound Harkins Road shared through/right to a through lane.*
6. *Add a southbound Harkins Road right-turn lane with right turn overlap phasing.*

These improvements are not included in the City of Salinas TFO. It is proposed that the City add these improvements to the TFO. If the City adds these improvements to the TFO, the payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts at this intersection. If the City does not add these improvements to the TFO, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program would not exist, the impact would remain significant and unavoidable.

RI #82. Harris Road / Harris Place (Int. #23, before annexation: Monterey County, LOS Standard C, after annexation: City of Salinas, LOS Standard D) – Stop Controlled (EB & WB). A fourth (west) leg would be constructed at this intersection with the implementation of the proposed project. This intersection would operate at an overall LOS A during the AM and PM

peak hours, and the worst approach would operate at LOS E and LOS F during the AM and PM peak hours, respectively, under 2030 cumulative no project no interchange conditions. Under 2030 cumulative plus project no interchange conditions the overall LOS would degrade to LOS F during the AM and PM peak hours and the worst approach would degrade to LOS F during the AM peak hour. Per the City of Salinas significance criteria the project would have a significant impact at this intersection. The project applicant is proposing to design this intersection with the following lane configurations and traffic controls under existing plus project phase 1 conditions (RI #29):

1. *Signalize intersection.*
2. *Northbound Harris Road approach: One left-turn lane, one shared through/right lane*
3. *Southbound Harris Road approach: One left-turn lane, one through lane, one right-turn lane.*
4. *Eastbound Harris Place approach: One left-turn lane, one shared through/right lane*
5. *Westbound Harris Place approach: One shared left/through/right lane*

The same improvements recommended under existing plus project phase 1 conditions (RI #29) would also be recommended under 2030 cumulative plus project no interchange conditions. In addition to RI #29, the following improvements (RI #82) are recommended under 2030 cumulative plus project no interchange conditions:

1. *Add a second northbound Harris Road through lane.*
2. *Add a second southbound Harris Road through lane.*

The project will widen Harris Road to 4 lanes along the project frontage.

RI #54 and RI #83. Firestone Driveway / Abbott Street (Int. #24, Monterey County, LOS Standard C) – Stop Controlled (NB). This intersection would operate at an overall LOS A during the AM and PM peak hours, and the worst approach would operate at LOS C and LOS F during the AM and PM peak hours, respectively, under 2030 cumulative no project no interchange conditions. Under 2030 cumulative plus project no interchange conditions it would operate at an overall LOS A and LOS B during the AM and PM peak hours, respectively, and the worst approach would degrade to LOS D in the AM peak hour and would continue to operate at LOS F during the PM peak hour. Per the Monterey County significance criteria the project would have a significant impact at this intersection. The following improvement (RI #54) would be recommended under 2030 cumulative no project no interchange conditions:

1. *Signalize the intersection.*

In addition to RI #54, the following improvements (RI #83) are recommended under 2030 cumulative plus project no interchange conditions:

1. *Add a second eastbound Abbott Street through lane.*
2. *Add a second westbound Abbott Street through lane.*

Improvements along Abbott Street are included in the TAMC fee (#7). Payment of the TAMC fee will mitigate cumulative project impacts at this intersection.

RI #55. U.S. 101 / Gould Road (Int. #25, Caltrans, LOS Standard C) – Stop Controlled (WB). This intersection would operate at an overall LOS A during the AM and PM peak hours, and the worst approach would operate at LOS E and LOS F during the AM and PM peak hours, respectively, under 2030 cumulative no project no interchange conditions and would continue to do so under 2030 cumulative plus project no interchange conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The same improvements recommended under 2030 cumulative no project no interchange conditions would also be recommended under 2030 cumulative plus project no interchange conditions. They are as follows:

1. *Eliminate the intersection and construct a frontage road system.*

   Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar. This would result in the elimination of this intersection. Payment of the TAMC fee will mitigate cumulative project impacts at this intersection.

RI #56. Davis Road / Blanco Road (Int. #38, Monterey County, LOS Standard C) – Signalized. This intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative no project no interchange conditions and would continue to do so under 2030 cumulative plus project no interchange conditions. Per the Monterey County significance criteria the project would have a significant impact at this intersection. The same improvements recommended under 2030 cumulative no project no interchange conditions would also be recommended under 2030 cumulative plus project no interchange conditions. They are as follows:

1. *Same as existing non-harvest season improvements. In addition:*
2. *Add a second northbound Davis Road right-turn lane.*
3. *Add a second southbound Davis Road through lane.*
4. *Add a second westbound Blanco Road left-turn lane.*

   Improvements at this intersection are included in the City's TFO (#26, #41) and the TAMC Regional Traffic Impact Fee (#8). In addition, the County should include these improvements in their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

   If the County adopts an impact fee program that includes these improvements prior to project implementation, payment of the fee will mitigate this impact to a less than significant level. If the County does not adopt an impact fee program including these improvements prior to project implementation, then the project will be responsible for its pro-rata fair-share of these improvements as mitigation as provided in Section 3 of the Agreement Regarding Supplement to the Final Program EIR for the Salinas Future Growth Area between the City of Salinas and the County of Monterey (March 27, 2008). In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find

that such improvements are within the responsibility and jurisdiction of another public agency (the County) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

SR 68 / Foster Road (Int. #40, Caltrans, LOS Standard C) – Stop Controlled (EB). This intersection would operate at an overall LOS A during the AM and PM peak hours and the worst approach would operate at LOS C and LOS E during the AM and PM peak hours, respectively, under 2030 cumulative no project no interchange conditions. Under 2030 cumulative plus project no interchange conditions it would operate the same except for the worst approach during the PM peak hour, which would degrade to LOS F. Per the Caltrans significance criteria, the project would have a significant impact on this intersection.

This intersection is within the responsibility and jurisdiction of Caltrans, and not the City of Salinas. Improvements along this corridor should be added to the TAMC fee. If they are, payment of the TAMC fee would mitigate project impacts at this intersection to a less than significant level. If improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of the improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

Options for improving operations at this intersection include consolidating access points and eliminating left-turns into and out of the driveways and minor intersections along SR 68 between Foster Road and Blanco Road, or the installation of a median barrier that would to allow left-turns into the minor streets but prevent left-turns out. These options would improve safety and the levels of service at the intersections along the corridor but would result in traffic diversions and the need to accommodate U-turns along the corridor. As pointed out by Monterey County Department of Public Works staff, the corridor merits a systems analysis to address these impacts, which is beyond the scope of this study. Caltrans should consider commissioning a systems analysis of the corridor.

It should be noted that installation of a traffic signal would improve operations at this intersection to an acceptable level of service. However, it would also have an adverse impact on the through traffic on SR 68 and could cause an increase in rear-end collisions. As a result, a traffic signal is not recommended for this intersection.

RI #84. Harris Road / Street B Project Road (Int. #34, before annexation: Monterey County, LOS Standard C, after annexation: City of Salinas, LOS Standard D) – Future Project Intersection. This intersection will be created with the implementation of the proposed project. The same lane configurations recommended under existing plus project phase 1 conditions (RI #31) are recommended under 2030 cumulative plus project no interchange conditions. They are as follows:

1. *Northbound Harris Road approach: One left-turn lane and one through lane.*
2. *Southbound Harris Road approach: One through lane and one right-turn lane.*
3. *Eastbound Street B Project Road approach: One left-turn lane and one right-turn lane.*

In addition, the following improvements (RI #84) are recommended under 2030 cumulative plus project no interchange conditions:

1. *Signalize the intersection.*

The project's frontage improvements will serve as the project's pro-rata fair share contribution to improvements at this intersection.

Road Segments

RI #57. Blanco Road between Davis Road and Alisal Street (Seg. #3b, City of Salinas, LOS Standard D). This road segment would operate at LOS F during the AM and PM peak hours under 2030 cumulative no project no interchange conditions and would continue to do so under 2030 cumulative plus project no interchange conditions. Per the City of Salinas significance criteria the project would have a significant impact on this road segment. The same improvements recommended under 2030 cumulative no project no interchange conditions would also be recommended under 2030 cumulative plus project no interchange conditions. They are as follows:

1. *Upgrade this segment of Blanco Road from a 3-lane divided arterial to a 4-lane expressway.*

Improvements along this road segment are included in the City of Salinas TFO (#41). Payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts on this road segment.

RI #58. Harris Road between Spreckels Boulevard and Harris Place (Seg. #9a, Monterey County, LOS Standard C). This road segment would operate at LOS D during the AM and PM peak hours under 2030 cumulative no project no interchange conditions and would degrade to LOS E during the AM and PM peak hours under 2030 cumulative plus project no interchange conditions. Per the Monterey County significance criteria the project would have a significant impact on this road segment. The same improvements recommended under 2030 cumulative no project no interchange conditions would also be recommended under 2030 cumulative plus project no interchange conditions. They are as follows:

1. *Widen this segment of Harris Road from a 2-lane rural road to a 4-lane divided arterial.*

The project will widen Harris Road to 4 lanes along the project frontage. This improvement will serve as the project's pro-rata fair share contribution to improvements along Harris Road and Spreckels Boulevard. Supporting calculations are included in Appendix X.

RI #59. Sanborn Road between Abbott Street and Terven Avenue (Seg. #13a, City of Salinas, LOS Standard D). This road segment would operate at LOS D and LOS F during the AM and PM peak hours, respectively, under 2030 cumulative no project no interchange conditions. Under 2030 cumulative plus project no interchange conditions it would degrade to LOS E during the AM peak hour and would continue to operate at LOS F during the PM peak hour. Per the City of Salinas significance criteria the project would have a significant impact on this road segment. The same improvements recommended under 2030 cumulative no project no interchange conditions would also be recommended under 2030 cumulative plus project no interchange conditions. They are as follows:

1. *Widen this segment of Sanborn Road from a 4-lane arterial to a 6-lane divided arterial.*

   Improvements along the Sanborn Road corridor are included in the City of Salinas TFO (#37). Payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts on this road segment.

RI #60. Sanborn Road between Terven Avenue and U.S. 101 (Seg. #13b, City of Salinas, LOS Standard D). This road segment would operate at LOS E and LOS F during the AM and PM peak hours, respectively, under 2030 cumulative no project no interchange conditions and would continue to do so under 2030 plus project no interchange conditions. Per the City of Salinas significance criteria the project would have a significant impact on this road segment. The same improvements recommended under 2030 cumulative no project no interchange conditions would also be recommended under 2030 cumulative plus project no interchange conditions. They are as follows:

1. *Widen this segment of Sanborn Road from a 4-lane arterial to a 6-lane divided arterial.*

   Improvements along the Sanborn Road corridor are included in the City of Salinas TFO (#37). Payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts on this road segment.

RI #61. Sanborn Road between U.S. 101 and Fairview Avenue (Seg. #13c, City of Salinas, LOS Standard D). This road segment would operate at LOS D and LOS F during the AM and PM peak hours, respectively, under 2030 cumulative no project no interchange conditions and would continue to do so under 2030 cumulative plus project no interchange conditions. Per the City of Salinas significance criteria the project would have a significant impact on this road segment. The same improvements recommended under 2030 cumulative no project no interchange conditions would also be recommended under 2030 cumulative plus project no interchange conditions. They are as follows:

1. *Widen this segment of Sanborn Road from a 4-lane arterial to a 6-lane divided arterial.*

   Improvements along the Sanborn Road corridor are included in the City of Salinas TFO (#37). Payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts on this road segment.

RI #62. Spreckels Boulevard between SR 68 and Hatton Avenue (Seg. #15a, Monterey County, LOS Standard C). This road segment would operate at LOS E during the AM and PM peak hours under 2030 cumulative no project no interchange conditions and would continue to do so under 2030 cumulative plus project no interchange conditions. Per the Monterey County significance criteria the project **would not** have a significant impact on this road segment. The same improvements recommended under 2030 cumulative no project no interchange conditions would also be recommended under 2030 cumulative plus project no interchange conditions. They are as follows:

1. *Widen this segment of Spreckels Boulevard from a 2-lane rural road to a 4-lane expressway.*

No mitigation is required of the project for this road segment.

RI #63. Spreckels Boulevard between Hatton Avenue and Harris Road (Seg. #15b, Monterey County, LOS Standard C). This road segment would operate at LOS D during the AM and PM peak hours under 2030 cumulative no project no interchange conditions and would degrade to LOS E during the AM and PM peak hours under 2030 cumulative plus project no interchange conditions. Per the Monterey County significance criteria the project would have a significant impact on this road segment. The same improvements recommended under 2030 cumulative no project no interchange conditions would also be recommended under 2030 cumulative plus project no interchange conditions. They are as follows:

1. *Widen this segment of Spreckels Boulevard from a 2-lane rural road to a 4-lane expressway.*

The project will widen Harris Road to 4 lanes along the project frontage. This improvement will serve as the project's pro-rata fair share contribution to improvements along Harris Road and Spreckels Boulevard. Supporting calculations are included in Appendix X.

RI #64. SR 68 between Spreckels Boulevard and Foster Road (Seg 16a, Caltrans, LOS Standard C). This road segment would operate at LOS D during the AM and PM peak hours under 2030 cumulative no project no interchange conditions and would continue to do so under 2030 cumulative plus project no interchange conditions. Per the Caltrans significance criteria the project **would not** have a significant impact on this road segment. The same improvements recommended under 2030 cumulative no project no interchange conditions would also be recommended under 2030 cumulative plus project no interchange conditions. They are as follows:

1. *Consolidate access points and eliminate left-turns into and out of driveways and minor intersections*
2. *Install acceleration and deceleration lanes to Caltrans Standards.*

No mitigation is required of the project for this road segment.

RI #65. SR 68 between Foster Road and Hitchcock Road (Seg 16b, Caltrans, LOS Standard C). This road segment would operate at LOS D during the AM and PM peak hours under 2030 cumulative no project no interchange conditions and would continue to do so under 2030 cumulative plus project no interchange conditions. Per the Caltrans significance criteria the project **would not** have a significant impact on this road segment. The same improvements recommended under 2030 cumulative no project no interchange conditions would also be recommended under 2030 cumulative plus project no interchange conditions. They are as follows:

1. *Consolidate access points and eliminate left-turns into and out of driveways and minor intersections*
2. *Install acceleration and deceleration lanes to Caltrans Standards.*

No mitigation is required of the project for this road segment.

RI #66. SR 68 between Hitchcock Road and Hunter Lane (Seg 16c, Caltrans, LOS Standard C). This road segment would operate at LOS C and LOS D during the AM and PM peak hours, respectively, under 2030 cumulative no project no interchange conditions. Under 2030 cumulative plus project no interchange conditions it would operate at LOS D during the AM and PM peak hours. Per the Caltrans significance criteria the project **would not** have a significant impact on this road segment. The same improvements recommended under 2030 cumulative no project no interchange conditions would also be recommended under 2030 cumulative plus project no interchange conditions. They are as follows:

1. *Consolidate access points and eliminate left-turns into and out of driveways and minor intersections*
2. *Install acceleration and deceleration lanes to Caltrans Standards.*

No mitigation is required of the project for this road segment.

RI #67. SR 68 between Hunter Lane and Blanco Road (Seg 16d, Caltrans, LOS Standard C). This road segment would operate at LOS C and LOS D during the AM and PM peak hours, respectively, under 2030 cumulative no project no interchange conditions and would continue to do so under 2030 cumulative plus project no interchange conditions. Per the Caltrans significance criteria the project **would not** have a significant impact on this road segment. The same improvements recommended under 2030 cumulative no project no interchange conditions would also be recommended under 2030 cumulative plus project no interchange conditions. They are as follows:

1. *Consolidate access points and eliminate left-turns into and out of driveways and minor intersections.*
2. *Install acceleration and deceleration lanes to Caltrans Standards.*

No mitigation is required of the project for this road segment.

RI #68. U.S. 101 between Potter Road and Spence Road (Seg. #20a, Caltrans, LOS Standard C). This road segment would operate at LOS C and LOS E during the AM and PM peak hours,

respectively, under 2030 cumulative no project no interchange conditions. Under 2030 cumulative plus project no interchange conditions it would degrade to LOS D and LOS F during the AM and PM peak hours, respectively. Per the Caltrans significance criteria the project would have a significant impact on this road segment. The same improvements recommended under 2030 cumulative no project no interchange conditions would also be recommended under 2030 cumulative plus project no interchange conditions. They are as follows:

1. *Widen and upgrade this segment of U.S. 101 from a 4-lane freeway to a 6-lane freeway.*

   Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar. This would improve traffic operations on U.S. 101 by eliminating minor intersections along the corridor. This road segment is within the responsibility and jurisdiction of Caltrans, and not the City of Salinas. Improvements along this corridor should be added to the TAMC fee. If they are, payment of the TAMC fee would mitigate project impacts at this intersection to a less than significant level. If improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of the improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

<u>RI #69. U.S. 101 between Spence Road and Abbott Street (Seg. #20b, Caltrans, LOS Standard C).</u> This road segment would operate at LOS D and LOS F during the AM and PM peak hours, respectively, under 2030 cumulative no project no interchange conditions and would continue to do so under 2030 cumulative plus project no interchange conditions. Per the Caltrans significance criteria the project would have a significant impact on this road segment. The same improvements recommended under 2030 cumulative no project no interchange conditions would also be recommended under 2030 cumulative plus project no interchange conditions. They are as follows:

1. *Widen and upgrade this segment of U.S. 101 from a 4-lane freeway to a 6-lane freeway.*

   Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar. This would improve traffic operations on U.S. 101 by eliminating minor intersections along the corridor. This road segment is within the responsibility and jurisdiction of Caltrans, and not the City of Salinas. Improvements along this corridor should be added to the TAMC fee. If they are, payment of the TAMC fee would mitigate project impacts at this intersection to a less than significant level. If improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of the improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt

findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

RI #70. U.S. 101 between Airport and Sanborn Road (Seg. #20g, Caltrans, LOS Standard C). This road segment would operate at LOS C and LOS D during the AM and PM peak hours, respectively, under 2030 cumulative no project no interchange conditions. Under 2030 cumulative plus project no interchange conditions it would continue to operate at LOS C during the AM peak hour and would degrade to LOS E during the PM peak hour. Per the Caltrans significance criteria the project would have a significant impact on this road segment. The same improvements recommended under 2030 cumulative no project no interchange conditions would also be recommended under 2030 cumulative plus project no interchange conditions. They are as follows:

1. *Widen and upgrade this segment of U.S. 101 from a 4-lane freeway to a 6-lane freeway.*

   These improvements are included in the City of Salinas TFO (#32). Payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts on this road segment.

RI #71. U.S. 101 between Sanborn Road and John Street (Seg. #20h, Caltrans, LOS Standard C). This road segment would operate at LOS C and LOS E during the AM and PM peak hours, respectively, under 2030 cumulative no project no interchange conditions. Under 2030 cumulative plus project no interchange conditions it would degrade to LOS D and LOS F during the AM and PM peak hours, respectively. Per the Caltrans significance criteria the project would have a significant impact on this road segment. The same improvements recommended under 2030 cumulative no project no interchange conditions would also be recommended under 2030 cumulative plus project no interchange conditions. They are as follows:

1. *Widen and upgrade this segment of U.S. 101 from a 4-lane freeway to a 6-lane freeway.*

   These improvements are included in the City of Salinas TFO (#32). Payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts on this road segment.

RI #72. U.S. 101 at Abbott Street Interchange – Northbound Offramp (Seg. #23a, Caltrans, LOS Standard C). This road segment would operate at LOS D and LOS A during the AM and PM peak hours, respectively, under 2030 cumulative no project no interchange conditions. Under 2030 cumulative plus project no interchange conditions it would continue to operate at LOS D during the AM peak hour and would operate at LOS B during the PM peak hour. Per the Caltrans significance criteria the project **would not** have a significant impact on this road segment. The same improvements recommended under 2030 cumulative no project no interchange conditions would also be recommended under 2030 cumulative plus project no interchange conditions. They are as follows:

1. *Widen the offramp from one lane to two lanes.*

   No mitigation is required of the project for this road segment.

RI #85. Fairview Avenue between Sanborn Road and U.S. 101 NB Ramps (Seg. #5a, City of Salinas, LOS Standard D). This road segment would operate at LOS A and LOS D during the AM and PM peak hours, respectively, under 2030 cumulative no project no interchange conditions. Under 2030 cumulative plus project no interchange conditions, it would continue to operate at LOS A during the AM peak hour and would degrade to LOS E during the PM peak hour. Per the City of Salinas significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project no interchange conditions:

1. *Widen this segment of Fairview Avenue from a 2-lane arterial to a 3-lane arterial. This would best be accomplished by extending the eastbound Fairview Avenue right-turn lane that was recommended under 2030 cumulative no project no interchange conditions (RI #45) at the U.S. 101 NB Ramps / Fairview Avenue intersection (Int. #7) west towards Sanborn Road as a trap lane onto the U.S. 101 northbound onramp.*

   This improvement is not included in the City of Salinas TFO. It is proposed that the City add this improvement to the TFO. If the City adds this improvement to the TFO, the payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts on this road segment. If the City does not add this improvement to the TFO, then the project will be responsible for its pro-rata fair-share of this improvement. In that event, because an established improvement program would not exist, the impact would remain significant and unavoidable.

RI #86. Airport Boulevard Interchange: Southbound Offramp (Seg. #21d, Caltrans, LOS Standard C). This road segment would operate at LOS B and LOS A during the AM and PM peak hours, respectively, under 2030 cumulative no project no interchange conditions. Under 2030 cumulative plus project no interchange conditions, it would degrade to LOS D during the AM peak hour and would continue to operate at LOS A during the PM peak hour. Per the Caltrans significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project no interchange conditions:

1. *Widen this offramp from one lane to two lanes.*

   Improvements at this interchange are planned but not fully funded as Phase 2 of the Caltrans Airport Boulevard interchange project (#0318). Improvements at this interchange are also included in the City of Salinas TFO (#32 and #38). Payment of the City of Salinas TFO will mitigate cumulative project impacts on this road segment.

RI #87. Abbott Street Interchange: Southbound Onramp (Seg. #23b, Caltrans, LOS Standard C). This road segment would operate at LOS A and LOS B during the AM and PM peak hours, respectively, under 2030 cumulative no project no interchange conditions. Under 2030 cumulative plus project no interchange conditions, it would degrade to LOS D and LOS F during

the AM and PM peak hours, respectively. Per the Caltrans significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project no interchange conditions:

1. *Widen this offramp from one lane to two lanes.*

Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar and removing the segment of Abbott Street from U.S. 101 to Harris Road. This road segment is within the responsibility and jurisdiction of Caltrans, and not the City of Salinas. The necessary improvements at this location should be included in the TAMC fee. If they are, payment of the TAMC fee would mitigate cumulative project impacts on this road segment to a less than significant level. If improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of the improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

2030 Cumulative Plus Project With Interchange

Intersections

RI #73 and RI #88. Sanborn Road / Elvee Drive-U.S. 101 SB Ramps (Int. #8, Caltrans, LOS Standard C) – Signalized. This intersection would operate at an overall LOS E and LOS F during the AM and PM peak hours, respectively, under 2030 cumulative no project with interchange conditions. Under 2030 cumulative plus project with interchange conditions it would degrade to LOS F during the AM peak hour and would continue to operate at LOS F during the PM peak hour. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The same improvements recommended under 2030 cumulative no project with interchange conditions would also be recommended under 2030 cumulative plus project with interchange conditions. They are as follows:

1. *Same as background improvements. In addition:*
2. *Add a third northbound Sanborn Road through lane.*

Improvements along the Sanborn Road corridor are included in the City of Salinas TFO (#32, #37 and #66). In addition, this intersection is within the responsibility and jurisdiction of Caltrans. Improvements at this intersection should be added to the TAMC fee. If they are, payment of the TAMC fee would mitigate project impacts at this intersection to a less than significant level. If improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of the improvements. In that event, because an established

improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

RI #89. Hatton Avenue / Spreckels Boulevard (Int. #21, Monterey County, LOS Standard C) – Stop Controlled (SB). This intersection would operate at an overall LOS D and LOS C during the AM and PM peak hours, respectively, and the worst approach would operate at LOS F during the AM and PM peak hours under 2030 cumulative no project with interchange conditions. Under 2030 cumulative plus project with interchange conditions it would operate at an overall LOS E and LOS D during the AM and PM peak hours, respectively, and the worst approach would continue to operate at LOS F during the AM and PM peak hours. Per the Monterey County significance criteria the project would have a significant impact at this intersection. Assuming the Harris Road interchange is constructed in the location shown in **Exhibit 17**, under 2030 cumulative plus project with interchange conditions, the following improvements are recommended:

1. *Same as 2030 cumulative no project no interchange improvements. In addition:*
2. *Signalize intersection.*

The project will widen Harris Road to 4 lanes along the project frontage. This improvement will serve as the project's pro-rata fair share contribution to improvements along Harris Road and Spreckels Boulevard. Supporting calculations are included in Appendix X.

RI #90. Harris Road / Abbott Street (Int. #22, before annexation: Monterey County, LOS Standard C, after annexation: City of Salinas, LOS Standard D) – Signalized. This intersection would operate at an overall LOS C and LOS E during the AM and PM peak hours, respectively, under 2030 cumulative no project with interchange conditions. Under 2030 cumulative plus project with interchange conditions it would degrade to an overall LOS E and LOS F during the AM and PM peak hours, respectively. Per the City of Salinas significance criteria the project would have a significant impact at this intersection. Assuming the Harris Road interchange is constructed in the location shown in **Exhibit 17**, under 2030 cumulative plus project with interchange conditions, the following improvements are recommended:

1. *Add second northbound Harris Road left-turn lane.*
2. *Convert the eastbound Abbott Street shared through/right-turn lane to a through lane.*
3. *Add an eastbound Abbott Street right-turn lane.*
4. *Add a second westbound Abbott Street left-turn lane.*

The project's frontage improvements will serve as the project's pro-rata fair share contribution to improvements at this intersection.

RI #91. Harris Road / Harris Place (Int. #23, before annexation: Monterey County, LOS Standard C, after annexation: City of Salinas, LOS Standard D) – Stop Controlled (EB & WB)

A fourth (west) leg would be constructed at this intersection with the implementation of the proposed project. The same improvements recommended under 2030 cumulative plus project no interchange conditions (RI #82) are recommended under 2030 cumulative plus project with interchange conditions. They are as follows:

1. *Signalize the intersection.*
2. *Northbound Harris Road approach: One left-turn lane, one through lane, one shared through/right lane.*
3. *Southbound Harris Road approach: One left-turn lane, two through lanes, one right-turn lane.*
4. *Eastbound Project Road approach: One left-turn lane, one shared through/right lane.*
5. *Westbound Harris Place approach: One shared left/through/right lane.*

The project's frontage improvements will serve as the project's pro-rata fair share contribution to improvements at this intersection.

RI #92. Street A Project Road / Abbott Street (Int. #27, City of Salinas, LOS Standard D) – Future Project Intersection. This intersection will be created with the implementation of the proposed project. Assuming the Harris Road interchange is constructed in the location shown in **Exhibit 17**, this intersection would require the following lane configurations and traffic controls:

1. *Signalize intersection.*
2. *Northbound Project Road approach: One left-turn lane and one right-turn lane.*
3. *Eastbound Abbott Street approach: One through lane, one shared through/right lane.*
4. *Westbound Abbott Street approach: One left-turn lane and two through lanes.*

The project's frontage improvements will serve as the project's pro-rata fair share contribution to improvements at this intersection.

RI #93. Harris Road / Street B Project Road (Int. #34, before annexation: Monterey County, LOS Standard C, after annexation: City of Salinas, LOS Standard D) – Future Project Intersection. This intersection will be created with the implementation of the proposed project. The analysis at this intersection assumes the Harris Road interchange (and the connector road between the interchange and Harris Road) would be located as shown in **Exhibit 17**, which shows a conceptual sketch of a possible location for the interchange. With the assumed roadway layout, as shown in **Exhibit 17**, this intersection would operate at an acceptable level of service during the AM and PM peak hours under 2030 cumulative plus project with interchange traffic conditions with the following traffic control and lane configurations. Assuming the Harris Road interchange is constructed in the location shown in **Exhibit 17**, the following lane configurations and traffic controls would result in an acceptable level of service:

1. *Signalize the intersection.*
2. *Northbound Harris Road approach: One left-turn lane, two through lanes and two right-turn lanes.*

3. *Southbound Harris Road approach: Two left-turn lanes, two through lanes, and one right-turn lane.*
4. *Eastbound Project Road approach: One left-turn lane, one through lane and one shared through/right-turn lane.*
5. *Westbound approach: Three left-turn lanes, one though lane, and one right-turn lane.*

The project's frontage improvements will serve as the project's pro-rata fair share contribution to improvements at this intersection.

Road Segments

RI #77. U.S. 101 between Abbott Street and Gould Road (Seg. #20c, Caltrans, LOS Standard C). This road segment would operate at LOS C and LOS D during the AM and PM peak hours, respectively, under 2030 cumulative no project with interchange conditions and would continue to do so under 2030 cumulative plus project with interchange conditions. Per the Caltrans significance criteria the project **would not** have a significant impact on this road segment. The same improvements recommended under 2030 cumulative no project with interchange conditions are recommended under 2030 cumulative plus project with interchange conditions. They are as follows:

1. *Widen and upgrade this segment of U.S. 101 from a 4-lane freeway to a 6-lane freeway.*

No mitigation is required of the project for this road segment.

RI #78. U.S. 101 between Gould Road and Harris Road (Seg. #20e, Caltrans, LOS Standard C). This road segment would operate at LOS C and LOS D during the AM and PM peak hours, respectively, under 2030 cumulative no project with interchange conditions and would continue to do so under 2030 cumulative plus project with interchange conditions. Per the Caltrans significance criteria the project **would not** have a significant impact on this road segment. The same improvements recommended under 2030 cumulative no project with interchange conditions are recommended under 2030 cumulative plus project with interchange conditions. They are as follows:

1. *Widen and upgrade this segment of U.S. 101 from a 4-lane freeway to a 6-lane freeway.*

No mitigation is required of the project for this road segment.

RI #94. U.S. 101 between Harris Road and Airport Boulevard (Seg. #20f, Caltrans, LOS Standard C). This road segment would operate at LOS B and LOS C during the AM and PM peak hours, respectively, under 2030 cumulative no project with interchange conditions. Under 2030 cumulative plus project with interchange conditions, it would degrade to LOS C and LOS D during the AM and PM peak hours, respectively. Per the Caltrans significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project with interchange conditions:

1. *Widen and upgrade this segment of U.S. 101 from a 4-lane freeway to a 6-lane freeway.*

   Improvements on this road segment are included in the City of Salinas TFO (#32). Payment of the City of Salinas TFO will mitigate cumulative project impacts on this road segment.

Truck Route Impacts

Designated truck route facilities between U.S. 101 and the proposed project site were assessed and the recommendations are as follows:

1. The section of roadway along Abbott Street from Harkins Road to the project site should be added to the official City of Salinas truck route to direct trucks to the project site. The need for this signage would be due to the project and it would thus be the project's responsibility to pay for this improvement. It is proposed that the City add this improvement to the City of Salinas TFO. If the City adds this improvement to the TFO, the payment of traffic impact fees per the City of Salinas TFO would satisfy the project's responsibility.

2. It is recommended that additional truck route signage be installed along Airport Boulevard, Hansen Street, Harkins Road, Work Street, Sanborn Road, and Abbott Street in order to better identify the official City truck routes and to discourage cut-through truck traffic on Terven Avenue. The need for this signage is not due to the project, but is recommended based on existing conditions in the field and is the City's responsibility.

3. Additional truck route signage should be installed along northbound U.S. 101 to direct truck traffic to use the Sanborn Road exit instead of the Fairview Avenue exit, as Fairview Avenue is not part of the City's designated truck route. The need for this signage is not due to the project, but is recommended based on existing conditions in the field and is the responsibility of Caltrans.

Highway-Rail Crossing Impacts

The California Public Utilities Commission (CPUC) is the state agency responsible for rail safety within the state of California. Since the proposed project is in the vicinity of an existing rail corridor, the CPUC requested that this traffic study evaluate any potential project-related rail safety impacts, and measures to reduce possible adverse impacts created by the project. Of primary concern is the potential for traffic queues to extend across railroad tracks, thus increasing the possibility that a motorist could stop on the tracks and be unable to clear the tracks as a train approaches.

Recommendations for highway-rail crossings within the study area are as follows:

Harkins Road Crossing North of Abbott Street

1. It is recommended that the traffic signal at the Harkins Road / Hansen Street intersection be connected to the railroad crossing signal in order to allow vehicles to clear the railroad tracks in advance of an approaching train.

   Item #1. No mitigation is required of the project. Connecting the traffic signal at this intersection to the railroad crossing signal is recommended based on existing traffic conditions and shall be the City's responsibility. This improvement is not included in the City of Salinas TFO. It is proposed that the City add this improvement to the TFO. Since item #1 is based on existing deficiencies, it cannot be funded directly by the TFO. Therefore, it is recommended it be funded through the City's Capital Improvement Program (CIP), or other sources as determined by the City of Salinas.

2. It is recommended that the traffic signal at the Harkins Road / Abbott Street intersection be connected to the railroad crossing signal in order to allow vehicles to clear the railroad tracks in advance of an approaching train.

   Item #2. Connecting the traffic signal at this intersection to the railroad crossing signal is recommended based on existing plus project phase 1 traffic conditions and represents a project impact. This improvement is not included in the City of Salinas TFO. It is proposed that the City add this improvement to the TFO. If the City adds this improvement to the TFO, the payment of traffic impact fees per the City of Salinas TFO will mitigate the project's impacts. If the City does not add this improvement to the TFO, then the project will be responsible for its pro-rata fair-share of this improvement. In that event, because an established improvement program would not exist, the impact would remain significant and unavoidable.

Westbound Left-Turns at Abbott Street Crossing East of Growers Street

3. It is recommended that a "Keep Clear" pavement legend be installed in the eastbound direction in the intersection to allow westbound left turning vehicles to clear the tracks if necessary. As an additional precautionary measure, the City may consider installing a railroad crossing gate for the eastbound traffic, just west of the Growers Street / Abbott Street intersection. This would help ensure that eastbound vehicles would stay clear of the area between the new railroad crossing gate and the railroad tracks, which would allow the westbound vehicles to turn left without conflict. The new railroad crossing gate would need to work in conjunction with the existing gates. Coordination with the CPUC and Union Pacific Railroad would be necessary to establish responsibility for installation and maintenance of the new equipment.

   Item #3. No mitigation is required of the project. This is recommended based on existing traffic conditions and shall be the City's responsibility. This improvement is not included in the City of Salinas TFO. It is proposed that the City add this improvement to the TFO. Since item #3 is based on existing deficiencies, it cannot be funded directly by the TFO. Therefore, it is recommended it be funded through the

City's Capital Improvement Program (CIP), or other sources as determined by the City of Salinas.

Pedestrian and Bicycle Impacts

The project is not expected to generate a large amount of pedestrian or bicycle traffic. However, pedestrian and bicycle circulation will be provided on all on-site project streets to ensure connectivity to existing and planned pedestrian and bicycle routes in the City of Salinas.

Pedestrian and bicycle improvements along Abbott Street that will be implemented with the project include 5 foot wide Class II bike lanes along both sides of the street and a 5 foot wide sidewalk along the project frontage. Future improvements by others will include a 5 foot wide sidewalk along the east side of Abbott Street. The project will also include a 5 foot wide Class II bike lane and a 5 foot wide sidewalk along the Harris Road project frontage. Future improvements by others will include a Class II bike lane and sidewalk along the south side of Harris Road.

The project will also provide Class II bike lanes along the following interior streets: Project Street "A", Project Street "B", and the extension of Dayton Street. Additionally, sidewalks will be provided along both sides of all interior streets, with the exception of Project Street "B", for which sidewalk is proposed only along the east side.

Transit Impacts

Monterey-Salinas Transit (MST) currently operates one public bus route that serves the Abbott Street corridor, Line 23, which includes the Line 23 Express. There are seven daily round trips on Line 23, including the two round trips on the express line. However, the Line 23 Express will be eliminated in January 2009, due to the expiration of grant funding.

According to MST, Line 23 is currently operating over-capacity on most of the trips. The southern Salinas Valley cities (King City, Greenfield, Soledad, and Gonzales) and the County of Monterey contract with the Transportation Agency for Monterey County (TAMC) to provide funding to MST to operate Line 23. As required by the California Transportation Development Act, Unmet Transit Needs hearings are held annually by TAMC to collect information about the Monterey County region that would help improve transit services. Per discussions with MST staff, MST will request additional funding from TAMC at the 2008-09 hearing (which will be held in December 2008) that will allow additional transit trips on Line 23 in order to meet the existing and future needs of the community. TAMC's funding decisions regarding Line 23 are scheduled to be released in April 2009.

In assessing transit impacts, neither the City of Salinas, Monterey County, nor Monterey-Salinas Transit has formal significance criteria that can be applied to determine whether a project's impacts on transit are significant.

To accommodate the project transit demand, additional bus stops would be required near the project site. The project is proposing to construct two new bus stops near the project site in

coordination with Monterey Salinas Transit (MST). These bus stops will be located along Abbott Street, near the intersection of Abbott Street and Project Street "A". One will be located on the project frontage side of Abbott Street and the other will be located on the side of Abbott Street opposite the project frontage.

Construction Impacts

Construction of the study project will occur in increments. Prior to development of any of the individual parcels, grading will occur across the entire site. This will include both the relocation and addition of new soil. Once the earthwork has been completed, the roadway and sidewalk infrastructure will be constructed throughout the project site. Each of the individual parcels will be developed independently of each other, and will be built to meet the needs of each individual end user. Therefore, the period of construction with the highest intensity of traffic is expected to occur during grading and infrastructure implementation.

The truck trips associated with the onsite grading and construction of the infrastructure were estimated based on the amount of import material that is expected to be required for the entire project site. Construction is tentatively planned to begin in March of 2010.
The truck trips associated with the project's earthwork were estimated based upon the approximate amount of soil to be imported to the project site. Based upon information provided by Ruggeri-Jensen-Azar & Associates (RJA), the project civil engineering consultant, the amount of soil import could range from 25,000 to 75,000 cubic yards. This volume range is based on a conceptual grading plan for which the exact location and number of future lots is unknown. In order to provide a conservative estimate, daily truck trips were calculated assuming 75,000 cubic yards of soil import with a grading schedule of eight months. Assuming a capacity of 18 cubic yards of soil per truck, the truck trip generation associated with earthwork is estimated to be 52 daily truck trips.

Truck trips will also be generated by the delivery of paving materials to the project site. The number of daily truck trips was estimated based upon the estimated amount of materials required and the estimated number of days materials will be delivered. Based upon information provided by RJA, at project buildout the project will have an overall impervious surface area ratio of 0.4 (for approximately 103 acres of impervious surface area across the entire project site). For truck trip estimation, it is assumed that 80 percent of the impervious surface area will be pavement, and construction will be completed within six months. Truck trip generation associated with the delivery of paving materials is estimated to be 68 daily truck trips.

To account for the additional truck traffic generated by the project due to the delivery of building materials, an additional twenty percent or 24 daily truck trips were estimated.

Construction activities will therefore generate an estimated 144 daily truck trips. This is approximately 4 percent of the daily truck trips estimated for Phase 1 of the project. Any impacts associated with project construction truck trips would therefore be considerably smaller than those caused by the daily operations of the project itself, and those impacts would be mitigated by the implementation of the proposed project's mitigation measures.

Development of each individual parcel within the project site would also involve construction activity, but on a much smaller scale than the soil or infrastructure construction. Trip activity on a per-parcel basis during construction would be at most similar to trip activity on the site once the parcel is fully developed. Therefore, impacts of individual parcel construction would also be mitigated through the implementation of the proposed project's mitigation measures.

1 Introduction

1.1 Project Description

The proposed Salinas Ag-Industrial Center project includes the development of approximately 257 acres of agricultural-related industrial land uses to be built on a primarily vacant site directly adjacent to the current City of Salinas City Limits in Monterey County, California. Development of the project site will require an amendment to the City's current General Plan and Sphere of Influence, and annexation into the City of Salinas. The project will be the subject of a Specific Plan that will define the allowable agricultural-related uses within the project site. The location of the project site is illustrated in **Exhibit 1**.

The proposed project is located on the northwest corner of the Harris Road / Abbott Street intersection. The project site plan includes one new intersection on Abbott Street, one new intersection on Harris Road, the addition of a fourth leg to the existing Harris Road / Harris Place intersection, and two internal project site intersections. A project vicinity map is shown in **Exhibit 2**, and the project site plan is included in **Exhibit 3**.

The project description for the Salinas Ag-Industrial Center includes a broad range of agricultural-related land uses dealing with the preservation, processing, and distribution of agricultural products.

The Specific Plan, which is currently under way, will include the following land uses:

1. Major Agricultural Processing
2. Minor Agricultural Processing
3. Abbott Street Frontage Zone

The following is a brief description of the land uses:

The Major Agricultural Processing land uses are generally defined as uses that alter raw produce (such as fruits or vegetables) into consumable food products. Agricultural produce processing facilities, food products processing facilities, and wineries are Major Agricultural Processors.

A Major Agricultural Processing use will typically include a combination of several of the following procedures: refinement, treatment, conversion, cooling, dehydration, fermenting, sorting, cleaning, packaging, canning, freezing, bottling, storing, and distributing agricultural commodities. Typical facilities will also include ancillary uses such as office space for employees and visitors, shop buildings, supply buildings and/or supply yards, warehousing, and fabrication or cooling facilities.

The Minor Agricultural Manufacturing land uses include agricultural related industries not classified as Major Agricultural Processing. These uses are complementary to the Major Agricultural Processing uses, and generally support those uses by producing related products, equipment, services or storage. Typical facilities will have office space for employees and visitors, shop buildings, supply buildings and/or supply yards, warehousing, and fabrication or cooling facilities.

The Abbott Street Frontage Zone could include any of the above-named agricultural-related land uses, but could also accommodate uses typically allowed in the City's General Industrial Zoning District.

Table 1 shows the minimum, probable, and maximum acreages for each land use category as defined in the Specific Plan.

Table 1.
Plan Area Land Use Distribution

Land Use (from Table 3-1)	Land Use Distribution		
	Minimum (net acres)	**Probable** (net acres)	**Maximum** (net acres)
Major Agricultural Processing:			
Agricultural-Industrial (IA) & Abbott Street Frontage Zone	0	90	101 [(a)]
Minor Agricultural Processing and all other uses:			
Agricultural-Industrial (IA)	0	130	220
Abbott Street Frontage Zone	0	15	15
Other:			
Public street right-of-way	0	22	--
Total	--	257	--

(a) Tracking is only required for the total maximum allowable land area for all "Major Agricultural Processing" Land Uses.

1.2 Regional Access

The eastern boundary of the project site is located approximately 300 feet west of U.S. 101 between the Airport Boulevard and Abbott Street interchanges. The Airport Boulevard interchange is north of the project site, and the Abbott Street interchange is south of the project site. The Airport Boulevard and Abbott Street interchanges provide the primary regional access to the project site. The Airport Boulevard interchange provides both northbound and southbound onramps and offramps, and provides primary regional access to the project site from the north.

The Abbott Street interchange is a non-standard partial interchange with a northbound offramp and a southbound onramp, both of which are located in the median of U.S. 101. These ramps provide access to the project site from the south.

A new interchange is proposed for construction on U.S. 101 in the vicinity of Harris Road. This study analyzes project conditions with and without this interchange. Other relevant state highways in the area include State Route 68, which is located approximately 2 miles west of the project site and provides a link between Salinas and the Monterey Peninsula, and State Route 183, which is located approximately 3 miles northwest of the project site and provides a link between Salinas and Castroville.

1.3 Local Access

Local access to the project site is provided via Abbott Street which is east of the project site, Harris Road which is south of the project site, and Harkins Road, Burton Avenue and Dayton Street which are north of the project site.

1.4 Scope of Work

The scope of work for this traffic study was developed to identify the potential traffic impacts that may be associated with the development of the Salinas Ag-Industrial Center for a range of project buildout levels. Intersections and segments were selected based on the potential for the project to impact them. The City (which is the lead agency for this project) collaborated directly with the County of Monterey and the California Department of Transportation to compile a list of intersections and road segments for analysis. The geographic area that encompasses the intersections and road segments examined in this report are hereafter referred to as the traffic "Study Area".

Within the study area, the intersections and segments that would potentially be impacted by the project were identified and included in the analysis. The scope of work analyzed within this traffic study, as well as the analysis scenarios, were then finalized after additional consultation with staff from the City of Salinas, Caltrans, the Association of Monterey Bay Area Governments (AMBAG), the Transportation Agency for Monterey County (TAMC) and the County of Monterey.

The project team held a series of early consultation meetings to provide opportunities for input from the City of Salinas, the County of Monterey, Caltrans, and TAMC regarding the scope of the traffic study. Representatives from the City of Salinas attended regular meetings throughout the course of the traffic study. In addition, County of Monterey, Caltrans, and TAMC representatives have each attended (some by phone) a minimum of three meetings to discuss possible traffic impacts from the proposed project.

Beyond the limits of the study area, the project trips disperse onto numerous local streets or onto regional facilities. The impact of trips that disperse on the local road network lessens as they move away from the project site. The local streets and intersections included in the analysis were identified as potentially having the greatest impact from the project. A series of four traffic mitigation meetings were also held with representatives from the City of Salinas and the project team to discuss and categorize project impacts and appropriate mitigation measures.

This traffic study includes the analysis of traffic operations during typical weekday AM and PM peak hours at 34 existing intersections and 4 future intersections on the study road network. An additional 8 future intersections, which would be located internally within the project site plan, have been numbered and serve as placeholders for future analyses. The traffic study also includes the analysis of 6 existing freeway segments, 2 future freeway segments, 15 existing freeway ramps, 4 future freeway ramps, 5 freeway weaving segments and 43 road segments. Where required, mitigation measures were recommended to mitigate the impacts due to the development of the project. Traffic control and channelization warrant assessments were performed at relevant study intersections for all traffic scenarios evaluated. The following intersections, freeway segments, freeway ramps, freeway weaving segments and road segments were analyzed in this study:

Intersections

This traffic study analyzed traffic operations at the following study intersections during typical weekday AM and PM peak hours.

1. SR 68 (S. Main Street) / Blanco Road
2. SR 68 / Hunter Lane
3. SR 68 WB Ramps / Spreckels Boulevard
4. SR 68 EB Off Ramp / Spreckels Boulevard
5. SR 68 EB On Ramp / Spreckels Boulevard
6. Sanborn Road / Fairview Avenue- U.S. 101 NB Off Ramp
7. U.S. 101 NB Ramps / Fairview Avenue
8. Sanborn Road / Elvee Drive- U.S. 101 SB Ramp
9. Sanborn Road / Work Street- Terven Avenue
10. Blanco Road- Sanborn Road / Abbott Street
11. Blanco Road / Blanco Circle
12. Airport Boulevard / De la Torre Street
13. Airport Boulevard / Terven Avenue
14. Airport Boulevard / Hansen Street
15. Harkins Road / Hansen Street
16. Harkins Road / Abbott Street
17. Harkins Road / Burton Avenue
18. Harkins Road / Dayton Street
19. Harkins Road / Hunter Lane
20. Hatton Avenue / 4th Street
21. Hatton Avenue / Spreckels Boulevard
22. Harris Road / Abbott Street
23. Harris Road / Harris Place (future Dayton Street Extension)
24. Firestone Driveway / Abbott Street
25. U.S. 101 / Gould Road
26. U.S. 101 / Hartnell Road Connector
27. Street A / Abbott Street (future)
28. **Internal Project Intersection**
29. **Internal Project Intersection**
30. **Internal Project Intersection**
31. **Internal Project Intersection**
32. **Internal Project Intersection**
33. **Internal Project Intersection**
34. Harris Road / Street B (future)
35. **Internal Project Intersection**
36. **Internal Project Intersection**
37. Cooper Road / Blanco Road
38. Davis Road / Blanco Road
39. SR 68 / Hitchcock Road

40. SR 68 / Foster Road
41. Abbott Street / East Romie Lane
42. Merrill Street / Abbott Street
43. Skyway Blvd / East Alisal Street
44. U.S. 101 / Spence Road
45. U.S. 101-Harris Road Interchange / SB Ramps (future)
46. U.S. 101-Harris Road Interchange / NB Ramps (future)

Road Segments

1. Abbott Street between Sanborn Road and Harkins Road
    a. Los Palos Drive – E. Romie Lane
    b. E. Romie Lane – Sanborn Road
    c. Sanborn Road – Merrill Street
    d. Merrill Street – Harkins Road
    e. Harkins Road – Harris Road
    f. Harris Road – Firestone Driveway

2. Airport Boulevard
    a. Hansen Street – Terven Avenue
    b. Terven Avenue – De la Torre Street
    c. De la Torre Street – Moffett Street

3. Blanco Road
    a. Cooper Road – Davis Road
    b. Davis Road – Alisal Street
    c. Alisal Street – Main Street
    d. Main Street – Blanco Circle
    e. Blanco Circle – Abbott Street

4. Davis Road
    a. Hitchcock Road – Blanco Road
    b. Blanco Road – Ambrose Drive

5. Fairview Avenue
    a. Sanborn Road – U.S. 101 NB Ramps

6. Foster Road
    a. Davis Road – SR 68

7. Hansen Street
    a. Airport Boulevard – Harkins Road

8. Harkins Road
    a. 5th Street – Hunter Lane
    b. Hunter Lane – Dayton Street
    c. Dayton Street – Burton Avenue

d. Burton Avenue – Abbott Street
e. Abbott Street – Hansen Street

9. Harris Road
    a. Spreckels Boulevard – Harris Place
    b. Harris Place - Abbott Street

10. Hatton Avenue
    a. Spreckels Boulevard – 4th Street

11. Hitchcock Road
    a. Davis Road – SR 68

12. Hunter Lane
    a. SR 68 – Harkins Road

13. Sanborn Road
    a. Abbott Street – Terven Avenue
    b. Terven Avenue – U.S. 101
    c. U.S. 101 – Fairview Avenue

14. Skyway Boulevard
    a. Airport Boulevard – Alisal Street

15. Spreckels Boulevard
    a. SR 68 – Hatton Avenue
    b. Hatton Avenue – Harris Road

16. SR 68
    a. Spreckels Boulevard – Foster Road
    b. Foster Road – Hitchcock Road
    c. Hitchcock Road – Hunter Lane
    d. Hunter Lane – Blanco Road

17. SR 156
    a. SR 183 – Castroville Boulevard
    b. Castroville Boulevard – U.S. 101

18. SR 183
    a. Espinoza Road – Salinas City Limits

19. Terven Avenue
    a. Sanborn Road – Airport Boulevard

Freeway Segments

20. U.S. 101

a. Potter Road – Spence Road
b. Spence Road – Abbott Street
c. Abbott Street – Gould Road
d. Gould Road – Airport Boulevard
e. Gould Road – Harris Road (future)
f. Harris Road – Airport Boulevard (future)
g. Airport Boulevard – Sanborn Road
h. Sanborn Road – John Street

Freeway Ramps

21. U.S. 101 at Airport Boulevard Interchange
    a. Northbound Onramp
    b. Northbound Offramp
    c. Southbound Onramp
    d. Southbound Offramp

22. U.S. 101 at Sanborn Road Interchange
    a. Northbound Onramp (at Fairview Ave.)
    b. Northbound Offramp (at Fairview Ave.)
    c. Northbound Offramp (at Sanborn Road)
    d. Southbound Onramp (at Sanborn Road)
    e. Southbound Offramp (at Sanborn Road)

23. U.S. 101 at Abbott Street Interchange
    a. Northbound Offramp
    b. Southbound Onramp

24. SR 68 at Spreckels Boulevard Interchange
    a. Eastbound Onramp
    b. Eastbound Offramp
    c. Westbound Onramp
    d. Westbound Offramp

25. U.S. 101 at Harris Road Interchange (future)
    a. Northbound Onramp
    b. Northbound Offramp
    c. Southbound Onramp
    d. Southbound Offramp

Weaving Segments

26. U.S. 101 Northbound between Hartnell Road and Abbott Street
27. U.S. 101 Southbound between Hartnell Road and Abbott Street
28. U.S. 101 Northbound between Airport Boulevard and Fairview Avenue
29. U.S. 101 Southbound between Airport Boulevard and Sanborn Road
30. U.S. 101 Northbound between Fairview Avenue and Sanborn Road

Analysis Scenarios

The traffic scenarios evaluated in this traffic study were selected to comprehensively test the traffic impacts from the project itself, as well as cumulative impacts resulting from traffic generated by the proposed project plus traffic from other approved, pending and future development projects proposed in the local and regional area. Traffic forecasts were obtained from the AMBAG 2030 Regional Travel Demand Model to assess impacts from the project for the year 2030 traffic conditions.

The analysis is based on the evaluation of worst-case conditions, and actual impacts may be less significant than stated, especially on a seasonal basis. Since the proposed project is primarily related to the agriculture industry, the traffic it generates will experience seasonal fluctuations, with its highest traffic generation occurring from mid-April to mid-October (which is referred to as the harvest season). This timeframe also coincides with the peak season of supporting agricultural industries in the region. New traffic counts were conducted at all study intersections during the non-harvest and the harvest seasons, and both of these "existing" scenarios were analyzed to provide a comparison between the two. In order to provide a "worst-case" analysis, the traffic volumes that will be generated by future developments were combined with the existing harvest Season traffic counts. The analysis assumes no relocation of existing uses within the City to the project site, which also contributes to a conservative analysis.

This traffic study analyzed the traffic impacts associated with the buildout of the proposed project, as well as impacts from approved, pending and future development projects in the City of Salinas, the Monterey Peninsula, and northern and southern Monterey County. The following development scenarios were assessed as part of this traffic impact analysis:

1. Existing Non-Harvest Season
2. Existing Harvest Season
3. Background No Project
4. Existing Plus Project Phase 1
5. Background Plus Project Phase 1
6. Background Plus Project Buildout
7. 2030 Cumulative No Project No Interchange
8. 2030 Cumulative No Project With Interchange
9. 2030 Cumulative Plus Project No Interchange
10. 2030 Cumulative Plus Project With Interchange

The Phase 1 analysis was conducted to provide a "project level" analysis that could be used to assess traffic impact findings for a project-specific application which the project applicant may submit in the near future. The "background" scenarios include existing harvest Season traffic volumes combined with traffic that will be generated by projects that have already been approved but not yet constructed. The "2030 cumulative" scenarios include existing harvest Season traffic volumes, as well as traffic that will be generated by approved, pending and future development projects (which have been assumed to be built by the year 2030).

The interchange referred to in scenarios 7 through 10 is a possible future interchange that will be located on U.S. 101 south of the City of Salinas (and is referred to as the Harris Road interchange). A detailed discussion of this interchange is provided in Chapter 8 of this report.

As previously stated, the AMBAG 2030 Regional Travel Demand Model was used to obtain the traffic forecasts for the year 2030 cumulative analyses. The AMBAG 2030 land use forecasts are constrained in the Fort Ord area based upon water availability. If water availability was not limited in the Fort Ord area, the cumulative land use forecasts would be unconstrained and the 2030 traffic volume forecasts would be greater than current estimates in some areas. It is unlikely that this situation would occur. However, for informational purposes, two additional development scenarios were analyzed to reflect such unconstrained conditions. These scenarios, which are referred to as "2030 Unconstrained Cumulative" and "2030 Unconstrained Cumulative plus project", are included in **Appendix V**. Both of these scenarios were analyzed without the future Harris Road interchange.

In order to isolate the project's specific impacts on the State highway and County road network, a Select Zone analysis for the proposed project was performed using the AMBAG 2030 Regional Travel Demand Model, as required by Monterey County and Caltrans. The Select Zone analysis represents a project only traffic model run, where the project's trips are distributed and assigned along the road network. Each development timeframe (i.e., existing, background, and 2030 cumulative) includes an analysis of traffic operations with and without the proposed project.

1.5 Study Network Jurisdictions and Level of Service Standards

Due to the size and location of the proposed Salinas Ag-Industrial Center, the selected study area includes the jurisdictions of multiple public agencies; they are the City of Salinas, Monterey County, and Caltrans. The local agencies and the state agency, Caltrans District 5, have adopted different level of service standards. The City of Salinas has established LOS D as the general threshold for acceptable overall traffic operations for both signalized and un-signalized intersections. The County of Monterey has established LOS C as its level of service standard. The Caltrans level of service standard is the transition between LOS C and LOS D.

1.6 Traffic Operation Evaluation Methodologies

Intersection and road segment traffic operations were evaluated based on the Level of Service (LOS) concept, and the LOS standard adopted by the jurisdiction within which the intersection or road segment is located. LOS is a quantitative description of an intersection and roadway's operation, ranging from LOS A to LOS F. Level of service "A" represents free flow un-congested traffic conditions. Level of service "F" represents highly congested traffic conditions with what is commonly considered unacceptable delay to vehicles on the road segments and at intersections. The intermediate levels of service represent incremental levels of congestion and delay between these two extremes. LOS descriptions for un-signalized intersections with two-way stop control, un-signalized intersections with all-way stop control, and signalized intersections are shown in **Appendices A1, A2 and A3**.

The traffic operations of the intersections were evaluated using the Synchro analysis software (Version 7), based on the *Highway Capacity Manual 2000* methodologies for signalized and un-signalized intersections. Intersection operations are based upon the average vehicular delay at the intersection. The average delay is then correlated to a level of service. For two-way stop controlled intersections, the vehicle delay for side street traffic is analyzed. LOS for each side street movement is based on the distribution of gaps in the major street traffic stream and driver judgment in selecting gaps. Improvements are warranted when a side street approach reaches LOS F for two-way stop controlled intersections. When using the HCM 2000 method for the analysis of signalized and all-way stop controlled intersections, the overall intersection delay is used to determine LOS.

The volume threshold planning methodology based on HCM 2000 was used in the evaluation of operating conditions on roadway segments, freeway segments, and freeway ramps. A description of level of service thresholds for the roadway segments and ramps is included as **Appendix A4.**

The weaving analysis that was performed for the freeway segments between the Airport Boulevard and Sanborn Road interchanges and between Hartnell Road and Abbott Street were based on the methodologies identified within the Caltrans Highway Design Manual (5th Edition). The procedure for evaluating weaving segment levels of service was developed by Jack E. Leisch & Associates in 1985, and uses weaving volumes and nomographs in the evaluation. The analysis presented within this report utilizes spreadsheets developed and provided by Caltrans District 5 staff.

Peak hour signal warrants were analyzed for the unsignalized intersections, as taken from the *California Manual on Uniform Traffic Control Devices For Streets and Highways (MUTCD)*, (Section 4C.04, Warrant 3, Peak Hour), California Department of Transportation, September 26, 2006. The decision to install a traffic signal should not be based purely on the warrants alone. Engineering judgment should be exercised on a case-by-case basis to evaluate the effect a traffic signal would have on certain types of accidents and traffic conditions at the subject intersection, as well as at adjacent intersections. Peak hour signal warrants are included in **Appendix S**.

1.7 Criteria for Significant Project Impacts

According to the California Environmental Quality Act (CEQA) guidelines, a project may have a significant effect on the environment if it would cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system. In accordance with CEQA, specific impact criteria have been applied to the study intersections and road segments to determine if the project specific increase in traffic is substantial in relation to the existing traffic load and capacity of the street system.

The study area falls within multiple jurisdictions as described in Section 1.5. The significance criteria for the relevant jurisdictions are listed below and have been applied to the analysis results.

As previously described, the following traffic scenarios were compared to determine project and cumulative project impacts:

Project Impacts

Existing Harvest Season	⇛	Existing Plus Project Phase 1
Background No Project	⇛	Background Plus Project Phase 1
Background No Project	⇛	Background Plus Project Buildout

Cumulative Project Impacts (Year 2030 Scenarios)

Cumulative No Project No Interchange	⇛	Cumulative Plus Project No Interchange
Cumulative No Project With Interchange	⇛	Cumulative Plus Project With Interchange

City of Salinas Significance Criteria

A significant impact at a **study intersection** is defined to occur under the following conditions:

- The addition of project traffic causes operations to deteriorate from an acceptable level (LOS D or better) to an unacceptable level (LOS E or LOS F), or
- The addition of project traffic adds one vehicle trip to intersections already operating at LOS E or LOS F.

A significant impact at a **study roadway segment** is defined to occur under the following conditions:

- The addition of project traffic causes operations to deteriorate from an acceptable level (LOS D or better) to an unacceptable level (LOS E or LOS F).

County of Monterey and Caltrans Significance Criteria

A significant impact at a **signalized study intersection** is defined to occur under the following conditions:

- A significant impact would occur if an intersection operating at LOS A, B or C degrades to D, E or F. For intersections already operating at unacceptable levels D and E, a significant impact would occur if a project adds 0.01 or more during peak hours to the critical movement's volume-to-capacity ratio. If the intersection is already operating at LOS F, any increase (one vehicle) in the critical movement's volume-to-capacity ratio is considered significant.

A significant impact at an **unsignalized study intersection** is defined to occur under the following conditions:

- A significant impact would occur if any traffic movement has LOS F or any traffic signal warrant is met.

A significant impact on a **study roadway segment** is defined to occur under the following conditions:

- A significant impact would occur if a roadway segment operating at A through E degrades to a lower level of service of D, E or F. If a segment is already operating at LOS F any increase during the peak hour (one vehicle) is considered significant.

1.8 Funding for Transportation Improvements

1.8.1 City of Salinas Traffic Impact Fee

The City of Salinas adopted the Salinas Traffic Fee Ordinance (TFO) program in August 1987. The fee program links increases in traffic generated by new development to the cost of transportation improvements that would be required to mitigate the traffic impacts caused by the new development.

The program included rules and regulations for the collection of fees and a list of transportation improvement projects to fund. The TFO was updated in 2005 to adjust the fee based on completed projects, revised development projections, and revised project descriptions and cost estimates.

The Salinas Ag-Industrial Center project was not a known project when the Salinas TFO was developed. Therefore the impacts associated with the project and the collections of fees from the project were not accounted for in the TFO.

Payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts within the City if the required improvements are identified in the TFO. If required improvements are not identified in the TFO, then it is recommended that the improvements and corresponding costs be added to the TFO so that project impacts can be mitigated by payment of an adjusted fee.

The fee program does not cover the cost to correct existing deficiencies, or deficiencies that would be caused or exacerbated by traffic generated by projects that have already been approved but not yet constructed at the time the updated TFO was adopted (referred to as background traffic). As a result, the improvement projects listed in the TFO may not be sufficient to improve levels of service (LOS) to the LOS standard prescribed by the City's General Plan (LOS D).

1.8.2 TAMC Fee

The Transportation Agency for Monterey County (TAMC) and its member jurisdictions recently adopted a county-wide, regional impact fee that will cover the costs for studies and construction of many improvements throughout Monterey County. This impact fee, which went into effect on August 27, 2008, will be applied to all new development within Monterey County. The governing document for the fee is the *Regional Impact Fee Nexus Study Update* (March 26, 2008) prepared by Kimley-Horn Associates, Inc.

1.8.3 Greater Salinas Area MOU and Monterey County Traffic Impact Fee

In August, 2006 the City of Salinas and the County of Monterey entered into an agreement known as the Greater Salinas Area Memorandum of Understanding (MOU). As stated in a report dated August 29, 2006 to the Salinas City Council and the Monterey County Board of Supervisors, "The MOU establishes a broad policy framework to govern and facilitate land use decisions in the Greater Salinas Area. The MOU must be viewed in its entirety as it is intended to aid the community, the City, and the County in the mutual goal of achieving orderly, consistent, and reasoned land use determinations in the Greater Salinas Area recognizing the responsibilities of both the County and City to assure orderly development in their respective jurisdictions."

Item #3 in the MOU specifically refers to the proposed Uni-Kool project (i.e., the Salinas Ag-Industrial Center project) and acknowledges the County's support of a future City Sphere of Influence / Annexation proposal to the south of the City's existing City Limit "for the exclusive purpose of agricultural processing and processing capacity…"

Item #9 in the MOU states "City and County agree to support fees and taxes needed to mitigate the collective impact of new and existing development on the regional transportation system to the extent that the fees and taxes reflect the overall financing program adopted by TAMC".

Item #10 in the MOU states that "City and County agree that the County will develop a County-wide Traffic Impact fee program for the improvement of major County roads in accordance with the County adopted General Plan." The County will consult with TAMC and Monterey County cities in the development of the County fee program. In order to prevent the need for an ad hoc traffic impact fee on developments within the City of Salinas, the County's traffic impact fee program will make the Greater Salinas Area a priority, and the County will attempt to complete a nexus study and hearing process within 18 months of adoption of the 2006 County General Plan, which is currently in the review process.

1.8.4 Other Fair-Share Fees

Separate fair-share contributions may be required for recommended improvements that are not included within the local fee or identified within the TAMC fee program.

2 Existing Traffic Conditions

This chapter presents a description of the existing road network, existing traffic volumes, intersection levels of service, and an overview of traffic flow conditions within the study area under existing traffic conditions.

2.1 Existing Road Network

The Salinas Ag-Industrial Center project site is bounded by Abbott Street to the east, agricultural lands to the west, Harris Road to the south, and commercial/industrial land uses to the north. Primary regional access to the project site is provided by U.S. 101; other important regional highways include State Routes 68, 156, and 183. Important arterial and collector streets relevant to the Salinas Ag-Industrial Center traffic impact analysis include Abbott Street, Airport Boulevard, Hansen Street, Harkins Road, Harris Road, Sanborn Road and Spreckels Boulevard.

A brief description of the street network follows.

Abbott Street is a 4-lane arterial between John Street (SR 68) in central Salinas and Harris Road in southern Salinas. Approximately one half mile south of Harris Road, Abbott Street narrows to three lanes, with one lane in the southbound direction and two lanes in the northbound direction. Abbott Street runs generally parallel to U.S. 101 between Harkins Road and U.S. 101. South of the Salinas City Limits, Abbott Street becomes a rural County road and links with U.S. 101 at the Abbott Street interchange. Only a northbound offramp and a southbound onramp are provided at this interchange. Abbott Street is part of the assigned City of Salinas truck route between Sanborn Road and Harkins Road.

Airport Boulevard is a 2-lane, north-south arterial (with a two-way left-turn lane along portions of it) that widens to four lanes at some locations. Airport Boulevard is part of the assigned City of Salinas truck route between Abbott Street and Skyway Boulevard.

Blanco Road is a major arterial with turn channelization at key intersections. It varies between 2 and 4 lanes and is located on the south side of the City of Salinas. Blanco Road turns into South Sanborn Road north of Abbott Street. Blanco Road is part of the assigned City of Salinas truck route between Davis Road and Abbott Street.

Davis Road for the most part forms the western limit line for the City of Salinas. Davis Road is a two-lane road from Reservation Road to Market Street, and a four-lane road from Market Street to its terminus at Boronda Road. Davis Road is part of the assigned City of Salinas truck route between Blanco Road and Boronda Road.

Hansen Street is a two lane arterial. It serves as a link between the Airport Boulevard interchange and Harkins Road, where it is part of the assigned City of Salinas truck route.

Harkins Road is a 2-lane rural County road between the town of Spreckels and the Salinas City Limits. Approximately one-third mile north of the City Limits, it becomes a 4-lane arterial with

a two-way left-turn lane and left-turn lanes at key intersections. Harkins Road is part of the assigned City of Salinas truck route between Abbott Street and Hansen Street.

Harris Road is a 2-lane rural County road that begins just east of Hatton Avenue in Spreckels and terminates at Abbott Street. Harris Road provides direct access to the project site.

Hunter Lane is a two lane rural County road that runs east/west between SR 68 and Harkins Road.

Spreckels Boulevard is a 2-lane rural County road with left-turn lanes provided at key intersections. It provides access to the town of Spreckels. It extends in an east/west direction, indirectly connecting State Route 68 to U.S. 101 via Abbott Street. Spreckels Boulevard turns into Harris Road just east of Hatton Avenue in the town of Spreckels.

Sanborn Road is a four-lane, north-south arterial with turn channelization at key intersections. Sanborn Road begins at the terminus of East Blanco Road, where it intersects with Abbott Street, and continues north through the east side of Salinas, where it terminates at East Boronda Road. Sanborn Road is part of the assigned City of Salinas truck route between Abbott Street and Laurel Drive.

State Route 68 (Monterey-Salinas Highway) connects State Route 1 in Monterey and U.S. 101 in Salinas. SR 68 is a 4-lane highway between the Spreckels Boulevard interchange and Blanco Road in the City of Salinas. North of Blanco Road in Salinas, SR 68 becomes a 4-lane arterial along South Main and John Streets. It serves as a commuter route between Salinas and the Monterey Peninsula, and functions as a scenic tourist route to the Monterey Peninsula.

State Route 156 (west) is a four-lane, east-west freeway from SR 1 to Castroville Boulevard. In the immediate Castroville vicinity, it provides full access to Castroville at the Merritt Street diamond interchange. It narrows to a two-lane rural highway east of Castroville Boulevard and extends to U.S. 101 in Prunedale.

State Route 183 is a two-lane, north-south highway that provides a link between Castroville and the City of Salinas. State Route 183 continues from W. Market Street to N. Main Street within the City of Salinas.

Terven Avenue is a two-lane, east-west collector extending from Sanborn Road to Airport Boulevard with a posted speed limit of 25 mph. Its intersection with Sanborn Road and the U.S. 101 southbound ramps is signalized.

U.S. 101 is a north-south freeway with two mainline lanes in each direction in the project study area. Auxiliary lanes are provided in the northbound and southbound directions between the Sanborn Road and Airport Boulevard interchanges. U.S. 101 has a posted speed limit of 65 mph in the project vicinity.

2.2 Existing Traffic Volumes

To establish existing traffic flow conditions during the non-harvest season, new traffic counts were conducted at the study intersections during the weekday AM (7:00 – 9:00 a.m.) and PM (4:00 – 6:00 p.m.) peak hours in February and March, 2008. The dates of the traffic counts at each study intersection are shown in **Exhibit 4**. Existing AM and PM non-harvest season traffic volumes are presented in **Diagrams 1** and **2** and are included in **Appendix B**.

To establish existing traffic flow conditions during the harvest season, new traffic counts were conducted at the study intersections during the weekday AM (7:00 – 9:00 a.m.) and PM (4:00 – 6:00 p.m.) peak hours in June 2008. The dates of the traffic counts at each study intersection are shown in **Exhibit 4**. Existing AM and PM harvest season traffic volumes are presented in **Diagrams 3** and **4** and are included in **Appendix B**.

Since the existing non-harvest season counts were not collected on the same day, and in some instances were collected in different months, the counts did not necessarily balance between intersections. The existing non-harvest season traffic volumes were therefore balanced where appropriate to account for variations in the counts. The existing harvest season counts were also balanced where appropriate to account for variations in the counts.

2.3 Existing Non-Harvest Season Intersection Operations

Existing non-harvest season AM and PM peak hour intersection levels of service are summarized in **Exhibit 5A**. LOS calculation sheets for existing off-peak season traffic conditions are included as **Appendix C1**. LOS calculation sheets for existing off-peak season conditions with recommended improvements are included in **Appendix C2**. A summary of all recommended intersection improvements is included in **Exhibit 6A**.

A description of each intersection that operates deficiently under existing non-harvest season traffic conditions follows below. Recommended improvements required to correct existing deficiencies are discussed in italics below the description of each intersection's operations.

The following operational deficiencies are caused by existing traffic on the study road network. Since this scenario does not include traffic that would be generated by the proposed project, the project is not responsible for providing any of these recommended improvements.

1. SR 68 / Blanco Road (Int. #1) – Signalized

This intersection operates at an overall LOS D during both the AM and PM peak hours under existing non-harvest season traffic conditions. The following improvements are recommended under existing non-harvest season conditions (RI #1):

1. *Add a second northbound SR 68 left-turn lane.*
2. *Convert the northbound SR 68 right-turn to a free right-turn. This will require a receiving lane on eastbound Blanco Road.*
3. *Add a third westbound Blanco Road left-turn lane. This will require a receiving lane on southbound SR 68.*

4. *Convert the westbound Blanco Road shared through/right-turn lane to a through lane.*
5. *Add a dedicated westbound Blanco Road right-turn lane.*
6. *Adjust signal timing and include right-turn overlap phasing on the southbound, eastbound and westbound approaches.*

Improvements 1, 4 and 5 are included in the City of Salinas TFO (#59). Improvements 2, 3 and 6 would also be required to improve operations to an acceptable level of service. The City will need to consider several challenges at this intersection. For example, widening the south leg of the intersection to accommodate a third receiving lane on southbound SR 68 may require the relocation of PG&E electrical equipment located on the southeast corner of the intersection, and the addition of a westbound right-turn lane would require the reconfiguration of the parking lot on the northeast corner of the intersection. For these reasons, the City must determine whether or not the recommended improvements are feasible.

2. Cooper Road / Blanco Road (Int. #37) – Stop Controlled (SB)

The minor street approach of this intersection operates at LOS F during both peak hours under existing non-harvest season traffic conditions. The following improvements are recommended under existing non-harvest season conditions (RI #2):

1. *Widen and restripe southbound Cooper Road to one left-turn lane and one right-turn lane.*
2. *Add a median acceleration lane on the east leg of the intersection to facilitate southbound left-turns.*

The County is considering a westbound Blanco Road right-turn lane at this intersection. Although it would improve operations at this intersection, the intersection would operate at an acceptable level of service without a dedicated westbound right-turn lane; therefore, it has not been included in the analysis.

Improvements at this intersection are not currently included in any fee program. This intersection operates deficiently under existing conditions and is within the County's responsibility and jurisdiction. The County should include the preceding improvements at this intersection in their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

3. Davis Road / Blanco Road (Int. #38) – Signalized

This intersection operates at an overall LOS D during the PM peak hour under existing non-harvest season traffic conditions. The following improvements are recommended under existing non-harvest season conditions (RI #3):

1. *Convert the northbound Davis Road shared through/right-turn lane to a through lane.*
2. *Add a dedicated northbound Davis Road right-turn lane.*
3. *Add a second southbound Davis Road left-turn lane.*
4. *Add a second southbound Davis Road right-turn lane.*
5. *Add a third eastbound Blanco Road left-turn lane.*
6. *Convert the eastbound Blanco Road shared through/right-turn lane to a through lane.*

7. *Add a dedicated eastbound Blanco Road right-turn lane.*
8. *Convert southbound and westbound right-turns to overlap phasing.*

Improvements at this intersection are included in the City's TFO (#26, #41) and the TAMC Regional Traffic Impact Fee (#8). In addition, the County should include these improvements in their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

4. U.S. 101 / Spence Road (Int. #44) – Stop Controlled (WB)

The minor street approach of this intersection operates at LOS F during the PM peak hour under existing non-harvest season traffic conditions. The following improvements are recommended under existing non-harvest season conditions (RI #4):

1. *Eliminate intersection and construct frontage road system.*

Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar. This would result in the elimination of this intersection.

2.4 Existing Non-Harvest Season Road Segment Operations

Existing non-harvest season AM and PM peak hour levels of service on the study road segments are tabulated in **Exhibit 7A**. Freeway ramp, weaving, and non-freeway roadway segment volumes are based upon the intersection turning volumes shown on **Diagrams 1** and **2** in **Appendix B**. Under all scenarios the mainline freeway segment volumes were derived from the U.S. 101 / Gould Road and U.S. 101 / Spence Road intersection volumes, as well as the ramp intersections.

Threshold volumes to determine the levels of service on specific types of roads as provided in **Appendix A4** were used under all scenarios in the evaluation of the non-freeway road segments and ramps; these serve primarily as a general guide as to whether major roadway widening is required. However, other factors may affect traffic flow conditions on roadway segments, including intersection channelization design, type of traffic control devices, bicycle and pedestrian volumes, driveway activities, average travel speeds, and on-street parking activities.
Nearly all of the study road segments, freeway segments and ramps evaluated operate at acceptable levels of service under existing non-harvest traffic conditions. A discussion of the traffic operations for the road and freeway segments and ramps with operational deficiencies under existing non-harvest season traffic conditions follows. Recommended road segment improvements are discussed in italics below the description of each segment's operations, and are shown on **Exhibits 7A and 7B**.

The following operational deficiencies are caused by existing traffic on the study road network. Since this scenario does not include traffic that would be generated by the proposed project, the project is not responsible for providing any of these recommended improvements.

Road Segments

1. Blanco Road
    a. Cooper Road – Davis Road (Seg. #3a). This segment operates at LOS E during the AM and PM peak hours. The following improvements are recommended under existing non-harvest season conditions (RI #5):

        i. Widen to a 4-lane expressway.

        Improvements on this road segment are included in the City of Salinas TFO (#26 and #41).

2. Davis Road
    a. Blanco Road – Ambrose Drive (Seg. #4b). This segment operates at LOS E during the AM and PM peak hours. The following improvements are recommended under existing non-harvest season conditions (RI #6):

        i. Widen to a 4-lane expressway.

        Improvements on this road segment are included in the TAMC fee (#8).

3. SR 156
    a. Castroville Boulevard – U.S. 101 (Seg. #17b). This segment operates at LOS E during the AM and PM peak hours. The following improvements are recommended under existing non-harvest season conditions (RI #7):

        i. Widen and upgrade to a 4-lane freeway.

        Improvements on this road segment are included in the TAMC fee (#3).

Freeway Segments

All of the study freeway segments operate at acceptable levels of service under existing non-harvest season traffic conditions.

Freeway Ramps

All of the study freeway ramps operate at acceptable levels of service under existing non-harvest season traffic conditions.

Weaving Segments

The results of the weaving analysis are discussed in Chapter 11.

2.5 Existing Harvest Season Intersection Operations

Existing harvest season AM and PM peak hour intersection levels of service are summarized in **Exhibit 5A**. LOS calculation sheets for existing harvest season traffic conditions are included as **Appendix D1**. LOS calculation sheets for existing harvest season conditions with recommended improvements are included as **Appendix D2**. A summary of all recommended intersection improvements is included in **Exhibit 6A**.

A description of each intersection that operates deficiently under existing harvest season traffic conditions follows below. Recommended improvements required to correct existing deficiencies are discussed in italics below the description of each intersection's operations.

The following operational deficiencies are caused by existing traffic on the study road network. Since this scenario does not include traffic that would be generated by the proposed project, the project is not responsible for providing any of these recommended improvements.

1. SR 68 / Blanco Road (Int. #1) – Signalized

This intersection operates at an overall LOS D during both the AM and PM peak hours under existing harvest season traffic conditions. The following improvements are recommended under existing harvest season conditions (RI #1):

1. *Same as existing non-harvest season.*

2. Sanborn Road / Fairview Avenue-U.S. 101 NB Offramp (Int. #6) – Stop Controlled (EB & WB)

This intersection operates at an overall LOS F during the PM peak hour under existing harvest season traffic conditions. The minor street approach operates at LOS E and LOS F during the AM and PM peak hours, respectively. The following improvements are recommended under existing harvest season conditions (RI #10):

1. *Consider signalizing the intersection, although gaps are created by the signal at the Sanborn Road / U.S. 101 SB Ramps intersection.*
2. *Lengthen the southbound Sanborn Road left turn-lane pocket.*

Improvements along the Sanborn Road corridor are included in the City of Salinas TFO (#32 and #37).

3. Sanborn Road / Elvee Drive-U.S. 101 SB Ramps (Int. #8) – Signalized

This intersection operates at an overall LOS D during the PM peak hour under existing harvest season traffic conditions. The following improvements are recommended under existing harvest season conditions (RI #11):

1. *Close Elvee Drive at Sanborn Road and extend the north end to Work Street.*

Improvements along the Sanborn Road corridor and the extension of Elvee Drive to Work Street are included in the City of Salinas TFO (#37 and #66).

4. Sanborn Road / Work Street-Terven Avenue (Int. #9) – Signalized

This intersection operates at an overall LOS E during the PM peak hour under existing harvest season traffic conditions. The following improvements are recommended under existing harvest season conditions (RI #12):

1. *Restripe eastbound Work Street to accommodate two left-turn lanes and one shared through/right.*
2. *Widen and restripe westbound Terven Avenue to accommodate two left-turn lanes and one shared through/right.*
3. *Convert east-west split phasing to protected left-turn phasing.*
4. *Adjust signal timing.*

Improvements along the Sanborn Road corridor are included in the City of Salinas TFO (#37).

5. Airport Boulevard / De la Torre Street (Int. #12) – Signalized

This intersection operates at an overall LOS D during both the AM and PM peak hours under existing harvest season traffic conditions. The following improvements are recommended under existing harvest season conditions (RI #13):

1. *Reconstruct the northbound ramps as planned by the Airport Boulevard interchange project.*

Improvements at this intersection are funded by Caltrans (#0318) and the City of Salinas TFO (#32 and #38).

6. Airport Boulevard / Terven Avenue (Int. #13) – Signalized

This intersection operates at an overall LOS D and LOS E during the AM and PM peak hours, respectively, under existing harvest season traffic conditions. The following improvements are recommended under existing harvest season conditions (RI #14):

1. *Reconstruct the southbound ramps as planned by the ultimate configuration of Airport Boulevard interchange project.*

Improvements at this intersection are planned but not fully funded as Phase 2 of the Caltrans Airport Boulevard interchange project (#0318). Improvements at this intersection are included in the City of Salinas TFO (#32 and #38).

7. Harkins Road / Hansen Street (Int. #15) – Signalized

This intersection operates at an overall LOS D during the AM and PM peak hours under existing harvest season traffic conditions. Although LOS D is acceptable under City of Salinas level of service standards, it is recommended that improvements be implemented at this intersection due to field observations of extensive queuing. The following improvements are recommended under existing harvest season conditions (RI #15):

1. *Restripe northbound Harkins Road to accommodate one left-turn lane, and one shared left/through/right lane on the northbound approach. These improvements would require reconstruction of the existing intersection and traffic signal.*
2. *Restripe the eastbound Hansen Street approach to one shared left/through lane and two right-turn lanes.*
3. *Modify the signal.*

These improvements are not included but are proposed to be added to the City of Salinas TFO. While the preceding improvements would enhance traffic operations at this intersection, it should be noted that the extensive queuing is caused by traffic congestion at the U.S. 101 / Airport Boulevard interchange, which is planned for improvements through a Caltrans PSR (#0318) and the City of Salinas TFO (#32 and #38).

8. Harkins Road / Dayton Street (Int. #18) – Stop Controlled (WB)

Although this intersection operates at an acceptable level of service during the AM and PM peak hours under existing harvest season traffic conditions, improvements are recommended due to the high volume of southbound left-turning vehicles in the AM peak hour. The following improvements are recommended under existing harvest season conditions (RI #16):

1. *Restripe to add a southbound Harkins Road left-turn lane.*

Improvements at this intersection are not included in any fee program.

9. Cooper Road / Blanco Road (Int. #37) – Stop Controlled (SB)

The minor street approach of this intersection operates at LOS F during both peak hours under existing harvest season traffic conditions. The following improvements are recommended under existing harvest season conditions (RI #2):

1. *Same as existing non-harvest season.*

10. Davis Road / Blanco Road (Int. #38) – Signalized

This intersection operates at an overall LOS D during the PM peak hour under existing harvest season traffic conditions. The following improvements are recommended under existing harvest season conditions (RI #3):

1. *Same as existing non-harvest season.*

11. U.S. 101 / Spence Road (Int. #44) – Stop Controlled (WB)

The minor street approach for this intersection operates at LOS F during both the AM and PM peak hours. The following improvements are recommended under existing harvest season conditions (RI #4):

1. *Same as existing non-harvest season.*

2.6 Existing Harvest Season Road Segment Operations

Existing harvest season AM and PM peak hour levels of service on the study road segments are tabulated in **Exhibit 9A**. Freeway ramp, weaving, and non-freeway roadway segment volumes are based upon the intersection turning volumes shown on **Diagrams 3** and **4** in **Appendix B**.

Nearly all of the study road segments, freeway segments and ramps evaluated operate at acceptable levels of service under existing harvest season traffic conditions. A discussion of the traffic operations for the road and freeway segments and ramps with operational deficiencies

follows. Road segment improvements are discussed in italics below the description of each segment's operations, and are shown on **Exhibits 9A and 9B**

.

The following operational deficiencies are caused by existing traffic on the study road network. Since this scenario does not include traffic that would be generated by the proposed project, the project is not responsible for providing any of these recommended improvements.

Road Segments

1. Blanco Road
    a. Cooper Road – Davis Road (Seg. #3a). This segment operates at LOS E during the AM and PM peak hours. The following improvements are recommended under existing harvest season conditions (RI #5):

        i. Same as existing non-harvest season.

2. Davis Road
    a. Blanco Road – Ambrose Drive (Seg. #4b). This segment operates at LOS E during the AM and PM peak hours. The following improvements are recommended under existing harvest season conditions (RI #6):

        i. Same as existing non-harvest season.

3. SR 156
    a. Castroville Boulevard – U.S. 101 (Seg. #17b). This segment operates at LOS D and LOS E during the AM and PM peak hours, respectively. The following improvements are recommended under existing harvest season conditions (RI #7):

        i. Same as existing non-harvest season.

4. SR 183
    a. Espinosa Road – Salinas City Limits (Seg. #18a). This segment operates at LOS D during the AM and PM peak hours. The following improvements are recommended under existing harvest season conditions (RI #17):

        i. Widen to a 4-lane expressway.

        Improvements on this road segment are not included but should be added to the TAMC fee.

Freeway Segments

All of the study freeway segments operate at acceptable levels of service under existing harvest season traffic conditions.

Freeway Ramps

All of the study freeway ramps operate at acceptable levels of service under existing harvest season traffic conditions.

Weaving Segments

The results of the weaving analysis are discussed in Chapter 11.

2.7 Airport Boulevard Interchange

The U.S. 101 / Airport Boulevard interchange is proposed to be completely reconstructed. The existing interchange includes a number of substandard features. These include on and off ramp links in both northbound and southbound directions, left-turn storage adequacy, shoulder widths and ramp intersection capacity. The current interchange configuration includes southbound off and on hook ramps that are the extension of Airport Boulevard. The ramps terminate at Terven Avenue, which is a signalized intersection. The ramps and intersections are north of the existing bridge over U.S. 101 that connects the east and west sides of the interchange. The northbound ramps are essentially hook ramps that intersect Airport Boulevard as the west leg of the Airport Boulevard / De la Torre Street intersection.

The ultimate reconstructed interchange will include the complete removal of the existing ramps and bridge. The northbound and southbound ramps, which are currently located north of the Airport Boulevard bridge, will be relocated to the south. In addition, additional capacity will be provided at the ramp junctions with Airport Boulevard. Terven Avenue is also proposed to be relocated to the west of its current location to provide better spacing between the Terven Avenue / southbound ramps intersection and the De la Torre Street / northbound ramps intersection on the east side of the freeway. In addition to improving the operations of the existing ramps and ramp junctions with the city street system, the relocation of the ramps to the south of their current location will provide a longer weaving section between the Airport Boulevard interchange and the Sanborn Road interchange to the north. Currently there is only about one-half mile spacing. The relocation of the ramps to the south will create the equivalent of a one mile spacing from the center of the hook ramps on both the northbound and southbound sides of the freeway.

The interchange reconstruction has been planned for many years. The reconstruction project involves the acquisition of a substantial amount of existing developed real estate at a very high cost. The funding that is currently available will only facilitate the reconstruction of the northbound ramps, which are less expensive to construct due to their relocation on to undeveloped agricultural lands. This phase of construction is expected to be implemented by the year 2012. Final design is already under way and will be completed within the next year. The southbound ramps and bridge reconstruction, on the other hand, is not expected to occur until about the year 2020 due to funding short falls. The previously planned bridge reconstruction is now expected to include only a bridge widening to three lanes which will occur as a part of the first phase of construction that will be completed in the next several years.

The reconstructed interchange is the mitigation for the deficiencies at the Airport Boulevard intersections with Terven Avenue and the southbound ramps as well as De la Torre Street with the northbound ramps. This study also evaluates the lane configurations that will be necessary to achieve and maintain LOS C through the buildout of the General Plan, including the Salinas Ag-Industrial Center. A concept plan of the ultimate interchange is included as **Exhibit 8**. The currently proposed modifications to the northbound ramps and widening of the existing bridge that will be constructed by 2012 is included as **Exhibit 9.**

2.8 Existing Truck Routes

The City of Salinas has adopted truck routes within the City Limits. Truck routes in the vicinity of the project site include portions of Abbott Street, Harkins Road, and Airport Boulevard. **Exhibit 10** illustrates the existing truck routes within the City of Salinas.

2.9 Existing Highway-Rail Crossings

There are a total of five highway-rail crossings within the study street network. Two are grade-separated and three are at-grade highway-rail crossings. The locations of the highway-rail crossings are shown in **Exhibit 11**. The following is a description of each of the highway-rail crossings in the vicinity of the project site.

Location #1 – Harkins Road Crossing North of Abbott Street (at-grade) – The northerly Harkins Road highway-rail crossing is an at-grade crossing and is located approximately 600 feet north of the Harkins Road / Abbott Street intersection and 530 feet south of the Harkins Road / Hansen Street intersection. This crossing is controlled by flashing light signals and gates.

Location #2 – Abbott Street Crossing (at-grade) – The highway-rail crossing at Abbott Street is an at-grade crossing and is located immediately east of the Growers Street / Abbott Street intersection and approximately 1000 feet west of the Harkins Road / Abbott Street intersection. This crossing is controlled by flashing light signals and gates.

Location #3 – Harkins Road Crossing South of Abbott Street (at-grade) – The southerly Harkins Road highway-rail crossing is an at-grade crossing and is located approximately 230 feet north of the Harkins Road / Nutting Street intersection and 930 feet south of the Harkins Road / Dayton Street intersection. This crossing is controlled by flashing light signals and gates.

Location #4 – Sanborn Road Crossing (grade-separated) – The highway-rail crossing at Sanborn Road is a grade-separated crossing and is located approximately 1,400 feet north of Sanborn Road / Abbott Street intersection.

Location #5 – Abbott Street / U.S. 101 Crossing (grade-separated) – The highway-rail crossing at the Abbott Street / U.S. 101 interchange is a grade-separated crossing and is located approximately 2 miles southeast of the Harris Road / Abbott Street intersection.

2.10 Existing Transit Services

The primary public transit service in the City of Salinas is the bus service provided by Monterey-Salinas Transit (MST). MST focuses on improving operational conditions through established bus routes and schedules that efficiently meet travel demands, reduce travel times, improve service reliability, and encourage bike-and-ride initiatives. All MST buses are wheelchair accessible and equipped with bike racks. In the vicinity of the project, bus routes are provided along Abbott Street (Route 23, which offers service between Salinas and King City) and Harkins Road (Route 56, which offers service between Salinas and Monterey). **Exhibit 12** illustrates the existing transit service in the vicinity of the project site.

2.11 Existing Bicycle Facilities

The City of Salinas has adopted a Master Bikeway Plan that designates routes along roadways that can be used by bicycling commuters and recreational riders for safe access to major employers, shopping centers and schools. Consistent with State and Federal designations, there are three basic types of bicycle facilities in Salinas. Each type is described below:

- Bike path (Class I) - A completely separate right-of-way designed for the exclusive use of cyclists and pedestrians, with minimal crossings for motorists.
- Bike lane (Class II) - A lane on a regular roadway, separated from the motorized vehicle right-of-way by paint striping, designated for the exclusive or semi-exclusive use of bicycles. Bike lanes allow one-way bike travel. Through travel by motor vehicles or pedestrians is prohibited, but crossing by pedestrians and motorists is permitted.
- Bike route (Class III) - Provides shared use of the roadway with motorists, designated by signs or permanent markings.

Most bicycle routes in Salinas are part of the existing and proposed street and highway system, being either lanes on roadway shoulders or designated routes that mix with the traffic. In the vicinity of the project site, Class II bicycle lanes are currently provided on Abbott Street north of Harkins Road, and on Harkins Road between Hansen Street and the Salinas City Limits. Monterey County is proposing to designate Harkins Road (which becomes Hatton Avenue in the town of Spreckels) as a Class III bicycle route between the Salinas City Limits and Spreckels Boulevard, and Spreckels Boulevard as a Class II bicycle lane between SR 68 and Hatton Avenue in the town of Spreckels. **Exhibits 13A and 13B** illustrate the City of Salinas and Monterey County Bikeways Maps, respectively.

3 Background No Project Traffic Conditions

This chapter presents a description of the traffic network, traffic volumes, and intersection and road segment levels of service within the study area under background (existing plus approved projects) traffic conditions without the proposed project.

3.1 Approved Projects Trip Generation, Distribution and Assignment

A number of projects have already been approved by the City of Salinas, and other agencies within close proximity to the study area; these approved projects have not yet been fully constructed and occupied. In addition, approved projects in other parts of Monterey County will generate additional local and through traffic that will impact the study area. **Appendix E** includes trip generation tables for approved projects and a regional map showing their locations in a regional context. Information on approved projects was obtained from recent traffic studies performed for other projects and from lists provided by City of Salinas and County of Monterey staff.

The approved projects' trips were distributed onto the study road network and assigned to the study intersections. The background (approved projects) AM and PM peak hour trip assignments are shown on **Diagrams 5** and **6** in **Appendix B**.

The trips that would be generated by the approved projects were assigned to the study area road network and subsequently added to the existing harvest season traffic volumes to obtain the background traffic conditions volumes, which are shown on **Diagrams 7** and **8** in **Appendix B**.

3.2 Background No Project Intersection Operations

Background no project AM and PM peak hour intersection levels of service are summarized in **Exhibit 5A**. LOS calculation sheets are included as **Appendix F1**. LOS calculation sheets with recommended improvements are included as **Appendix F2**. A summary of all recommended intersection improvements is included in **Exhibit 6A**.

A description of each intersection that will operate deficiently under background no project traffic conditions follows below. Recommended improvements are discussed in italics below the description of each intersection's operations.

The following operational deficiencies would be caused by existing traffic in addition to background traffic growth (i.e., traffic generated by approved projects) on the study road network. Since this scenario does not include traffic that would be generated by the proposed project, the project is not responsible for providing any of these recommended improvements.

1. SR 68 / Blanco Road (Int. #1) – Signalized

This intersection will operate at an overall LOS D and LOS E during the AM and PM peak hours, respectively, under background traffic conditions. The following improvements are recommended under background no project conditions (RI #1):

1. *The same improvements recommended under existing non-harvest season conditions are recommended under background no project conditions. However, these would only improve operations to level of service D during the PM peak hour.*

2. SR 68 / Hunter Lane (Int. #2) – Stop Controlled (WB)

The minor street approach of this intersection will operate at LOS F during the AM peak hour under background no project traffic conditions.

Options for improving operations at this intersection include consolidating access points and eliminating left-turns into and out of the driveways and minor intersections along SR 68 between Foster Road and Blanco Road, or the installation of a median barrier that would to allow left-turns into the minor streets but prevent left-turns out. These options would improve safety and the levels of service at the intersections along the corridor but would result in traffic diversions and the need to accommodate U-turns along the corridor. As pointed out by Monterey County Department of Public Works staff, the corridor merits a systems analysis to address these impacts, which is beyond the scope of this study. Caltrans should consider commissioning a systems analysis of the corridor.

It should be noted that installation of a traffic signal would improve operations at this intersection to an acceptable level of service. However, it would also have an adverse impact on the through traffic on SR 68 and could cause an increase in rear-end collisions. As a result, a traffic signal is not recommended for this intersection.

3. Sanborn Road / Fairview Ave.-U.S. 101 NB Offramp (Int. #6) – Stop Controlled (EB & WB)

This intersection will operate at an overall LOS F during both the AM and PM peak hours under background traffic conditions. The minor street approach will also operate at LOS F during both the AM and PM peak hours. The following improvements are recommended under background no project conditions (RI #18):

1. *Same as existing harvest season. In addition:*
2. *Add an eastbound U.S. 101 Offramp right-turn lane.*
3. *Add a third northbound Sanborn Road through lane.*
4. *Add a third southbound Sanborn Road through lane.*

Improvements along the Sanborn Road corridor are included in the City of Salinas TFO (#32 and #37).

4. Sanborn Road / Elvee Drive-U.S. 101 SB Ramps (Int. #8) – Signalized

This intersection will operate at an overall LOS E during the PM peak hour under background traffic conditions. The following improvements are recommended under background no project conditions (RI #19):

1. *Same as existing harvest season. In addition:*
2. *Widen the southbound U.S. 101 offramp to accommodate two left-turn lanes, one shared through/right turn lane, and one dedicated right-turn lane.*

Improvements along the Sanborn Road corridor are included in the City of Salinas TFO (#32 and #37).

5. Sanborn Road / Work Street-Terven Avenue (Int. #9) – Signalized

This intersection will continue to operate at an overall LOS E during the PM peak hour under background traffic conditions. The following improvements are recommended under background no project conditions (RI #12):

1. *Same as existing harvest season.*

Improvements along the Sanborn Road corridor are included in the City of Salinas TFO (#37).

6. Airport Boulevard / De la Torre Street (Int. #12) – Signalized

This intersection will continue to operate at an overall LOS D during both the AM and PM peak hours under background traffic conditions. The following improvements are recommended under background no project conditions (RI #13):

1. *Same as existing harvest season.*

7. Airport Boulevard / Terven Avenue (Int. #13) – Signalized

This intersection will operate at an overall LOS E during the PM peak hour under background traffic conditions. The following improvements are recommended under background no project conditions (RI #14):

1. *Same as existing harvest season.*

8. Harkins Road / Hansen Street (Int. #15) – Signalized

This intersection operates at an overall LOS D during the AM and PM peak hours under background traffic conditions. The following improvements are recommended under background no project conditions (RI #15):

1. *Same as existing harvest season.*

9. Harkins Road / Dayton Street (Int. #18) – Stop Controlled (WB)

Although this intersection would operate at an acceptable level of service during the AM and PM peak hours, improvements are recommended due to the high volume of southbound left-turning vehicles in the AM peak hour. The following improvements are recommended under background no project conditions (RI #16):

1. *Same as existing harvest season.*

10. U.S. 101 / Hartnell Road Connector (Int. #26) – Stop Controlled (WB)

The minor street approach of this intersection will operate at LOS F during the AM peak hour under background traffic conditions. The following improvements are recommended under background no project conditions (RI #20):

1. *Eliminate intersection and construct frontage road system.*

Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar. This would result in the elimination of this intersection.

11. Cooper Road / Blanco Road (Int. #37) – Stop Controlled (SB)

The minor street approach of this intersection will continue to operate at LOS F during both peak hours under background traffic conditions. The following improvements are recommended under background no project conditions (RI #2):

1. *Same as existing non-harvest season.*

12. Davis Road / Blanco Road (Int. #38) – Signalized

This intersection will operate at an overall LOS D and LOS F during the AM and PM peak hours, respectively, under background traffic conditions. The following improvements are recommended under background no project conditions (RI #21):

1. *Same as existing non-harvest season. In addition:*
2. *Add a second southbound Davis Road through lane.*
3. *Add a second westbound Blanco Road left-turn lane.*
4. *Convert the southbound Davis Road right-turn to a free right turn.*

Improvements at this intersection are included in the City's TFO (#26 and #41) and the TAMC Regional Traffic Impact Fee (#8). In addition, the County should include the segment of Blanco Road in the vicinity of this intersection in their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

13. SR 68 / Hitchcock Road (Int. #39) – Stop Controlled (EB)

The minor street approach of this intersection would operate at LOS F during the PM peak hour under background traffic conditions.

Options for improving operations at this intersection include consolidating access points and eliminating left-turns into and out of the driveways and minor intersections along SR 68 between Foster Road and Blanco Road, or the installation of a median barrier that would to allow left-turns into the minor streets but prevent left-turns out. These options would improve safety and the levels of service at the intersections along the corridor but would result in traffic diversions and the need to accommodate U-turns along the corridor. As pointed out by Monterey County Department of Public Works staff, the corridor merits a systems analysis to address these impacts, which is beyond the scope of this study. Caltrans should consider commissioning a systems analysis of the corridor.

It should be noted that installation of a traffic signal would improve operations at this intersection to an acceptable level of service. However, it would also have an adverse impact on the through traffic on SR 68 and could cause an increase in rear-end collisions. As a result, a traffic signal is not recommended for this intersection.

14. Merrill Street / Abbott Street (Int. #42) – Stop Controlled (NB)

The minor street approach of this intersection will operate at LOS F during the PM peak hour under background traffic conditions. The following improvements are recommended under background no project conditions (RI #22):

1. *Signalize the intersection.*
2. *Add eastbound Abbott Street left-turn lane.*
3. *Add westbound Abbott Street left-turn lane.*

Improvements at this intersection are not included in the City of Salinas TFO. It is proposed that the City add these improvements to the City of Salinas TFO.

15. Skyway Boulevard / E. Alisal Street (Int. #43) – Stop Controlled (NB & SB)

The minor street approach of this intersection will operate at LOS F during the AM peak hour under background traffic conditions. The following improvements are recommended under background no project conditions (RI #23):

1. *Signalize the intersection.*

Improvements along E. Alisal Street are included in the City of Salinas TFO.

16. U.S. 101 / Spence Road (Int. #44) – Stop Controlled (WB)

This intersection will operate at an overall LOS D and LOS F during the AM and PM peak hours, respectively, under background traffic conditions. The minor street approach will continue to operate at LOS F during both the AM and PM peak hours. The following improvements are recommended under background no project conditions (RI #4):

1. *Same as existing non-harvest season.*

3.3 Background No Project Road Segment Operations

Background no project AM and PM peak hour levels of service on the study road segments are tabulated in **Exhibit 7A**. Freeway ramp, weaving, and non-freeway roadway segment volumes are based upon the intersection turning volumes shown on **Diagrams 7** and **8** in **Appendix B**.

A discussion of the traffic operations for the road and freeway segments and ramps with operational deficiencies under background no project traffic conditions follows. Recommended road segment improvements are discussed in italics below the description of each segment's operations, and are shown on **Exhibits 7A** and **7B**.

The following operational deficiencies would be caused by existing traffic in addition to background traffic growth (i.e., traffic generated by approved projects) on the study road

network. Since this scenario does not include traffic that would be generated by the proposed project, the project is not responsible for providing any of these recommended improvements.

Road Segments

1. Airport Boulevard
    a. Terven Avenue – De La Torre Street (Seg. #2b). This segment will operate at LOS D during the PM peak hour. The following improvements are recommended under background no project conditions (RI #24):

        i. Widen to a 4-lane divided arterial.

        Improvements along this road segment are included in the City of Salinas TFO (#38).

2. Blanco Road
    a. Cooper Road – Davis Road (Seg. #3a). This segment will operate at LOS E and LOS F during the AM and PM peak hours, respectively. The following improvements are recommended under background no project conditions (RI #5):

        i. Same as existing non-harvest season.

    b. Davis Road – Alisal Street (Seg. #3b). This segment will operate at LOS F during the PM peak hour. The following improvements are recommended under background no project conditions (RI #25):

        i. Widen to a 4-lane divided arterial.

        Improvements along this road segment are included in the City of Salinas TFO (#41).

3. Davis Road
    a. Hitchcock Road – Blanco Road (Seg. #4a). This segment will operate at LOS D and LOS E during the AM and PM peak hours, respectively. The following improvements are recommended under background no project conditions (RI #26):

        i. Widen to a 4-lane expressway.

        Improvements along this road segment are included in the TAMC fee (#4).

    b. Blanco Road – Ambrose Drive (Seg. #4b). This segment will operate at LOS F during the AM and PM peak hours. The following improvements are recommended under background no project conditions (RI #6):

        i. Same as existing non-harvest season.

4. SR 156
    a. Castroville Boulevard – U.S. 101 (Seg. #17b). This segment will operate at LOS E during the AM and PM peak hours. The following improvements are recommended under background no project conditions (RI #7):

        i. Same as existing non-harvest season.

5. SR 183
    a. Espinosa Road – Salinas City Limits (Seg. #18a). This segment will operate at LOS D and LOS E during the AM and PM peak hours, respectively. The following improvements are recommended under background no project conditions (RI #17):

        i. Same as existing harvest season.

Freeway Segments
All of the study freeway segments will operate at acceptable levels of service under background without project traffic conditions.

Freeway Ramps
All of the study freeway ramps will operate at acceptable levels of service under background without project traffic conditions.

Weaving Segments
The results of the weaving analysis are discussed in Chapter 11.

4 Existing Plus Project Phase 1 Traffic Conditions

This chapter presents a description of the traffic network, traffic volumes, and intersection and road segment levels of service within the study area under existing plus project phase 1 traffic conditions.

It is important to note that no credit was given for the relocation of existing uses within the City to the project site. All of the project-generated traffic was assumed to be new traffic on the local and regional road network. Although it is reasonable to assume that some of the traffic generated by the project will be existing traffic diverted from other parts of the City, the amount would be difficult to quantify. It is also possible that new businesses could eventually occupy existing facilities that are vacated due to the proposed project. As a result, the following analysis is conservative.

4.1 Project Phase 1 Trip Generation

The proposed Salinas Ag-Industrial Center project will include a broad range of agricultural-related land uses dealing with the preservation, processing, and distribution of agricultural products. Two of the dominant industries will be agricultural processing and cooler facilities, both of which will generate significant amounts of truck traffic in addition to employee-related traffic. It was estimated that Phase 1 of the project will occupy approximately 160 acres of the 257-acre project site.

Based on discussions with the City of Salinas and Caltrans, Institute of Transportation Engineers (ITE) trip generation rates for the land use Industrial Park (ITE land use code 130) were used to estimate the project's trip generation. As requested by Caltrans, this is consistent with the *Gonzales Industrial Park Traffic Analysis Report* prepared by Higgins Associates in February 2005.

The ITE describes this category as containing a number of industrial or related facilities, which are "characterized by a mix of manufacturing, service and warehouse facilities with a wide variation in the proportion of each type of use from one location to another. Many industrial parks contain highly diversified facilities – some with a large number of small businesses and others with one or two dominant industries."

The ITE provides trip generation rates for Industrial Parks based on number of employees, square footage, and by acreage. Since the number of employees and the ratio of building coverage to land are not known, the rates by acreage were used to estimate the project's trip generation.

Phase 1 of the proposed project will generate an estimated 10,098 daily trips, with 1,369 trips occurring during the AM peak hour (1,037 in, 332 out) and 1,414 trips occurring during the PM peak hour (387 in, 1,027 out). The trip generation estimate for Phase 1 of the project is shown in **Exhibit 14**.

Operational information regarding daily, AM peak hour and PM peak hour traffic volumes was also provided by the project applicant. These estimates were compared to the volumes derived

from the ITE rates, and were found to be reasonably consistent with the information provided by the project applicant.

4.2 Project Truck Trips

The ITE Trip Generation book (7th Edition, 2003) states that truck trips accounted for 1 to 22 percent of the weekday traffic at the Industrial Park sites they surveyed, with an average of approximately 8 percent for all sites surveyed. To be conservative, it was assumed that trucks would represent 22% of the project's total AM and PM peak hour trip generation (i.e., the high end of the ITE range). To corroborate this assumption Higgins Associates conducted a survey of a neighboring industrial area (approximately 250 acres in size) near the project site and found that truck trips accounted for approximately 25% of the traffic entering and exiting this industrial area. Data collected during the neighboring industrial area survey are included in **Appendix W**.

Agricultural processing and cooler facilities primarily generate truck traffic from two types of trucks; line trucks and field trucks. As the name implies, field trucks are used to transfer raw product from the fields to the processing or cooler facilities. Line trucks are used to ship finished product across the state or country. The ratio of line trucks to field trucks varies depending on the type of product being handled. For instance, partially loaded line trucks may be shipped out if the product being shipped is highly perishable (i.e., waiting to obtain a full load may result in a loss of product).

Based on the allowable land uses within the project and information provided by the project applicant, it was assumed that the proportion of line trucks and field trucks for the Salinas Ag-Industrial Center would be 60% line trucks and 40% field trucks. In order to confirm that this assumption was realistic, several sources were considered.

These sources and their results are summarized in Table 2. Supporting data are included in **Appendix W**. Item #1 in Table 2 is derived from historical data provided by Uni-Kool. The data represents 4 days of truck activity per month for 5 months (for a total of 20 days of data) during the months of May, June, July, August and September 2007 (the peak harvest season months).

Item #2 is from the *D'Arrigo Brothers Traffic Impact and Pavement Analysis* report prepared by Higgins Associates (August 2002). The D'Arrigo Brothers facility consists of coolers and associated office space and is located on Harris Road, approximately 1.5 miles from the proposed project site.

Item #3 is information obtained from a truck survey performed by Higgins Associates in June 2008 at the driveways around the industrial area bordered by Blanco Road, Abbott Street, and Harkins Road, which is adjacent to the project site. This area is approximately 250 acres in size and has a variety of industrial land uses contained within it.

Item #4 is information obtained from a truck survey performed by Higgins Associates at the Abbott Street, Airport Boulevard, and Sanborn Road interchanges on June 25, 2008. The survey, which was conducted during the AM and PM peak hours, was used to determine the percentages

of line trucks and field trucks at these interchanges, as well as to provide information about their distribution characteristics (i.e., whether they were traveling to and from the north or the south).

Table 2.
Proportions of Line Trucks to Field Trucks

	Source	% Line Trucks	% Field Trucks
1	Uni-Kool Data	48%	52%
2	D'Arrigo Brothers TIA	72%	28%
3	Neighboring Area Survey	61%	39%
4	Interchange Survey	59%	41%

From the data presented in Table 2 it was determined that the assumption of 60% line trucks and 40% field trucks was reasonable.

4.3 Project Trip Distribution and Assignment

Employee-based trip distribution percentages were obtained from the Association for Monterey Bay Area Government's (AMBAG) regional travel demand model. Project employment and land use data were coded into the model, which then provided estimates for the employee trip distribution. These percentages were reviewed, and adjustments were made based on knowledge of the local area and engineering judgment. **Exhibit 15A** presents the employee trip distribution percentages as obtained from the AMBAG model, as well as the adjusted percentages, where they differed from the model.

Line truck and field truck trip distributions were derived from the interchange survey referenced in Table 2 and from information provided by the project applicant. The line and field truck distributions were reviewed and approved by City of Salinas staff. **Exhibits 15B and 15C** present the trip distribution percentages for the line trucks and field trucks, respectively.

The AM and PM peak hour trips generated by project phase 1 employees, line trucks and field trucks were assigned to the study intersections and are shown on **Diagrams 9, 10, 11, 13, 14,** and **15** and are included in **Appendix B**. These trips were then combined to obtain the total AM and PM peak hour trips for project phase 1, which are shown on **Diagrams 12** and **16** in **Appendix B**.

Project phase 1 trips were added to the existing harvest season traffic volumes to obtain existing plus project phase 1 traffic volumes, which are shown on **Diagrams 25** and **26** in **Appendix B**.

4.4 Existing Plus Project Phase 1 Intersection Operations

Existing plus project phase 1 AM and PM intersection levels of service are summarized in **Exhibit 5A**. LOS calculation sheets for existing plus project phase 1 traffic conditions are included as **Appendix G1**. LOS calculation sheets for existing plus project phase 1 conditions with recommended improvements are included as **Appendix G2**. A summary of all recommended intersection improvements is included in **Exhibit 6A**.

A description of each intersection that would operate deficiently under existing plus project phase 1 traffic conditions follows below. Recommended improvements are discussed in italics below the description of each intersection's operations.

1. SR 68 / Blanco Road (Int. #1) – Signalized

This intersection would operate at an overall LOS D during the AM and PM peak hours under existing plus project phase 1 traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under existing plus project phase 1 conditions (RI #1):

1. *Same as existing non-harvest season (see Section 2.3)*

   Improvements 1, 4 and 5 are included in the City of Salinas TFO (#59). Improvements 2, 3 and 6 would also be required to improve operations to an acceptable level of service. It is proposed that the City add these improvements to the City of Salinas TFO. If the City adds improvements 2, 3 and 6 to the City of Salinas TFO, the payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection. If the City does not add these improvements to the TFO, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program for improvements 2, 3 and 6 would not exist, the impact would remain significant and unavoidable.

   The City will need to consider several challenges at this intersection. For example, widening the south leg of the intersection to accommodate a third receiving lane on southbound SR 68 may require the relocation of PG&E electrical equipment located on the southeast corner of the intersection, and the addition of a westbound right-turn lane would require the reconfiguration of the parking lot on the northeast corner of the intersection. For these reasons, the City must determine whether or not the recommended improvements are feasible.

2. Sanborn Road / Fairview Ave.-U.S. 101 NB Offramp (Int. #6) – Stop Controlled (EB & WB)

This intersection would operate at an overall LOS F during the PM peak hours under existing plus project phase 1 traffic conditions. The minor street approach would operate at LOS F during both the AM and PM peak hours. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under existing plus project phase 1 conditions (RI #10):

1. *Same as existing harvest season.*

   Payment of traffic impact fees per the City of Salinas TFO (#32 and #37) will mitigate project impacts at this intersection.

3. Sanborn Road / Elvee Drive-U.S. 101 SB Ramps (Int. #8) – Signalized

This intersection would operate at an overall LOS D during the AM and PM peak hours under existing plus project phase 1 traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under existing plus project phase 1 conditions (RI #11):

1. *Same as existing harvest season.*

   Improvements along the Sanborn Road corridor are included in the City of Salinas TFO (#32, #37 and #66). In addition, this intersection is within the responsibility and jurisdiction of Caltrans. Improvements at this intersection should be added to the TAMC fee. If they are, payment of the TAMC fee would mitigate project impacts at this intersection to a less than significant level. If improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of the improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

4. Sanborn Road / Work Street-Terven Avenue (Int. #9) – Signalized

This intersection would operate at an overall LOS E during the PM peak hour under existing plus project phase 1 traffic conditions. Per the City of Salinas significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under existing plus project phase 1 conditions (RI #12):

1. *Same as existing harvest season.*

   Payment of traffic impact fees per the City of Salinas TFO (#37) will mitigate project impacts at this intersection.

5. Airport Boulevard / De la Torre Street (Int. #12) – Signalized

This intersection would operate at an overall LOS D and LOS F during the AM and PM peak hours, respectively, under existing plus project phase 1 traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under existing plus project phase 1 conditions (RI #13):

1. *Same as existing harvest season.*

   Improvements at this intersection are funded by Caltrans (#0318) and the City of Salinas TFO (#32 and #38). Payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection.

6. Airport Boulevard / Terven Avenue (Int. #13) – Signalized

This intersection would operate at an overall LOS D and LOS F during the AM and PM peak hours, respectively, under existing plus project phase 1 traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under existing plus project phase 1 conditions (RI #14):

1. *Same as existing harvest season.*

   Improvements at this intersection are planned but not fully funded as Phase 2 of the Caltrans Airport Boulevard interchange project (#0318). Improvements at this intersection are included in the City of Salinas TFO (#32 and #38). Payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection.

7. Airport Boulevard / Hansen Street (Int. #14) – Stop Controlled (NB & WB)

The minor street approach to this intersection would operate at an LOS F during both the AM and PM peak hours. Per the City of Salinas significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under existing plus project phase 1 conditions (RI #27):

1. *Add a second westbound Hansen Street right-turn lane.*

   Improvements at this intersection are not included in the City of Salinas TFO. It is proposed that the City add this improvement to the City of Salinas TFO. If the City adds this improvement to the City of Salinas TFO, the payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection. If the City does not add this improvement to the TFO, then the project will be responsible for its pro-rata fair-share of this improvement. In that event, because an established improvement program would not exist, the impact would remain significant and unavoidable.

8. Harkins Road / Hansen Street (Int. #15) – Signalized

This intersection would operate at an overall LOS F during PM peak hour under existing plus project phase 1 traffic conditions. Per the City of Salinas significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under existing plus project phase 1 conditions (RI #15):

1. *Same as existing harvest season.*

   While the preceding improvements would enhance traffic operations at this intersection, it should be noted that the extensive queuing is caused by traffic congestion at the U.S. 101 / Airport Boulevard interchange, which is planned for improvements through a Caltrans PSR (#0318) and the City of Salinas TFO (#32 and #38).

   It is proposed that the City add these improvements to the City of Salinas TFO. If the City adds these improvements to the City of Salinas TFO, payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection. If the City does not add these improvements to the TFO, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program would not exist, the impact would remain significant and unavoidable.

9. Harkins Road / Abbott Street (Int. #16) – Signalized

This intersection would operate at an overall LOS E during the AM peak hour under existing plus project phase 1 traffic conditions. Per the City of Salinas significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under existing plus project phase 1 conditions (RI #28):

1. *Add a second southbound Harkins Road left-turn lane.*
2. *Convert the westbound Abbott Street right-turn to include right turn overlap phasing.*

Improvements at this intersection are not included in the City of Salinas TFO. It is proposed that the City add these improvements to the City of Salinas TFO. If the City adds these improvements to the City of Salinas TFO, the payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection. If the City does not add these improvements to the TFO, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program would not exist, the impact would remain significant and unavoidable.

10. Harkins Road / Dayton Street (Int. #18) – Stop Controlled (WB)

Although this intersection would operate at an acceptable level of service during the AM and PM peak hours, improvements are recommended due to the high volume of southbound left-turning vehicles in the AM peak hour. Per the City of Salinas significance criteria the project **would not** have a significant impact at this intersection. The following improvements are recommended under existing plus project phase 1 conditions (RI #16):

1. *Same as existing harvest season.*

Improvements at this intersection are not included in any fee program and no mitigation is required of the project at this intersection. However, the project is proposing to implement this improvement to enhance safety at this intersection.

11. Harris Road / Harris Place (Int. #23) – Stop Controlled (EB & WB)

A fourth (west) leg would be constructed at this intersection with the implementation of the proposed project. Without additional improvements, the minor street approach of this intersection would operate at LOS F during the PM peak hour under existing plus project phase 1 traffic conditions. Per the City of Salinas significance criteria, the project would have a significant impact at this intersection. The project applicant is proposing to design this intersection with the following lane configurations and traffic controls (RI #29):

1. *Signalize intersection.*
2. *Northbound Harris Road approach: One left-turn lane, one shared through/right lane*
3. *Southbound Harris Road approach: One left-turn lane, one through lane, one right-turn lane*
4. *Eastbound Harris Place approach: One left-turn lane, one shared through/right lane*

5. *Westbound Harris Place approach: One shared left/through/right lane*

If the intersection is designed with these lane configurations and traffic controls, the project will not have a significant impact at this location.

12. Street A Project Road / Abbott Street (Int. #27) – Future Project Intersection

This intersection will be created with the implementation of the proposed project. The project applicant is proposing to design this intersection with the following lane configurations and traffic controls (RI #30):

1. *Signalize intersection.*
2. *Northbound Street A Project Road approach: Two left-turn lanes, one right-turn lane.*
3. *Eastbound Abbott Street approach: Two through lanes and one right-turn lane*
4. *Westbound Abbott Street approach: One left-turn lane and two through lanes*

If the intersection is designed with these lane configurations and traffic controls, the project would not have a significant impact at this location.

13. Harris Road / Street B Project Road (Int. #34) – Future Project Intersection

This intersection will be created with the implementation of the proposed project. The project applicant is proposing to design this intersection with the following lane configurations and traffic controls (RI #31):

1. *One-way stop control (EB Street B Project Road approach).*
2. *Northbound Harris Road approach: One left-turn lane and one through lane.*
3. *Southbound Harris Road approach: One through lane and one right-turn lane.*
4. *Eastbound Street B Project Road approach: One left-turn lane and one right-turn lane.*

If the intersection is designed with these lane configurations and traffic controls, the project would not have a significant impact at this location.

14. Cooper Road / Blanco Road (Int. #37) – Stop Controlled (SB)

The minor street approach of this intersection would operate at LOS F during both peak hours under existing plus project phase 1 traffic conditions. Per the Monterey County significance criteria, the project would have a significant impact at this intersection. The following improvements are recommended under existing plus project phase 1 conditions (RI #2):

1. *Same as existing non-harvest season.*

Improvements at this intersection are not currently included in any fee program. This intersection operates deficiently under existing conditions and is within the County's responsibility and jurisdiction. The County should include the recommended improvements at this intersection in their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

If the County adopts an impact fee program that includes these improvements prior to project implementation, payment of the fee will mitigate this impact to a less than significant level. If the County does not adopt an impact fee program including these improvements prior to project implementation, then the project will be responsible for its pro-rata fair-share of these improvements as mitigation as provided in Section 3 of the Agreement Regarding Supplement to the Final Program EIR for the Salinas Future Growth Area between the City of Salinas and the County of Monterey (March 27, 2008). In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (the County) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

15. Davis Road / Blanco Road (Int. #38) – Signalized

This intersection would operate at an overall LOS D during the PM peak hour under existing plus project phase 1 traffic conditions. Per the Monterey County significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under existing plus project phase 1 conditions (RI #21):

1. *Same as background.*

Improvements at this intersection are included in the City's TFO (#26, #41) and the TAMC Regional Traffic Impact Fee (#8). In addition, the County should include these improvements in their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

If the County adopts an impact fee program that includes these improvements prior to project implementation, payment of the fee will mitigate this impact to a less than significant level. If the County does not adopt an impact fee program including these improvements prior to project implementation, then the project will be responsible for its pro-rata fair-share of these improvements as mitigation as provided in Section 3 of the Agreement Regarding Supplement to the Final Program EIR for the Salinas Future Growth Area between the City of Salinas and the County of Monterey (March 27, 2008). In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (the County) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

16. Merrill Street / Abbott Street (Int. #42) – Stop Controlled (NB)

The minor street approach of this intersection would operate at LOS F during the PM peak hour under existing plus project phase 1 traffic conditions. Per the City of Salinas significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under existing plus project phase 1 conditions (RI #22):

1. *Same as background.*

   Improvements at this intersection are not included in the City of Salinas TFO. It is proposed that the City add these improvements to the City of Salinas TFO. If the City adds these improvements to the TFO, payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection. If the City does not add these improvements to the TFO, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program would not exist, the impact would remain significant and unavoidable.

17. Skyway Boulevard / E. Alisal Street (Int. #43) – Stop Controlled (NB & SB)

The minor street approach of this intersection would operate at LOS F during the AM peak hour under existing plus project phase 1 traffic conditions. Per the City of Salinas significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under existing plus project phase 1 conditions (RI #23):

1. *Same as background.*

   Improvements along E. Alisal Street are included in the City of Salinas TFO (#36). Payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection.

18. U.S. 101 / Spence Road (Int. #44) – Stop Controlled (WB)

This intersection would operate at an overall LOS F during the PM peak hour under existing plus project phase 1 traffic conditions. The minor street approach would continue to operate at LOS F during both the AM and PM peak hours. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under existing plus project phase 1 conditions (RI #4):

1. *Same as existing non-harvest season.*

   Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar. This would result in the elimination of this intersection. Payment of the TAMC fee (#7) will mitigate the project impacts at this intersection.[2]

[2] Per CEQA guidelines, a cumulative impact is defined as: "The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present and reasonably foreseeable probable future projects"). In addition, the September Ranch case (Save our Peninsula Committee v. Monterey County Board of Supervisors 87 Cal.App.4th 99, 104 Cal.Rptr.2d 326Cal.App. 6 Dist., 2001.February 15, 2001) defines a cumulative impact as an impact that is not unique to a single project. In regions where regional impact fee programs are in place, Caltrans considers the collection and application of fees for impacts of new development as sufficient to mitigate cumulative impacts to the State Highway System under CEQA. See Appendix Y for Caltrans letter dated February 21, 2008.

4.5 Existing Plus Project Phase 1 Road Segment Operations

Existing plus project phase 1 AM and PM peak hour levels of service on the study road segments are tabulated in **Exhibit 7A**. Freeway ramp, weaving, and non-freeway roadway segment volumes are based upon the intersection turning volumes shown on **Diagrams 25** and **26** in **Appendix B**.

A discussion of the traffic operations for the road and freeway segments and ramps with operational deficiencies under existing plus project phase 1 traffic conditions follows. Recommended road segment improvements are discussed in italics below the description of each segment's operations, and are shown on **Exhibits 7A and 7B**.

Road Segments

1. Airport Boulevard
    a. Terven Avenue – De la Torre Street (Seg. #2b). This segment would operate at LOS F during the PM peak hour. Per Caltrans significance criteria, the project would have a significant impact on this road segment. The following improvements are recommended under existing plus project phase 1 conditions (RI #24):

        i. Same as background.

        Improvements along this road segment are included in the City of Salinas TFO (#38). Payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts on this road segment. Improvements on this road segment are also planned but not fully funded as Phase 2 of the Caltrans Airport Boulevard interchange project (#0318).

2. Blanco Road
    a. Cooper Road – Davis Road (Seg. #3a). This segment would operate at LOS E during the AM and PM peak hours. Per the Monterey County significance criteria, the project **would not** have a significant impact on this road segment. The following improvements are recommended under existing plus project phase 1 conditions (RI #5):

        i. Same as existing non-harvest season.

        No mitigation is required of the project.

3. Davis Road
    a. Blanco Road – Ambrose Drive (Seg. #4b). This segment would operate at LOS E during the AM and PM peak hours. Per the Monterey County significance criteria, the project **would not** have a significant impact on this road segment. The following improvements are recommended under existing plus project phase 1 conditions (RI #6):

i. *Same as existing non-harvest season.*

No mitigation is required of the project.

4. SR 156
   a. Castroville Boulevard – U.S. 101 (Seg. #17b). This segment would operate at LOS D and LOS E during the AM and PM peak hours, respectively. Per the Caltrans significance criteria, the project **would not** have a significant impact on this road segment. The following improvements are recommended under existing plus project phase 1 conditions (RI #7):

      i. *Same as existing non-harvest season.*

      No mitigation is required of the project.

5. SR 183
   a. Espinosa Road – Salinas City Limit (Seg. #18a). This segment would operate at LOS D and LOS E during the AM and PM peak hours, respectively. Per the Caltrans significance criteria, the project would have a significant impact on this road segment under existing plus project phase 1 conditions. The following improvements are recommended under existing plus project phase 1 conditions (RI #17):

      i. *Same as existing harvest season.*

      This road segment is within the responsibility and jurisdiction of Caltrans, and not the City of Salinas. Improvements on this road segment are not included but should be added to the TAMC fee. If these improvements are added to the TAMC fee prior to project implementation, payment of the TAMC fee will mitigate project impacts on this road segment to a less than significant level. If these improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

Freeway Segments

All of the study freeway segments would operate at acceptable levels of service under existing plus project phase 1 traffic conditions.

Freeway Ramps

All of the study freeway ramps would operate at acceptable levels of service under existing plus project phase 1 traffic conditions.

Weaving Segments
The results of the weaving analysis are discussed in Chapter 11.

4.6 Truck Route Recommendations

Research was done to determine if designated truck route facilities exist between U.S. 101 and the proposed project site. The most direct route from U.S. 101 to the project site is via the Airport Boulevard exit. Trucks taking this route would head south on Airport Boulevard to eastbound Hansen Street, southbound Harkins Road, and eastbound Abbott Street to reach the project site. Airport Boulevard, Hansen Street, and Harkins Road are all included in the official City truck route by the City of Salinas. The truck route extends to the intersection of Harkins Road and Abbott Street. The truck route continues on Abbott Street west of Harkins Road, but does not continue east of Harkins Road. The section of roadway along Abbott Street from Harkins Road to the project site should be added to the official City truck route as part of the proposed project.

Due to their proximity to the project site, it is likely that some of the trucks heading to and from the project site will use the existing trucks stops located along Sanborn Road and Terven Avenue. Access to the truck stops can be obtained from U.S. 101 via the S. Sanborn Road and Fairview Avenue exits, and from the Airport Boulevard interchange via Terven Avenue. Sanborn Road is designated as an official City truck route by the City of Salinas. However, Fairview Avenue is not a City truck route. Therefore adequate truck route signage should be installed along northbound U.S. 101 to direct truck traffic to use the Sanborn Road exit instead of the Fairview Avenue exit.

For truck drivers leaving the truck stops, there are several ways to get to the project site. The three most likely routes are described below.

1. One route is to travel northbound on Sanborn Road and take the U.S. 101 southbound on-ramp. Drivers can then take the next exit at Airport Boulevard and follow the same route as described in the first paragraph of this section.

2. A second route is to travel southbound on Sanborn Road, turn left on Abbott Street and continue along Abbott Street to the project site. As previously described, Sanborn Road is designated as an official City truck route. Abbott Street is also designated as an official City truck route between Sanborn Road and Harkins Road. The section of roadway along Abbott Street from Harkins Road to the project site will need to be added to the official City truck route as part of this project.

3. A third route is to travel east on Terven Avenue, turn right on Airport Boulevard, and follow the previously described Airport Boulevard truck route. This is not the recommended truck route to use since Terven Avenue is not designated as an official City truck route.

A field review of existing truck route signage was also performed for this study. The field review found that there are truck route signs on the U.S. 101 off-ramps at Sanborn Road. There

are also truck route signs on three of the approaches of the Abbott Street / Harkins Road intersection (one on the eastbound Abbott Street approach, one on the southbound Harkins Road approach, and one on the northbound Harkins Road approach). It is recommended that additional truck route signage be installed along Airport Boulevard, Hansen Street, Harkins Road, Work Street, Sanborn Road, and Abbott Street in order to better identify the official City truck routes and to discourage cut-through truck traffic on Terven Avenue.

5 Background Plus Project Phase 1 Conditions

This chapter presents a description of the traffic network, traffic volumes, and intersection and road segment levels of service within the study area under background plus project phase 1 traffic conditions.

It is important to note that no credit was given for the relocation of existing uses within the City to the project site. All of the project-generated traffic was assumed to be new traffic on the local and regional road network. Although it is reasonable to assume that some of the traffic generated by the project will be existing traffic diverted from other parts of the City, the amount would be difficult to quantify. It is also possible that new businesses could eventually occupy existing facilities that are vacated due to the proposed project. As a result, the following analysis is conservative.

5.1 Background Plus Project Phase 1 Intersection Operations

Background conditions AM and PM peak hour traffic volumes and the project phase 1 AM and PM peak hour trip assignments were combined to obtain background plus project phase 1 traffic volumes, which are shown on **Diagrams 27** and **28** in **Appendix B**. Background plus project phase 1 AM and PM intersection levels of service are summarized in **Exhibit 5A**. LOS calculation sheets for background plus project phase 1 traffic conditions are included as **Appendix H1**. LOS calculation sheets for background plus project phase 1 conditions with recommended improvements are included as **Appendix H2**. A summary of all recommended intersection improvements is included in **Exhibit 6A**.

A description of each intersection that would operate deficiently under background plus project phase 1 traffic conditions follows below. Recommended improvements are discussed in italics below the description of each intersection's operations.

1. SR 68 / Blanco Road (Int. #1) – Signalized

This intersection would operate at an overall LOS D and LOS E during the AM and PM peak hours, respectively, under background plus project phase 1 traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under background plus project phase 1 conditions (RI #1):

1. *Same as existing non-harvest season (see Section 2.3)*

Improvements 1, 4 and 5 are included in the City of Salinas TFO (#59). Improvements 2, 3 and 6 are also recommended, but would only improve operations to level of service D during the PM peak hour. It is proposed that the City add these improvements to the City of Salinas TFO. If the City adds improvements 2, 3 and 6 to the City of Salinas TFO, the payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection. If the City does not add these improvements to the TFO, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program for

improvements 2, 3 and 6 would not exist, the impact would remain significant and unavoidable.

The City will need to consider several challenges at this intersection. For example, widening the south leg of the intersection to accommodate a third receiving lane on southbound SR 68 may require the relocation of PG&E electrical equipment located on the southeast corner of the intersection, and the addition of a westbound right-turn lane would require the reconfiguration of the parking lot on the northeast corner of the intersection. For these reasons, the City must determine whether or not the recommended improvements are feasible.

2. SR 68 / Hunter Lane (Int. #2) – Stop Controlled (WB)

The minor street approach of this intersection would operate at LOS F during the AM peak hour under background plus project phase 1 traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection.

This intersection is within the responsibility and jurisdiction of Caltrans, and not the City of Salinas. Improvements along this corridor should be added to the TAMC fee. If they are, payment of the TAMC fee would mitigate project impacts at this intersection to a less than significant level. If improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of the improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

Options for improving operations at this intersection include consolidating access points and eliminating left-turns into and out of the driveways and minor intersections along SR 68 between Foster Road and Blanco Road, or the installation of a median barrier that would to allow left-turns into the minor streets but prevent left-turns out. These options would improve safety and the levels of service at the intersections along the corridor but would result in traffic diversions and the need to accommodate U-turns along the corridor. As pointed out by Monterey County Department of Public Works staff, the corridor merits a systems analysis to address these impacts, which is beyond the scope of this study. Caltrans should consider commissioning a systems analysis of the corridor.

It should be noted that installation of a traffic signal would improve operations at this intersection to an acceptable level of service. However, it would also have an adverse impact on the through traffic on SR 68 and could cause an increase in rear-end collisions. As a result, a traffic signal is not recommended for this intersection.

3. SR 68 WB Ramps / Spreckels Boulevard (Int. #3) – Stop Controlled (SB)

The minor street approach of this intersection would operate at LOS F during the PM peak hour under background plus project phase 1 traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under background plus project phase 1 conditions (RI #32):

1. *Convert intersection to all-way stop control.*

The project is responsible for funding this improvement.

4. Sanborn Road / Fairview Ave.-U.S. 101 NB Offramp (Int. #6) – Stop Controlled (EB & WB)

This intersection would operate at an overall LOS F during the AM and PM peak hours under background plus project phase 1 traffic conditions. The minor street approach would operate at LOS F during both the AM and PM peak hours. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under background plus project phase 1 conditions (RI #18):

1. *Same as background.*

Payment of traffic impact fees per the City of Salinas TFO (#32 and #37) will mitigate project impacts at this intersection.

5. Sanborn Road / Elvee Drive-U.S. 101 SB Ramps (Int. #8) – Signalized

This intersection would operate at an overall LOS D and LOS E during the AM and PM peak hours, respectively, under background plus project phase 1 traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under background plus project phase 1 conditions (RI #19):

1. *Same as background.*

Improvements along the Sanborn Road corridor are included in the City of Salinas TFO (#32, #37 and #66). In addition, this intersection is within the responsibility and jurisdiction of Caltrans. Improvements at this intersection should be added to the TAMC fee. If they are, payment of the TAMC fee would mitigate project impacts at this intersection to a less than significant level. If improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of the improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

6. Sanborn Road / Work Street-Terven Avenue (Int. #9) – Signalized

This intersection would operate at an overall LOS E during both the AM and PM peak hours under background plus project phase 1 traffic conditions. Per the City of Salinas significance criteria, the project would have a significant impact at this intersection. The following improvements are recommended under background plus project phase 1 conditions (RI #33):

1. *Same as harvest season. In addition:*
2. *Convert northbound Sanborn Road shared though/right-turn lane to a through lane.*
3. *Add a northbound Sanborn Road right-turn lane*
4. *Add a third southbound Sanborn Road through lane.*

Payment of traffic impact fees per the City of Salinas TFO (#37) will mitigate project impacts at this intersection.

7. Blanco Road-Sanborn Road / Abbott Street (Int. #10) – Signalized

This intersection would operate at an overall LOS E during the PM peak hour under background plus project phase 1 traffic conditions. Per the City of Salinas significance criteria, the project would have a significant impact at this intersection. The following improvements are recommended under background plus project phase 1 conditions (RI #34):

1. *Convert eastbound Abbott Street shared left/through lane to a through lane.*
2. *Add a second eastbound Abbott Street left-turn lane.*
3. *Convert westbound Abbott Street shared left/ through lane to a through lane.*
4. *Add a second westbound Abbott Street left-turn lane.*
5. *Convert east-west split phasing to protected left-turn phasing.*

Improvements at this intersection are not included in the City of Salinas TFO. It is proposed that the City add these improvements to the City of Salinas TFO. If the City adds these improvements to the City of Salinas TFO, the payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection. If the City does not add these improvements to the TFO, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program would not exist, the impact would remain significant and unavoidable.

8. Airport Boulevard / De la Torre Street (Int. #12) – Signalized

This intersection would operate at an overall LOS D and LOS F during the AM and PM peak hours, respectively, under background plus project phase 1 traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under background plus project phase 1 conditions (RI #13):

1. *Same as existing harvest season.*

Improvements at this intersection are funded by Caltrans (#0318) and the City of Salinas TFO (#32 and #38). Payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection.

9. Airport Boulevard / Terven Avenue (Int. #13) – Signalized

This intersection would operate at an overall LOS E and LOS F during the AM and PM peak hours, respectively, under background plus project phase 1 traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under background plus project phase 1 conditions (RI #14):

1. *Same as existing harvest season.*

Improvements at this intersection are planned but not fully funded as Phase 2 of the Caltrans Airport Boulevard interchange project (#0318). Improvements at this intersection are included in the City of Salinas TFO (#32 and #38). Payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection.

10. Airport Boulevard / Hansen Street (Int. #14) – Stop Controlled (NB & WB)

The minor street approach to this intersection would operate at an LOS F during both the AM and PM peak hours. Per the City of Salinas significance criteria, the project would have a significant impact at this intersection. The following improvements are recommended under background plus project phase 1 conditions (RI #27):

1. *Same as existing plus project phase 1.*

Improvements at this intersection are not included in the City of Salinas TFO. It is proposed that the City add this improvement to the City of Salinas TFO. If the City adds this improvement to the City of Salinas TFO, the payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection. If the City does not add this improvement to the TFO, then the project will be responsible for its pro-rata fair-share of this improvement. In that event, because an established improvement program would not exist, the impact would remain significant and unavoidable.

11. Harkins Road / Hansen Street (Int. #15) – Signalized

This intersection would operate at an overall LOS F during PM peak hour under background plus project phase 1 traffic conditions. Per the City of Salinas significance criteria, the project would have a significant impact at this intersection. The following improvements are recommended under background plus project phase 1 conditions (RI #15):

1. *Same as existing plus project phase 1.*

While the preceding improvements would enhance traffic operations at this intersection, it should be noted that the extensive queuing is caused by traffic congestion at the U.S. 101 / Airport Boulevard interchange, which is planned for improvements through a Caltrans PSR (#0318) and the City of Salinas TFO (#32 and #38).

It is proposed that the City add these improvements to the City of Salinas TFO. If the City adds these improvements to the City of Salinas TFO, payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection. If the City does not add these improvements to the TFO, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program would not exist, the impact would remain significant and unavoidable.

12. Harkins Road / Abbott Street (Int. #16) – Signalized

This intersection would operate at an overall LOS E during the AM peak hour under background plus project phase 1 traffic conditions. Per the City of Salinas significance criteria, the project would have a significant impact at this intersection. The following improvements are recommended under background plus project phase 1 conditions (RI #28):

1. *Same as existing plus project phase 1.*

Improvements at this intersection are not included in the City of Salinas TFO. It is proposed that the City add these improvements to the City of Salinas TFO. If the City adds these improvements to the City of Salinas TFO, the payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection. If the City does not add these improvements to the TFO, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program would not exist, the impact would remain significant and unavoidable.

13. Harkins Road / Dayton Street (Int. #18) – Stop Controlled (WB)

Although this intersection would operate at an acceptable level of service during the AM and PM peak hours, improvements are recommended due to the high volume of southbound left-turning vehicles in the AM peak hour. Per the City of Salinas significance criteria the project **would not** have a significant impact at this intersection. The following improvements are recommended under background plus project phase 1 conditions (RI #16):

1. *Same as existing harvest season.*

Improvements at this intersection are not included in any fee program and no mitigation is required of the project at this intersection. However, the project is proposing to implement this improvement to enhance safety at this intersection.

14. Harris Road / Harris Place (Int. #23) – Stop Controlled (EB & WB)

A fourth (west) leg would be constructed at this intersection with the implementation of the proposed project. Without additional improvements, this intersection would operate at an overall LOS E during the PM peak hour under background plus project phase 1 traffic conditions. The minor street approach of this intersection would operate at LOS F during the AM and PM peak hours. Per the City of Salinas significance criteria, the project would have a significant impact at this intersection. The project applicant is proposing to design this intersection with the following lane configurations and traffic controls (RI #29):

1. *Signalize intersection.*
2. *Northbound Harris Road approach: One left-turn lane, one shared through/right lane*
3. *Southbound Harris Road approach: One left-turn lane, one through lane, one right-turn lane.*
4. *Eastbound Harris Place approach: One left-turn lane, one shared through/right lane*
5. *Westbound Harris Place approach: One shared left/through/right lane*

If the intersection is designed with these lane configurations and traffic controls, the project will not have a significant impact at this location.

15. U.S. 101 / Hartnell Road Connector (Int. #26) – Stop Controlled (WB)

The minor street approach of this intersection would continue to operate at LOS F during the AM peak hour under background plus project phase 1 traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under background plus project phase 1 conditions (RI #20):

1. *Same as background.*

Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar. This would result in the elimination of this intersection. Payment of the TAMC fee will mitigate project impacts at this intersection.[3]

16. Street A Project Road / Abbott Street (Int. #27) – Future Project Intersection

This intersection will be created with the implementation of the proposed project. The project applicant is proposing to design this intersection with the following lane configurations and traffic controls (RI #30):

1. *Signalize intersection.*
2. *Northbound Street A Project Road approach: Two left-turn lanes, one right-turn lane.*
3. *Eastbound Abbott Street approach: Two through lanes and one right-turn lane*
4. *Westbound Abbott Street approach: One left-turn lane and two through lanes*

If the intersection is designed with these lane configurations and traffic controls, the project would not have a significant impact at this location.

[3] Per CEQA guidelines, a cumulative impact is defined as: "The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present and reasonably foreseeable probable future projects"). In addition, the September Ranch case (Save our Peninsula Committee v. Monterey County Board of Supervisors 87 Cal.App.4th 99, 104 Cal.Rptr.2d 326Cal.App. 6 Dist., 2001.February 15, 2001) defines a cumulative impact as an impact that is not unique to a single project. In regions where regional impact fee programs are in place, Caltrans considers the collection and application of fees for impacts of new development as sufficient to mitigate cumulative impacts to the State Highway System under CEQA. See Appendix Y for Caltrans letter dated February 21, 2008.

17. Harris Road / Street B Project Road (Int. #34) – Future Project Intersection

This intersection will be created with the implementation of the proposed project. The project applicant is proposing to design this intersection with the following lane configurations and traffic controls (RI #31):

1. *One-way stop control (EB Street B Project Road approach)*
2. *Northbound Harris Road approach: One left-turn lane and one through lane.*
3. *Southbound Harris Road approach: One through lane and one right-turn lane.*
4. *Eastbound Street B Project Road approach: One left-turn lane and one right-turn lane.*

If the intersection is designed with these lane configurations and traffic controls, the project would not have a significant impact at this location.

18. Cooper Road / Blanco Road (Int. #37) – Stop Controlled (SB)

The minor street approach of this intersection would operate at LOS F during both the AM and PM peak hours under background plus project phase 1 traffic conditions. Per the Monterey County significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under background plus project phase 1 conditions (RI #2):

1. *Same as existing non-harvest season.*

Improvements at this intersection are not currently included in any fee program. This intersection operates deficiently under existing conditions and is within the County's responsibility and jurisdiction. The County should include the recommended improvements at this intersection in their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

If the County adopts an impact fee program that includes these improvements prior to project implementation, payment of the fee will mitigate this impact to a less than significant level. If the County does not adopt an impact fee program including these improvements prior to project implementation, then the project will be responsible for its pro-rata fair-share of these improvements as mitigation as provided in Section 3 of the Agreement Regarding Supplement to the Final Program EIR for the Salinas Future Growth Area between the City of Salinas and the County of Monterey (March 27, 2008). In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (the County) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

19. Davis Road / Blanco Road (Int. #38) – Signalized

This intersection would operate at an overall LOS D and LOS F during the AM and PM peak hours, respectively, under background plus project phase 1 traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The

following improvements are recommended under background plus project phase 1 conditions (RI #21):

1. *Same as background.*

   Improvements at this intersection are included in the City's TFO (#26, #41) and the TAMC Regional Traffic Impact Fee (#8). In addition, the County should include these improvements in their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

   If the County adopts an impact fee program that includes these improvements prior to project implementation, payment of the fee will mitigate this impact to a less than significant level. If the County does not adopt an impact fee program including these improvements prior to project implementation, then the project will be responsible for its pro-rata fair-share of these improvements as mitigation as provided in Section 3 of the Agreement Regarding Supplement to the Final Program EIR for the Salinas Future Growth Area between the City of Salinas and the County of Monterey (March 27, 2008). In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (the County) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

20. SR 68 / Hitchcock Road (Int. #39) – Stop Controlled (EB)

The minor street approach of this intersection would operate at LOS F during the PM peak hour under background plus project phase 1 traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection.

This intersection is within the responsibility and jurisdiction of Caltrans, and not the City of Salinas. Improvements along this corridor should be added to the TAMC fee. If they are, payment of the TAMC fee would mitigate project impacts at this intersection to a less than significant level. If improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of the improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

Options for improving operations at this intersection include consolidating access points and eliminating left-turns into and out of the driveways and minor intersections along SR 68 between Foster Road and Blanco Road, or the installation of a median barrier that would to allow left-turns into the minor streets but prevent left-turns out. These options would improve safety and the levels of service at the intersections along

the corridor but would result in traffic diversions and the need to accommodate U-turns along the corridor. As pointed out by Monterey County Department of Public Works staff, the corridor merits a systems analysis to address these impacts, which is beyond the scope of this study. Caltrans should consider commissioning a systems analysis of the corridor.

It should be noted that installation of a traffic signal would improve operations at this intersection to an acceptable level of service. However, it would also have an adverse impact on the through traffic on SR 68 and could cause an increase in rear-end collisions. As a result, a traffic signal is not recommended for this intersection.

21. Merrill Street / Abbott Street (Int. #42) – Stop Controlled (NB)

The minor street approach of this intersection would operate at LOS F during the PM peak hour under background plus project phase 1 traffic conditions. Per the City of Salinas significance criteria, the project would have a significant impact at this intersection. The following improvements are recommended under background plus project phase 1 conditions (RI #22):

1. *Same as background.*

Improvements at this intersection are not included in the City of Salinas TFO. It is proposed that the City add these improvements to the City of Salinas TFO. If the City adds these improvements to the TFO, payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection. If the City does not add these improvements to the TFO, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program would not exist, the impact would remain significant and unavoidable.

22. Skyway Boulevard / E. Alisal Street (Int. #43) – Stop Controlled (NB & SB)

The minor street approach of this intersection would operate at LOS F during the AM peak hour under background plus project phase 1 traffic conditions. Per the City of Salinas significance criteria, the project would have a significant impact at this intersection. The following improvements are recommended under background plus project phase 1 conditions (RI #23):

1. *Same as background.*

Improvements along E. Alisal Street are included in the City of Salinas TFO (#36). Payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection.

23. U.S. 101 / Spence Road (Int. #44) – Stop Controlled (WB)

This intersection would continue to operate at an overall LOS D and LOS F during the AM and PM peak hours, respectively, under background plus project phase 1 traffic conditions. The minor street approach would continue to operate at LOS F during both the AM and PM peak hours. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under background plus project phase 1 conditions (RI #4):

1. *Same as existing non-harvest season.*

Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar. This would result in the elimination of this intersection. Payment of the TAMC fee (#7) will mitigate the project impacts at this intersection.[4]

5.2 Background Plus Project Phase 1 Road Segment Operations

Background plus project phase 1 AM and PM peak hour levels of service on the study road segments are tabulated in **Exhibit 7A**. Freeway ramp, weaving, and non-freeway roadway segment volumes are based upon the intersection turning volumes shown on **Diagrams 27** and **28** in **Appendix B**. Mainline freeway segment volumes were derived from the U.S. 101 / Gould Road and U.S. 101 / Spence Road intersection volumes, as well as the volumes at the ramp intersections.

A discussion of the traffic operations for the road and freeway segments and ramps with operational deficiencies under background plus project phase 1 traffic conditions follows. Recommended road segment improvements are discussed in italics below the description of each segment's operations, and are shown on **Exhibits 7A and 7B**.

Road Segments

1. Airport Boulevard
    a. Terven Avenue – De la Torre Street (Seg. #2b). This segment would operate at LOS F during the PM peak hour. Per Caltrans significance criteria, the project would have a significant impact on this road segment. The following improvements are recommended under background plus project phase 1 conditions (RI #24):

        i. Same as background.

        Improvements along this road segment are included in the City of Salinas TFO (#38). Payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts on this road segment. Improvements on this road segment are also planned but not fully

[4] Per CEQA guidelines, a cumulative impact is defined as: "The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present and reasonably foreseeable probable future projects"). In addition, the September Ranch case (Save our Peninsula Committee v. Monterey County Board of Supervisors 87 Cal.App.4th 99, 104 Cal.Rptr.2d 326Cal.App. 6 Dist., 2001.February 15, 2001) defines a cumulative impact as an impact that is not unique to a single project. In regions where regional impact fee programs are in place, Caltrans considers the collection and application of fees for impacts of new development as sufficient to mitigate cumulative impacts to the State Highway System under CEQA. See Appendix Y for Caltrans letter dated February 21, 2008.

funded as Phase 2 of the Caltrans Airport Boulevard interchange project (#0318).[5]

2. Blanco Road
    a. Cooper Road – Davis Road (Seg. #3a). This segment would operate at LOS E and LOS F during the AM and PM peak hours, respectively. Per Monterey County significance criteria, the project would have a significant impact on this road segment. The following improvements are recommended under background plus project phase 1 conditions (RI #5):

        i. Same as existing non-harvest season.

        Improvements on this road segment are included in the City of Salinas TFO (#26 and #41). Payment of traffic impact fees per the City of Salinas TFO would mitigate project impacts on this road segment.

    b. Davis Road – Alisal Street (Seg. #3b). This segment will operate at LOS F during the PM peak hour. The following improvements are recommended under background plus project phase 1 conditions (RI #25):

        i. Same as background.

        Improvements along this road segment are included in the City of Salinas TFO (#41). Payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts on this road segment.

3. Davis Road
    a. Hitchcock Road – Blanco Road (Seg. #4a). This segment would operate at LOS D and LOS E during the AM and PM peak hours, respectively. Per Monterey County significance criteria the project **would not** have a significant impact on this road segment. The following improvements are recommended under background plus project phase 1 conditions (RI #26):

        i. Same as background.

        No mitigation is required of the project.

    b. Blanco Road – Ambrose Drive (Seg. #4b). This segment would operate at LOS F during the AM and PM peak hours. Per Monterey County significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under background plus project phase 1 conditions (RI #6):

[5] The analysis indicates that construction of the eastside connector and Harris Road interchange, which are discussed in Section 8.1 of this report, would divert traffic from this road segment under 2030 Cumulative traffic conditions, resulting in an acceptable level of service on this road segment.

i. Same as existing non-harvest.

Improvements on this road segment are included in the TAMC fee (#8). Payment of the TAMC fee will mitigate project impacts on this road segment.

4. SR 156
   a. Castroville Boulevard – U.S. 101 (Seg. #17b). This segment would operate at LOS E during both the AM and PM peak hours. Per Caltrans significance criteria, the project **would not** have a significant impact on this road segment. The following improvements are recommended under background plus project phase 1 conditions (RI #7):

      i. Same as existing non-harvest season.

      No mitigation is required of the project.

5. SR 183
   a. Espinosa Road – Salinas City Limits (Seg. #18a). This segment would operate at LOS D and LOS E during the AM and PM peak hours, respectively. Per Caltrans significance criteria, the project **would not** have a significant impact on this road segment. The following improvements are recommended under background plus project phase 1 conditions (RI #17):

      i. Same as existing harvest season.

      No mitigation is required of the project.

Freeway Segments

1. U.S. 101
   a. Sanborn Road – John Street (Seg. #20h). This segment would operate at LOS D during the PM peak hour. Per Caltrans significance criteria, the project would have a significant impact on this road segment. The following improvements are recommended under background plus project phase 1 conditions (RI #35):

      i. Widen to a 6-lane freeway.

      The widening of U.S. 101 to a 6-lane freeway through the City of Salinas is included in the City of Salinas TFO (#32). Payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts to this freeway segment.

Freeway Ramps

All of the study freeway ramps would operate at acceptable levels of service under background plus project phase 1 traffic conditions.

Weaving Segments

The results of the weaving analysis are discussed in Chapter 11.

6 Background Plus Project Buildout Traffic Conditions

This chapter presents a description of the traffic network, traffic volumes, and intersection and road segment levels of service within the study area under background plus project buildout traffic conditions.

It is important to note that no credit was given for the relocation of existing uses within the City to the project site. All of the project-generated traffic was assumed to be new traffic on the local and regional road network. Although it is reasonable to assume that some of the traffic generated by the project will be existing traffic diverted from other parts of the City, the amount would be difficult to quantify. It is also possible that new businesses could eventually occupy existing facilities that are vacated due to the proposed project. As a result, the following analysis is conservative.

6.1 Project Buildout Trip Generation

At buildout the proposed project will occupy approximately 257 acres. As with the project phase 1 trip generation estimate, ITE trip generation rates were used to estimate the project buildout trip generation.

Buildout of the proposed project will generate an estimated 16,219 daily trips, with 2,198 trips occurring during the AM peak hour (1,665 in, 533 out) and 2,272 trips occurring during the PM peak hour (622 in, 1,650 out). The trip generation estimate for buildout of the proposed project is shown in **Exhibit 16**.

6.2 Project Buildout Trip Distribution and Assignment

As was done with the project phase 1 employee-based trip distribution percentages, project buildout employee-based trip distribution percentages were also obtained from the AMBAG regional travel demand model. Once again, these percentages were reviewed, and adjustments were made based on knowledge of the local area and engineering judgment. **Exhibit 15A** presents the project buildout employee trip distribution percentages as obtained from the AMBAG model, as well as the adjusted percentages, where they differed from the model. From **Exhibit 15A** it can be seen that employee trip distribution percentages are different under project phase 1 and project buildout conditions. This is because the project phase 1 percentages were obtained from the AMBAG base year 2000 land use network, and project buildout percentages were obtained from the AMBAG year 2030 land use network.

The same line truck and field truck trip distributions that were used for project phase 1 (discussed in Section 4.3) were also used for project buildout conditions. **Exhibits 15B and 15C** present the trip distribution percentages for the line trucks and field trucks, respectively.

The AM and PM peak hour trips generated by project buildout employees, line trucks and field trucks were assigned to the study intersections and are shown on **Diagrams 17, 18, 19, 21, 22,** and **23** and are included in **Appendix B**. These trips were then combined to obtain the total AM and PM peak hour trips for project buildout, which are shown on **Diagrams 20** and **24** in **Appendix B.**

6.3 Background Plus Project Buildout Intersection Operations

Background conditions AM and PM peak hour traffic volumes and the project buildout AM and PM peak hour trip assignments were combined to obtain background plus project buildout traffic volumes, which are shown on **Diagrams 29** and **30** in **Appendix B**. Background plus project buildout AM and PM intersection levels of service are summarized in **Exhibit 5A**. LOS calculation sheets for background plus project buildout traffic conditions are included as **Appendix I1**. LOS calculation sheets for background plus project buildout conditions with recommended improvements are included as **Appendix I2**. A summary of all recommended intersection improvements is included in **Exhibit 6A**.

A description of each intersection that would operate deficiently under background plus project buildout traffic conditions follows below. Recommended improvements are discussed in italics below the description of each intersection's operations.

1. SR 68 / Blanco Road (Int. #1) – Signalized

This intersection would operate at an overall LOS D and LOS E during the AM and PM peak hours, respectively, under background plus project buildout traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under background plus project buildout conditions (RI #1):

1. *Same as existing non-harvest season (see Section 2.3).*

   Improvements 1, 4 and 5 are included in the City of Salinas TFO (#59). Improvements 2, 3 and 6 are also recommended, but would only improve operations to level of service D during the PM peak hour. It is proposed that the City add these improvements to the City of Salinas TFO. If the City adds improvements 2, 3 and 6 to the City of Salinas TFO, the payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection. If the City does not add these improvements to the TFO, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program for improvements 2, 3 and 6 would not exist, the impact would remain significant and unavoidable.

   The City will need to consider several challenges at this intersection. For example, widening the south leg of the intersection to accommodate a third receiving lane on southbound SR 68 may require the relocation of PG&E electrical equipment located on the southeast corner of the intersection, and the addition of a westbound right-turn lane would require the reconfiguration of the parking lot on the northeast corner of the intersection. For these reasons, the City must determine whether or not the recommended improvements are feasible.

2. SR 68 / Hunter Lane (Int. #2) – Stop Controlled (WB)

The minor street approach of this intersection would operate at LOS F during the AM peak hour under background plus project buildout traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection.

This intersection is within the responsibility and jurisdiction of Caltrans, and not the City of Salinas. Improvements along this corridor should be added to the TAMC fee. If they are, payment of the TAMC fee would mitigate project impacts at this intersection to a less than significant level. If improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of the improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

Options for improving operations at this intersection include consolidating access points and eliminating left-turns into and out of the driveways and minor intersections along SR 68 between Foster Road and Blanco Road, or the installation of a median barrier that would to allow left-turns into the minor streets but prevent left-turns out. These options would improve safety and the levels of service at the intersections along the corridor but would result in traffic diversions and the need to accommodate U-turns along the corridor. As pointed out by Monterey County Department of Public Works staff, the corridor merits a systems analysis to address these impacts, which is beyond the scope of this study. Caltrans should consider commissioning a systems analysis of the corridor.

It should be noted that installation of a traffic signal would improve operations at this intersection to an acceptable level of service. However, it would also have an adverse impact on the through traffic on SR 68 and could cause an increase in rear-end collisions. As a result, a traffic signal is not recommended for this intersection.

3. <u>SR 68 WB Ramps / Spreckels Boulevard (Int. #3) – Stop Controlled (SB)</u>

The minor street approach of this intersection would operate at LOS F during the PM peaks hour under background plus project buildout traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under background plus project buildout conditions (RI #32):

1. *Same as background plus project phase 1.*

The project is responsible for funding this improvement.

4. <u>Sanborn Road / Fairview Ave.-U.S. 101 NB Offramp (Int. #6) – Stop Controlled (EB & WB)</u>

This intersection would operate at an overall LOS F during the AM and PM peak hours under background plus project buildout traffic conditions. The minor street approach would also operate at LOS F during both the AM and PM peak hours. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under background plus project buildout conditions (RI #18):

1. *Same as background.*

   Payment of traffic impact fees per the City of Salinas TFO (#32 and #37) will mitigate project impacts at this intersection.

5. Sanborn Road / Elvee Drive-U.S. 101 SB Ramps (Int. #8) – Signalized

This intersection would operate at an overall LOS D and LOS F during the AM and PM peak hours, respectively, under background plus project buildout traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under background plus project buildout conditions (RI #19):

1. *Same as background.*

   Improvements along the Sanborn Road corridor are included in the City of Salinas TFO (#32, #37 and #66). In addition, this intersection is within the responsibility and jurisdiction of Caltrans. Improvements at this intersection should be added to the TAMC fee. If they are, payment of the TAMC fee would mitigate project impacts at this intersection to a less than significant level. If improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of the improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

6. Sanborn Road / Work Street-Terven Avenue (Int. #9) – Signalized

This intersection would operate at an overall LOS E during both the AM and PM peak hours under background plus project buildout traffic conditions. Per the City of Salinas significance criteria, the project would have a significant impact at this intersection. The following improvements are recommended under background plus project buildout conditions (RI #33):

1. *Same as background plus project phase 1.*

   Payment of traffic impact fees per the City of Salinas TFO (#37) will mitigate project impacts at this intersection.

7. Blanco Road-Sanborn Road / Abbott Street (Int. #10) – Signalized

This intersection would operate at an overall LOS E during the PM peak hour under background plus project buildout traffic conditions. Per the City of Salinas significance criteria, the project would have a significant impact at this intersection. The following improvements are recommended under background plus project buildout conditions (RI #34):

1. *Same as background plus project phase 1.*

   Improvements at this intersection are not included in the City of Salinas TFO. It is proposed that the City add these improvements to the City of Salinas TFO. If the City adds these improvements to the City of Salinas TFO, the payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection. If the City does not add these improvements to the TFO, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program would not exist, the impact would remain significant and unavoidable.

8. Airport Boulevard / De la Torre Street (Int. #12) – Signalized

This intersection would operate at an overall LOS D and LOS F during the AM and PM peak hours, respectively, under background plus project buildout traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under background plus project buildout conditions (RI #13):

1. *Same as existing harvest season.*

   Improvements at this intersection are funded by Caltrans (#0318) and the City of Salinas TFO (#32 and #38). Payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection.

9. Airport Boulevard / Terven Avenue (Int. #13) – Signalized

This intersection would operate at an overall LOS F during the AM and PM peak hours under background plus project buildout traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under background plus project buildout conditions (RI #14):

1. *Same as existing harvest season.*

   Improvements at this intersection are planned but not fully funded as Phase 2 of the Caltrans Airport Boulevard interchange project (#0318). Improvements at this intersection are included in the City of Salinas TFO (#32 and #38). Payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection.

10. Airport Boulevard / Hansen Street (Int. #14) – Stop Controlled (NB & WBT)

The minor street approach of this intersection would operate at LOS F during the AM and PM peak hours under background plus project buildout traffic conditions. Per the City of Salinas significance criteria, the project would have a significant impact at this intersection. The following improvements are recommended under background plus project buildout conditions (RI #27):

1. *Same as existing plus project phase 1.*
2. *Results in level of service F on the minor street approach during the AM peak hour.*

Improvements at this intersection are not included in the City of Salinas TFO. It is proposed that the City add this improvement to the City of Salinas TFO. If the City adds this improvement to the City of Salinas TFO, the payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection. If the City does not add this improvement to the TFO, then the project will be responsible for its pro-rata fair-share of this improvement. In that event, because an established improvement program would not exist, the impact would remain significant and unavoidable.

11. Harkins Road / Hansen Street (Int. #15) – Signalized

This intersection would operate at an overall LOS F during AM and PM peak hours under background plus project buildout traffic conditions. Per the City of Salinas significance criteria, the project would have a significant impact at this intersection. The following improvements are recommended under background plus project buildout conditions (RI #15):

1. *Same as existing plus project phase 1.*

While the preceding improvements would enhance traffic operations at this intersection, it should be noted that the extensive queuing is caused by traffic congestion at the U.S. 101 / Airport Boulevard interchange, which is planned for improvements through a Caltrans PSR (#0318) and the City of Salinas TFO (#32 and #38).

It is proposed that the City add these improvements to the City of Salinas TFO. If the City adds these improvements to the City of Salinas TFO, payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection. If the City does not add these improvements to the TFO, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program would not exist, the impact would remain significant and unavoidable.

12. Harkins Road / Abbott Street (Int. #16) – Signalized

This intersection would operate at an overall LOS E during both the AM and PM peak hours under background plus project buildout traffic conditions. Per the City of Salinas significance criteria, the project would have a significant impact at this intersection. The following improvements are recommended under background plus project buildout conditions (RI #28):

1. *Same as existing plus project phase 1.*

Improvements at this intersection are not included in the City of Salinas TFO. It is proposed that the City add these improvements to the City of Salinas TFO. If the City adds these improvements to the City of Salinas TFO, the payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection. If the City does not add these improvements to the TFO, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established

improvement program would not exist, the impact would remain significant and unavoidable.

13. Harkins Road / Dayton Street (Int. #18) – Stop Controlled (WB)

Although this intersection would operate at an acceptable level of service during the AM and PM peak hours, improvements are recommended due to the high volume of southbound left-turning vehicles in the AM peak hour. Per the City of Salinas significance criteria the project **would not** have a significant impact at this intersection. The following improvements are recommended under background plus project buildout conditions (RI #16):

1. *Same as existing harvest season.*

Improvements at this intersection are not included in any fee program and no mitigation is required of the project at this intersection. However, the project is proposing to implement this improvement to enhance safety at this intersection.

14. Harris Road / Abbott Street (Int. #22) – Signalized

This intersection would operate at an overall LOS D during the PM peak hour under background plus project buildout traffic conditions. Per the Monterey County significance criteria the project would have a significant impact at this intersection. However, this intersection will come under the jurisdiction of the City of Salinas as part of the annexation that will occur with the implementation of the proposed project and will be subject to a level of service standard D (per City of Salinas standards). Per the City of Salinas significance criteria, the project **would not** have a significant impact at this intersection.

Even though the project would not have a significant impact at this intersection, due to the high volume of truck traffic associated with the project, the following improvements are recommended under background plus project buildout conditions (RI #39):

1. *Add a second northbound Harris Road right-turn lane.*
2. *Add a second westbound Abbott Street left-turn lane.*

The project is proposing to implement these improvements.

15. Harris Road / Harris Place (Int. #23) – Stop Controlled (EB & WB)

A fourth (west) leg would be constructed at this intersection with the implementation of the proposed project. Without additional improvements, this intersection would operate at an overall LOS E and LOS F during the AM and PM peak hours, respectively, under background plus project buildout traffic conditions. The minor street approach of this intersection would operate at LOS F during the AM and PM peak hours. Per the City of Salinas significance criteria, the project would have a significant impact at this intersection. The project applicant is proposing to design this intersection with the following lane configurations and traffic controls (RI #29):

1. *Signalize intersection.*
2. *Northbound Harris Road approach: One left-turn lane, one shared through/right lane*
3. *Southbound Harris Road approach: One left-turn lane, one through lane, one right-turn lane.*

4. *Eastbound Harris Place approach: One left-turn lane, one shared through/right lane*
5. *Westbound Harris Place approach: One shared left/through/right lane*

If the intersection is designed with these lane configurations and traffic controls, the project would not have a significant impact at this location.

16. U.S. 101 / Hartnell Road Connector (Int. #26) – Stop Controlled (WB)

The minor street approach of this intersection would continue to operate at LOS F during the AM peak hour and would degrade to LOS F during the PM peak hour under background plus project buildout traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under background plus project buildout conditions (RI #20):

1. *Same as background.*

Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar. This would result in the elimination of this intersection. Payment of the TAMC fee will mitigate project impacts at this intersection.[6]

17. Street A Project Road / Abbott Street (Int. #27) – Future Project Intersection

This intersection will be created with the implementation of the proposed project. The project applicant is proposing to design this intersection with the following lane configurations and traffic controls (RI #30):

1. *Signalize intersection.*
2. *Northbound Street A Project Road approach: Two left-turn lanes, one right-turn lane.*
3. *Eastbound Abbott Street approach: Two through lanes and one right-turn lane*
4. *Westbound Abbott Street approach: One left-turn lane and two through lanes*

If the intersection is designed with these lane configurations and traffic controls, the project would not have a significant impact at this location.

18. Harris Road / Street B Project Road (Int. #34) – Future Project Intersection

This intersection will be created with the implementation of the proposed project. The project applicant is proposing to design this intersection with the following lane configurations and traffic controls (RI #31):

[6] Per CEQA guidelines, a cumulative impact is defined as: "The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present and reasonably foreseeable probable future projects"). In addition, the September Ranch case (Save our Peninsula Committee v. Monterey County Board of Supervisors 87 Cal.App.4th 99, 104 Cal.Rptr.2d 326Cal.App. 6 Dist., 2001.February 15, 2001) defines a cumulative impact as an impact that is not unique to a single project. In regions where regional impact fee programs are in place, Caltrans considers the collection and application of fees for impacts of new development as sufficient to mitigate cumulative impacts to the State Highway System under CEQA. See Appendix Y for Caltrans letter dated February 21, 2008.

1. *One-way stop control (EB Street B Project Road approach)*
2. *Northbound Harris Road approach: One left-turn lane and one through lane.*
3. *Southbound Harris Road approach: One through lane and one right-turn lane.*
4. *Eastbound Street B Project Road approach: One left-turn lane and one right-turn lane.*

If the intersection is designed with these lane configurations and traffic controls, the project would not have a significant impact at this location.

19. Cooper Road / Blanco Road (Int. #37) – Stop Controlled (SB)

The minor street approach of this intersection would operate at LOS F during both the AM and PM peak hours under background plus project buildout traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under background plus project buildout conditions (RI #2):

1. *Same as existing non-harvest season.*

Improvements at this intersection are not currently included in any fee program. This intersection operates deficiently under existing conditions and is within the County's responsibility and jurisdiction. The County should include the recommended improvements at this intersection in their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

If the County adopts an impact fee program that includes these improvements prior to project implementation, payment of the fee will mitigate this impact to a less than significant level. If the County does not adopt an impact fee program including these improvements prior to project implementation, then the project will be responsible for its pro-rata fair-share of these improvements as mitigation as provided in Section 3 of the Agreement Regarding Supplement to the Final Program EIR for the Salinas Future Growth Area between the City of Salinas and the County of Monterey (March 27, 2008). In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (the County) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

20. Davis Road / Blanco Road (Int. #38) – Signalized

This intersection would operate at an overall LOS D and LOS F during the AM and PM peak hours, respectively, under background plus project buildout traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under background plus project buildout conditions (RI #21):

1. *Same as background.*

Improvements at this intersection are included in the City's TFO (#26, #41) and the TAMC Regional Traffic Impact Fee (#8). In addition, the County should include these improvements in their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.
If the County adopts an impact fee program that includes these improvements prior to project implementation, payment of the fee will mitigate this impact to a less than significant level. If the County does not adopt an impact fee program including these improvements prior to project implementation, then the project will be responsible for its pro-rata fair-share of these improvements as mitigation as provided in Section 3 of the Agreement Regarding Supplement to the Final Program EIR for the Salinas Future Growth Area between the City of Salinas and the County of Monterey (March 27, 2008). In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (the County) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

21. SR 68 / Hitchcock Road (Int. #39) – Stop Controlled (EB)

The minor street approach of this intersection would operate at LOS F during the PM peak hour under background plus project buildout traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection.

This intersection is within the responsibility and jurisdiction of Caltrans, and not the City of Salinas. Improvements along this corridor should be added to the TAMC fee. If they are, payment of the TAMC fee would mitigate project impacts at this intersection to a less than significant level. If improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of the improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

Options for improving operations at this intersection include consolidating access points and eliminating left-turns into and out of the driveways and minor intersections along SR 68 between Foster Road and Blanco Road, or the installation of a median barrier that would to allow left-turns into the minor streets but prevent left-turns out. These options would improve safety and the levels of service at the intersections along the corridor but would result in traffic diversions and the need to accommodate U-turns along the corridor. As pointed out by Monterey County Department of Public Works staff, the corridor merits a systems analysis to address these impacts, which is

beyond the scope of this study. Caltrans should consider commissioning a systems analysis of the corridor.

It should be noted that installation of a traffic signal would improve operations at this intersection to an acceptable level of service. However, it would also have an adverse impact on the through traffic on SR 68 and could cause an increase in rear-end collisions. As a result, a traffic signal is not recommended for this intersection.

22. Merrill Street / Abbott Street (Int. #42) – Stop Controlled (NB)

The minor street approach of this intersection would operate at LOS F during the PM peak hour under background plus project buildout traffic conditions. Per the City of Salinas significance criteria, the project would have a significant impact at this intersection. The following improvements are recommended under background plus project buildout conditions (RI #22):

1. *Same as background.*

Improvements at this intersection are not included in the City of Salinas TFO. It is proposed that the City add these improvements to the City of Salinas TFO. If the City adds these improvements to the TFO, payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection. If the City does not add these improvements to the TFO, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program would not exist, the impact would remain significant and unavoidable.

23. Skyway Boulevard / E. Alisal Street (Int. #43) – Stop Controlled (NB & SB)

This intersection would operate at an overall LOS F during the AM and PM peak hours under background plus project buildout traffic conditions. The minor street approach would also operate at LOS F during both the AM and PM peak hours. Per the City of Salinas significance criteria, the project would have a significant impact at this intersection. The following improvements are recommended under background plus project buildout conditions (RI #23):

1. *Same as background.*

Improvements along E. Alisal Street are included in the City of Salinas TFO (#36). Payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection.

24. U.S. 101 / Spence Road (Int. #44) – Stop Controlled (WB)

This intersection would degrade to an overall LOS F during the AM peak and would continue to operate at an overall LOS F during PM peak hour under background plus project buildout traffic conditions. The minor street approach would continue to operate at LOS F during both the AM and PM peak hours. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under background plus project buildout conditions (RI #4):

1. *Same as existing non-harvest season.*

Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar. This would result in the elimination of this intersection. Payment of the TAMC fee (#7) will mitigate the project impacts at this intersection.[7]

6.4 Background Plus Project Buildout Road Segment Operations

Background plus project buildout AM and PM peak hour levels of service on the study road segments are tabulated in **Exhibit 7A**. Freeway ramp, weaving, and non-freeway roadway segment volumes are based upon the intersection turning volumes shown on **Diagrams 29** and **30** in **Appendix B**.

A discussion of the traffic operations for the road and freeway segments and ramps with operational deficiencies under background plus project buildout traffic conditions follows. Recommended road segment improvements are discussed in italics below the description of each segment's operations, and are shown on **Exhibits 7A and 7B**.

Road Segments

1. Abbott Street
    a. Harris Road – Firestone Driveway (Seg. #1f). This segment would operate at LOS E during the AM and PM peak hours. Per Monterey County significance criteria, the project would have a significant impact on this road segment. The following improvements are recommended under background plus project buildout conditions (RI #40):

        i. Widen to a 4-lane expressway.

        Improvements on this road segment are included in the TAMC fee (#7 and #10). Payment of the TAMC fee will mitigate project impacts on this segment.

2. Airport Boulevard
    a. Terven Avenue – De la Torre Street (Seg. #2b). This segment would operate at LOS F during the PM peak hour. Per Caltrans significance criteria, the project would have a significant impact on this road segment. The following improvements are recommended under background plus project buildout conditions (RI #24):

[7] Per CEQA guidelines, a cumulative impact is defined as: "The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present and reasonably foreseeable probable future projects"). In addition, the September Ranch case (Save our Peninsula Committee v. Monterey County Board of Supervisors 87 Cal.App.4th 99, 104 Cal.Rptr.2d 326Cal.App. 6 Dist., 2001.February 15, 2001) defines a cumulative impact as an impact that is not unique to a single project. In regions where regional impact fee programs are in place, Caltrans considers the collection and application of fees for impacts of new development as sufficient to mitigate cumulative impacts to the State Highway System under CEQA. See Appendix Y for Caltrans letter dated February 21, 2008.

i. *Same as background.*

Improvements along this road segment are included in the City of Salinas TFO (#38). Payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts on this road segment. Improvements on this road segment are also planned but not fully funded as Phase 2 of the Caltrans Airport Boulevard interchange project (#0318).[8]

3. Blanco Road
   a. Cooper Road – Davis Road (Seg. #3a). This segment would operate at LOS E and LOS F during the AM and PM peak hours, respectively. Per Monterey County significance criteria, the project would have a significant impact on this road segment. The following improvements are recommended under background plus project buildout conditions (RI #5):

      i. *Same as existing non-harvest season.*

      Improvements on this road segment are included in the City of Salinas TFO (#26 and #41). Payment of traffic impact fees per the City of Salinas TFO would mitigate project impacts on this road segment.

   b. Davis Road – Alisal Street (Seg. #3b). This segment will operate at LOS F during the PM peak hour. The following improvements are recommended under background plus project buildout conditions (RI #25):

      i. *Same as background.*

      Improvements along this road segment are included in the City of Salinas TFO (#41). Payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts on this road segment.

4. Davis Road
   a. Hitchcock Road – Blanco Road (Seg. #4a). This segment would operate at LOS D and LOS E during the AM and PM peak hours, respectively. Per Monterey County significance criteria the project **would not** have a significant impact on this road segment. The following improvements are recommended under background plus project buildout conditions (RI #26):

      i. *Same as background.*

      No mitigation is required of the project.

[8] The analysis indicates that construction of the eastside connector and Harris Road interchange, which are discussed in Section 8.1 of this report, would divert traffic from this road segment under 2030 Cumulative traffic conditions, resulting in an acceptable level of service on this road segment.

b. Blanco Road – Ambrose Drive (Seg. #4b). This segment would operate at LOS F during the AM and PM peak hours. Per Monterey County significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under background plus project buildout conditions (RI #6):

   i. Same as existing non-harvest.

   Improvements on this road segment are included in the TAMC fee (#8). Payment of the TAMC fee will mitigate project impacts on this road segment.

5. Harris Road
   a. Harris Place – Abbott Street (Seg. #9b). This segment would operate at LOS D during the AM and PM peak hours. Per Monterey County significance criteria, the project would have a significant impact on this road segment. However, this road segment will come under the jurisdiction of the City of Salinas as part of the annexation that will occur with the implementation of the proposed project and will be subject to a level of service standard D (per City of Salinas standards). Per the City of Salinas significance criteria, the project **would not** have a significant impact on this road segment.

      Although the project would not have a significant impact on this road segment, due to the high volume of truck traffic associated with the project, the project applicant is proposing to implement the following improvements (RI #41):

      i. Widen to a 4-lane divided arterial.

      No mitigation is required of the project. However, the project is proposing to implement these improvements.

6. SR 156
   a. Castroville Boulevard – U.S. 101 (Seg. #17b). This segment would operate at LOS E during both the AM and PM peak hours. Per Caltrans significance criteria, the project **would not** have a significant impact on this road segment. The following improvements are recommended under background plus project buildout conditions (RI #7):

      i. Same as existing non-harvest season.

      No mitigation is required of the project.

7. SR 183
   a. Espinosa Road – Salinas City Limits (Seg. #18a). This segment would operate at LOS D and LOS E during the AM and PM peak hours, respectively. Per Caltrans significance criteria, the project **would not** have a significant impact on this road

segment. The following improvements are recommended under background plus project buildout conditions (RI #17):

i. Same as existing harvest season.

No mitigation is required of the project.

Freeway Segments

1. U.S. 101
    a. Sanborn Road – John Street (Seg. #20h). This segment would operate at LOS D during the PM peak hours. Per Caltrans significance criteria, the project would have a significant impact on this road segment. The following improvements are recommended under background plus project buildout conditions (RI #35):

i. Same as background plus project phase 1.

The widening of U.S. 101 to a 6-lane freeway through the City of Salinas is included in the City of Salinas TFO (#32). Payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts on this freeway segment.

Freeway Ramps

All of the study freeway ramps would operate at acceptable levels of service under background plus project buildout traffic conditions.

Weaving Segments

The results of the weaving analysis are discussed in Chapter 11.

7 2030 Cumulative No project No Interchange Traffic Conditions

This chapter presents a description of the traffic network, traffic volumes, and intersection and road segment levels of service within the study area under 2030 cumulative traffic conditions without the proposed project and without the future Harris Road interchange. A discussion regarding the future Harris Road interchange is included in Section 8.1 of this report.

7.1 2030 Cumulative Traffic Volume Forecasts

The 2030 cumulative volumes are primarily based upon the 2030 travel forecasts estimated by the Association of Monterey Bay Area Governments (AMBAG) Regional Travel Forecasting Model. This model was developed over the past several years with its first public release in late 2004. The model uses TransCAD software. The 2030 forecasts are based upon the land use, population and employment forecasts formally adopted by AMBAG in 2004. These forecasts are based upon the input of all the local agencies in Monterey County.

The methods used to forecast the 2030 cumulative volumes involved an iterative process. To start, a comparison was made between several sets of average daily traffic (ADT) volume data on major roadways within the study area; namely, the AMBAG model base 2000 ADT's, existing ADT's (year 2008 or the most current that was available), 2030 forecasts from other relevant traffic studies, and the AMBAG model year 2030 ADT forecasts.

Comparing the AMBAG 2000 ADT's to the AMBAG 2030 ADT's provided an estimated rate of growth over a 30-year period. Where appropriate, the estimated growth rate was applied to the 2008 peak hour volumes to forecast peak hour volumes for the 2030 cumulative scenario. In some cases, the 2030 AMBAG model volumes were lower than the existing (2008) volumes. In these cases adjustments were made accordingly. Cumulative volume forecasts from several recent traffic studies in certified EIR's were used to assist in this process. They include the *Salinas Sphere of Influence Amendment and Annexation Supplemental TIA* (Fehr & Peers Transportation Consultants, July 2007) and the *Marina Station Traffic Impact Analysis* (Higgins Associates, October 2007).

The AMBAG 2030 land use forecasts are constrained in the Fort Ord area based upon water availability. If water availability was not limited in the Fort Ord area, the cumulative land use forecasts would be unconstrained and the 2030 traffic volume forecasts would be greater than current estimates in some areas. It is unlikely that this situation would occur. However, for informational purposes, two additional development scenarios were analyzed to reflect such unconstrained conditions. These scenarios, which are referred to as "2030 Unconstrained Cumulative" and "2030 Unconstrained Cumulative plus project", are included in **Appendix V**. Both of these scenarios were analyzed without the future Harris Road interchange.

The model appears to produce expected results along the regional highway corridors including U.S. 101, SR 68, Reservation Road, Davis Road, Blanco Road west of Davis Road, and Sanborn Road. The model appears to produce somewhat suspect forecasts on more local streets within individual communities. This appears to be due to the lack of detail in the street network and

some coding errors in land uses within each individual city. The overall totals in terms of land use, employment and population for each city appeared to be accurate for the model validation as well as for the year 2030. The model appears to be generally adequate for overall forecasting, especially on the regional highway system.

7.2 AMBAG Revised Population and Employment Projections

AMBAG recently revised their 2004 population and employment projections. The revised projections, which were adopted on June 11, 2008, are significantly below their previously adopted projections. For example, the revised industrial employment forecasts for the City of Salinas are 40% below the 2004 projections. The previous projections were used to support AMBAG's 2004 regional travel demand model. Since AMBAG updates their regional travel demand model every five years, the newly adopted projections have not yet been incorporated into the AMBAG regional travel demand model. As a result, the 2030 cumulative forecast volumes and analyses can be considered very conservative.

7.3 2030 Cumulative No Project No Interchange Intersection Operations

2030 cumulative no project no interchange volumes are shown on **Diagrams 37** and **38** in **Appendix B**. 2030 cumulative no project no interchange AM and PM intersection levels of service are summarized in **Exhibit 5B**. LOS calculation sheets are included as **Appendix J1**. LOS calculation sheets with recommended improvements are included as **Appendix J2**. A summary of all recommended intersection improvements is included in **Exhibit 6B**.

A description of each intersection that would operate deficiently under 2030 cumulative no project no interchange follows below. Recommended improvements are discussed in italics below the description of each intersection's operations.

The following operational deficiencies would be caused by existing traffic in addition to cumulative traffic growth (i.e., traffic generated by approved and future projects) on the study road network. Since this scenario does not include traffic that would be generated by the proposed project, the project is not responsible for providing any of these recommended improvements.

1. SR 68 / Blanco Road (Int. #1) – Signalized

This intersection would operate at an overall LOS E and LOS F during the AM and PM peak hours under 2030 cumulative no project no interchange traffic conditions. The following improvements are recommended under cumulative no project no interchange conditions (RI #1):

1. *Same as existing non-harvest season (see Section 2.3).*

Improvements 1, 4 and 5 are included in the City of Salinas TFO (#59). Improvements 2, 3 and 6 are also recommended, but would only improve operations to level of service D during the AM and PM peak hours. The City will need to consider several challenges at this intersection. For example, widening the south leg of the intersection to accommodate a third receiving lane on southbound SR 68 may require the relocation of PG&E electrical equipment located on the southeast corner of the

intersection, and the addition of a westbound right-turn lane would require the reconfiguration of the parking lot on the northeast corner of the intersection. For these reasons, the City must determine whether or not the recommended improvements are feasible.

2. SR 68 / Hunter Lane (Int. #2) – Stop Controlled (WB)

This intersection would operate at an overall LOS D in the PM peak hour under 2030 cumulative no project no interchange traffic conditions. The minor street approach of this intersection would operate at LOS F during the AM and PM peak hours.

Options for improving operations at this intersection include consolidating access points and eliminating left-turns into and out of the driveways and minor intersections along SR 68 between Foster Road and Blanco Road, or the installation of a median barrier that would to allow left-turns into the minor streets but prevent left-turns out. These options would improve safety and the levels of service at the intersections along the corridor but would result in traffic diversions and the need to accommodate U-turns along the corridor. As pointed out by Monterey County Department of Public Works staff, the corridor merits a systems analysis to address these impacts, which is beyond the scope of this study. Caltrans should consider commissioning a systems analysis of the corridor.

It should be noted that installation of a traffic signal would improve operations at this intersection to an acceptable level of service. However, it would also have an adverse impact on the through traffic on SR 68 and could cause an increase in rear-end collisions. As a result, a traffic signal is not recommended for this intersection.

3. SR 68 WB Ramps / Spreckels Boulevard (Int. #3) – Stop Controlled (SB)

This intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative no project no interchange traffic conditions. The minor street approach would also operate at LOS F during both peak hours. The following improvements are recommended under cumulative no project no interchange conditions (RI #42):

1. *Signalize intersection.*
2. *Add a second westbound Spreckels Boulevard left-turn lane.*
3. *Continue westbound lane along Spreckels Boulevard.*

Per CEQA guidelines [Section 15091(a)(2)] this intersection is within the responsibility and jurisdiction of Caltrans and not the City of Salinas, and the improvements at this intersection can and should be adopted by Caltrans and the County as a part of their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

4. SR 68 EB Offramp / Spreckels Boulevard (Int. #4) – Stop Controlled (NB)

This intersection would operate at an overall LOS C and LOS A during the AM and PM peak hours, respectively under 2030 cumulative no project no interchange traffic conditions. The minor street approach would operate at LOS E during the AM peak hour. The following

improvements are recommended under cumulative no project no interchange conditions (RI #43):

1. *Add a second westbound Spreckels Boulevard through lane.*
2. *Restripe northbound (Highway 68 offramp) left-turn lane to a shared left/right-turn lane.*
3. *Add a second eastbound Spreckels Boulevard receiving lane.*

Per CEQA guidelines [Section 15091(a)(2)] this intersection is within the responsibility and jurisdiction of Caltrans and not the City of Salinas, and the improvements at this intersection can and should be adopted by Caltrans and the County as a part of their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

5. SR 68 EB Onramp / Spreckels Boulevard (Int. #5) – Stop Controlled (SB)

This intersection would operate at an overall LOS A during the AM and PM peak hours. The minor street approach would operate at LOS E during the AM and PM peak hours. However, traffic diversions from the recommended improvements at the SR 68 / Foster Road and SR 68 / Hitchcock Road intersections would impact this intersection. With these improvements, the minor street approach would operate at LOS D during the AM and PM peak hours. The following improvements are recommended under cumulative no project no interchange conditions (RI #44):

1. *Add a second westbound Spreckels Boulevard through lane.*
2. *Add a second eastbound Spreckels Boulevard through lane.*

Per CEQA guidelines [Section 15091(a)(2)] this intersection is within the responsibility and jurisdiction of Caltrans and not the City of Salinas, and the improvements at this intersection can and should be adopted by Caltrans and the County as a part of their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

6. Sanborn Road / Fairview Ave.-U.S. 101 NB Offramp (Int. #6) – Stop Controlled (EB & WB)

This intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative no project no interchange traffic conditions. The minor street approach would also operate at LOS F during both the AM and PM peak hours. The following improvements are recommended under cumulative no project no interchange conditions (RI #18):

1. *Same as background.*

Improvements along the Sanborn Road corridor are included in the City of Salinas TFO (#32 and #37).

7. U.S. 101 NB Ramps / Fairview Avenue (Int. #7) – Stop Controlled (NB)

This intersection would operate at an overall LOS D during the PM peak hour under 2030 cumulative no project no interchange traffic conditions. The minor street approach would operate at LOS F during the PM peak hour. The following improvements are recommended under cumulative no project no interchange conditions (RI #45):

1. *Add an eastbound Fairview Avenue right-turn lane.*

These improvements are not included but are proposed to be added to the City of Salinas TFO.

8. Sanborn Road / Elvee Drive-U.S. 101 SB Ramps (Int. #8) – Signalized

This intersection would operate at an overall LOS E and LOS F during the AM and PM peak hours, respectively, under 2030 cumulative no project no interchange traffic conditions. The following improvements are recommended under cumulative no project no interchange conditions (RI #46):

1. *Same as background. In addition:*
2. *Add a third northbound Sanborn Road through lane.*
3. *Add a third southbound Sanborn Road through lane.*

Improvements along the Sanborn Road corridor are included in the City of Salinas TFO (#32, #37 and #66).

9. Sanborn Road / Work Street-Terven Avenue (Int. #9) – Signalized

This intersection would operate at an overall LOS F during both the AM and PM peak hours under 2030 cumulative no project no interchange traffic conditions. The following improvements are recommended under cumulative no project no interchange conditions (RI #47):

1. *Same as background plus project phase 1. In addition:*
2. *Adjust signal timing.*

Improvements along the Sanborn Road corridor are included in the City of Salinas TFO (#37).

10. Blanco Road-Sanborn Road / Abbott Street (Int. #10) – Signalized

This intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative no project no interchange traffic conditions. The following improvements are recommended under cumulative no project no interchange conditions (RI #48):

1. *Same as background plus project phase 1. In addition:*
2. *Convert the existing northbound Blanco Road-Sanborn Road right-turn into a free right-turn.*
3. *Add a third northbound Blanco Road through lane.*
4. *Convert the existing westbound Abbott Street right-turn into a free right-turn.*
5. *This results in LOS E during the AM and PM peak hours.*

These improvements are not included but are proposed to be added to the City of Salinas TFO.

11. Airport Boulevard / De la Torre Street (Int. #12) – Signalized

This intersection would operate at an overall LOS E and LOS F during the AM and PM peak hours, respectively, under 2030 cumulative no project no interchange traffic conditions. The following improvements are recommended under cumulative no project no interchange conditions (RI #13):

1. *Same as existing harvest season.*

Improvements at this intersection are funded by Caltrans (#0318) and the City of Salinas TFO (#32 and #38).

12. Airport Boulevard / Terven Avenue (Int. #13) – Signalized

This intersection would operate at an overall LOS E during the AM and PM peak hours under 2030 cumulative no project no interchange traffic conditions. The following improvements are recommended under cumulative no project no interchange conditions (RI #14):

1. *Same as existing harvest season.*

Improvements at this intersection are planned but not fully funded as Phase 2 of the Caltrans Airport Boulevard interchange project (#0318). Improvements at this intersection are included in the City of Salinas TFO (#32 and #38).

13. Airport Boulevard / Hansen Street (Int. #14) – Stop Controlled (NB & WBT)

The minor street approach of this intersection would operate at LOS F during the PM peak hour under 2030 cumulative no project no interchange traffic conditions. The following improvements are recommended under cumulative no project no interchange conditions (RI #27):

1. *Same as existing plus project phase 1.*

These improvements are not included but are proposed to be added to the City of Salinas TFO.

14. Harkins Road / Hansen Street (Int. #15) – Signalized

This intersection would operate at an overall LOS E during the PM peak hour under 2030 cumulative no project no interchange traffic conditions. The following improvements are recommended under cumulative no project no interchange conditions (RI #49):

1. *Same as existing plus project phase 1. In addition:*
2. *Convert the existing eastbound Hansen Street right-turn to include right-turn overlap phasing.*

These improvements are not included but are proposed to be added to the City of Salinas TFO. While the preceding improvements would enhance traffic operations at this intersection, it should be noted that the extensive queuing is caused by traffic

congestion at the U.S. 101 / Airport Boulevard interchange, which is planned for improvements through a Caltrans PSR (#0318) and the City of Salinas TFO (#32 and #38).

15. Harkins Road / Abbott Street (Int. #16) – Signalized

This intersection would operate at an overall LOS E during both the AM and PM peak hours under 2030 cumulative no project no interchange traffic conditions. The following improvements are recommended under cumulative no project no interchange conditions (RI #28):

1. *Same as existing plus project phase 1.*

Improvements at this intersection are not included in the City of Salinas TFO. It is proposed that the City add these improvements to the City of Salinas TFO.

16. Harkins Road / Dayton Street (Int. #18) – Stop Controlled (WB)

Although this intersection would operate at an acceptable level of service during the AM and PM peak hours, improvements are recommended due to the high volume of southbound left-turning vehicles in the AM peak hour. The following improvements are recommended under cumulative no project no interchange conditions (RI #16):

1. *Same as existing harvest season.*

Improvements at this intersection are not included in any fee program.

17. Harkins Road / Hunter Lane (Int. #19) – Stop Controlled (EB)

This intersection would operate at an overall LOS E during the AM peak hour under 2030 cumulative no project no interchange traffic conditions. The minor street approach would operate at LOS F during the AM peak hour. The following improvements are recommended under cumulative no project no interchange conditions (RI #50):

1. *Convert to all-way stop control or signalize the intersection.*

The peak hour signal warrant and the all-way stop control warrant were assessed at this intersection under all traffic scenarios. The all-way stop control warrant is currently met under existing harvest season conditions, and the peak hour signal warrant would be met beginning under 2030 cumulative no project no interchange conditions. Although the peak hour signal warrant would be met under 2030 conditions, the intersection would operate acceptably with all-way stop control. It is recommended that either all-way stop control or a signal be installed at this intersection.

Improvements at this intersection are not currently included in any fee program. This intersection would operate deficiently under 2030 cumulative no project no interchange conditions and is within the County's responsibility and jurisdiction. The County should include the preferred improvement at this intersection in their proposed

future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

18. Hatton Avenue / Spreckels Boulevard (Int. #21) – Stop Controlled (SB)

The minor street approach of this intersection would operate at LOS F during the AM and PM peak hours under 2030 cumulative no project no interchange traffic conditions. The following improvements are recommended under cumulative no project no interchange conditions (RI #51):

1. *Add a second eastbound Spreckels Boulevard through lane.*
2. *Add a second westbound Spreckels Boulevard through lane.*

Per CEQA guidelines [Section 15091(a)(2)] this intersection is within the responsibility and jurisdiction of the County and not the City of Salinas, and the improvements at this intersection can and should be adopted by the County as a part of their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

19. Harris Road / Abbott Street (Int. #22) – Signalized

This intersection would operate at an overall LOS D and LOS E during the AM and PM peak hours, respectively, under 2030 cumulative no project no interchange traffic conditions. The following improvements are recommended under cumulative no project no interchange conditions (RI #52):

1. *Same as background plus project buildout. In addition:*
2. *Convert the existing northbound Harris Road right-turn to include right-turn overlap phasing.*

Improvements at this intersection are not included in any fee program.

20. Harris Road / Harris Place (Int. #23) – Stop Controlled (EB & WB)

The minor street approach of this intersection would operate at LOS F during the PM peak hour under 2030 cumulative no project no interchange traffic conditions. The following improvements are recommended under cumulative no project no interchange conditions (RI #53):

1. *Convert to all-way stop control.*
2. *Add a second northbound Harris Road through lane.*
3. *Add a second southbound Harris Road through lane.*

Improvements at this intersection are not currently included in any fee program.

21. Firestone Driveway / Abbott Street (Int. #24) – Stop Controlled (NB)

The minor street approach of this intersection would operate at LOS F during the PM peak hour under 2030 cumulative no project no interchange traffic conditions. The following improvements are recommended under cumulative no project no interchange conditions (RI #54):

1. *Signalize the intersection.*

   Improvements along Abbott Street are included in the TAMC fee (#7).

22. U.S. 101 / Gould Road (Int. #25) – Stop Controlled (WB)

The minor street approach of this intersection would operate at LOS F during the PM peak hour under 2030 cumulative no project no interchange traffic conditions. The following improvements are recommended under cumulative no project no interchange conditions (RI #55):

1. *Eliminate the intersection and construct a frontage road system.*

   Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar. This would result in the elimination of this intersection.

23. U.S. 101 / Hartnell Road Connector (Int. #26) – Stop Controlled (WB)

This intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative no project no interchange traffic conditions. The minor street approach of this intersection would also operate at LOS F during the AM and PM peak hours. The following improvements are recommended under cumulative no project no interchange conditions (RI #20):

1. *Same as background.*

   Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar. This would result in the elimination of this intersection.

24. Cooper Road / Blanco Road (Int. #37) – Stop Controlled (SB)

This intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative no project no interchange traffic conditions. The minor street approach of this intersection would also operate at LOS F during both peak hours. The following improvements are recommended under cumulative no project no interchange conditions (RI #2):

1. *Same as existing non-harvest season.*

   Improvements at this intersection are not currently included in any fee program. This intersection operates deficiently under existing conditions and is within the County's responsibility and jurisdiction. The County should include the segment of Blanco Road in the vicinity of this intersection in their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

25. Davis Road / Blanco Road (Int. #38) – Signalized

This intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative no project no interchange traffic conditions. The following improvements are recommended under cumulative no project no interchange conditions (RI #56):

1. *Same as existing non-harvest season. In addition:*
2. *Add a second northbound Davis Road right-turn lane.*
3. *Add a second southbound Davis Road through lane.*
4. *Add a second westbound Blanco Road left-turn lane.*

Improvements at this intersection are included in the City's TFO (#26 and #41) and the TAMC Regional Traffic Impact Fee (#8 In addition, the County should include these improvements in their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

26. SR 68 / Hitchcock Road (Int. #39) – Stop Controlled (EB)

The minor street approach of this intersection would operate at LOS F during the AM and PM peak hours under 2030 cumulative no project no interchange traffic conditions.

Options for improving operations at this intersection include consolidating access points and eliminating left-turns into and out of the driveways and minor intersections along SR 68 between Foster Road and Blanco Road, or the installation of a median barrier that would to allow left-turns into the minor streets but prevent left-turns out. These options would improve safety and the levels of service at the intersections along the corridor but would result in traffic diversions and the need to accommodate U-turns along the corridor. As pointed out by Monterey County Department of Public Works staff, the corridor merits a systems analysis to address these impacts, which is beyond the scope of this study. Caltrans should consider commissioning a systems analysis of the corridor.

It should be noted that installation of a traffic signal would improve operations at this intersection to an acceptable level of service. However, it would also have an adverse impact on the through traffic on SR 68 and could cause an increase in rear-end collisions. As a result, a traffic signal is not recommended for this intersection.

27. Merrill Street / Abbott Street (Int. #42) – Stop Controlled (NB)

This intersection would operate at an overall LOS F during the PM peak hour under 2030 cumulative no project no interchange traffic conditions. The minor street approach would operate at LOS F during both the AM and PM peak hours. The following improvements are recommended under cumulative no project no interchange conditions (RI #22):

1. *Same as background.*

Improvements at this intersection are not included in the City of Salinas TFO. It is proposed that the City add these improvements to the City of Salinas TFO.

28. Skyway Boulevard / E. Alisal Street (Int. #43) – Stop Controlled (NB & SB)

This intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative no project no interchange traffic conditions. The minor street approach would also operate at LOS F during both the AM and PM peak hours. The following improvements are recommended under cumulative no project no interchange conditions (RI #23):

1. *Same as background.*

Improvements along E. Alisal Street are included in the City of Salinas TFO (#36).

29. U.S. 101 / Spence Road (Int. #44) – Stop Controlled (WB)

This intersection would operate at an overall LOS F during both the AM and PM peak hours under 2030 cumulative no project no interchange traffic conditions. The minor street approach would also operate at LOS F during both the AM and PM peak hours. The following improvements are recommended under cumulative no project no interchange conditions (RI #4):

1. *Same as existing non-harvest season.*

Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar. This would result in the elimination of this intersection.

7.4 2030 Cumulative No Project No Interchange Road Segment Operations

2030 cumulative no project no interchange AM and PM peak hour levels of service on the study road segments are tabulated in **Exhibit 7B**. Freeway ramp, weaving, and non-freeway roadway segment volumes are based upon the intersection turning volumes shown on **Diagrams 37** and **38** in **Appendix B**.

A discussion of the traffic operations for the road and freeway segments and ramps with operational deficiencies under 2030 cumulative no project no interchange traffic conditions follows. Recommended road segment improvements are discussed in italics below the description of each segment's operations, and are shown on **Exhibits 7A and 7B**.

The following operational deficiencies would be caused by existing traffic in addition to cumulative traffic growth (i.e., traffic generated by approved and future projects) on the study road network. Since this scenario does not include traffic that would be generated by the proposed project, the project is not responsible for providing any of these recommended improvements.

Road Segments

1. Abbott Street
    a. Harris Road – Firestone Driveway (Seg. #1f). This segment would operate at LOS E and LOS F during the AM and PM peak hours, respectively. The following improvements are recommended under cumulative no project no interchange conditions (RI #40):

        i. Same as background plus project buildout.

Improvements on this road segment are included in the TAMC fee (#7 and #10).

2. Airport Boulevard
    a. Terven Avenue – De la Torre Street (Seg. #2b). This segment would operate at LOS E during the PM peak hour. The following improvements are recommended under cumulative no project no interchange conditions (RI #24):

        i. Same as background.

        Improvements along this road segment are included in the City of Salinas TFO (#38).

3. Blanco Road
    a. Cooper Road – Davis Road (Seg. #3a). This segment would operate at LOS E during the AM and PM peak hours. The following improvements are recommended under cumulative no project no interchange conditions (RI #5):

        i. Same as existing non-harvest season.

        Improvements on this road segment are included in the City of Salinas TFO (# 26 and #41).

    b. Davis Road – Alisal Street (Seg. #3b). This segment will operate at LOS F during the AM and PM peak hours. The following improvements are recommended under cumulative no project no interchange conditions (RI #57):

        i. Upgrade this segment to a 4-lane expressway.

        Improvements along this road segment are included in the City of Salinas TFO (#41).

4. Davis Road
    a. Hitchcock Road – Blanco Road (Seg. #4a). This segment would operate at LOS E and LOS F during the AM and PM peak hours, respectively. The following improvements are recommended under cumulative no project no interchange conditions (RI #26):

        i. Same as background.

        Improvements along this road segment are included in the TAMC fee (#4).

    b. Blanco Road – Ambrose Drive (Seg. #4b). This segment would operate at LOS F during the AM and PM peak hours. The following improvements are recommended under cumulative no project no interchange conditions (RI #6):

i. *Same as existing non-harvest season.*

Improvements on this road segment are included in the TAMC fee (#8).

5. Harris Road
   a. Spreckels Boulevard – Harris Place (Seg. #9a). This segment would operate at LOS D during the AM and PM peak hours. The following improvements are recommended under cumulative no project no interchange conditions (RI #58):

      i. *Widen to a 4-lane divided arterial.*

      This road segment would operate deficiently under 2030 cumulative without project conditions and is within the County's responsibility and jurisdiction. The County should include this road segment in their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

   b. Harris Place – Abbott Street (Seg. #9b). This segment would operate at LOS D and LOS E during the AM and PM peak hours, respectively. The following improvements are recommended under cumulative no project no interchange conditions (RI #41):

      i. *Same as background plus project buildout.*

      This road segment would operate deficiently under 2030 cumulative without project conditions and is within the County's responsibility and jurisdiction. The County should include this road segment in their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

6. Sanborn Road
   a. Abbott Street – Terven Avenue (Seg. #13a). This segment would operate at LOS F during the PM peak hour. The following improvements are recommended under cumulative no project no interchange conditions (RI #59):

      i. *Widen to a 6-lane divided arterial.*

      Improvements along the Sanborn Road corridor are included in the City of Salinas TFO (#37).

   b. Terven Avenue – U.S. 101 (Seg. #13b). This segment would operate at LOS E and LOS F during the AM and PM peak hours, respectively. The following improvements are recommended under cumulative no project no interchange conditions (RI #60):

      i. *Widen to a 6-lane divided arterial.*

Improvements along the Sanborn Road corridor are included in the City of Salinas TFO (#37).

c. U.S. 101 – Fairview Avenue (Seg. #13c). This segment would operate at LOS F during the PM peak hour. The following improvements are recommended under cumulative no project no interchange conditions (RI #61):

i. Widen to a 6-lane divided arterial.

Improvements along the Sanborn Road corridor are included in the City of Salinas TFO (#37).

7. Spreckels Boulevard
   a. SR 68 – Hatton Avenue (Seg. #15a). This segment would operate at LOS E during the AM and PM peak hours. The following improvements are recommended under cumulative no project no interchange conditions (RI #62):

i. Widen to a 4-lane expressway.

This road segment would operate deficiently under 2030 cumulative without project conditions and is within the County's responsibility and jurisdiction. The County should include this road segment in their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

   b. Hatton Avenue – Harris Road (Seg. #15b). This segment would operate at LOS D during the AM and PM peak hours. The following improvements are recommended under cumulative no project no interchange conditions (RI #63):

i. Widen to a 4-lane expressway.

This road segment would operate deficiently under 2030 cumulative without project conditions and is within the County's responsibility and jurisdiction. The County should include this road segment in their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

8. SR 68
   a. Spreckels Boulevard – Foster Road (Seg. #16a). This segment would operate at LOS D during the AM and PM peak hour. Per CEQA guidelines [Section 15091(a)(2)] this road segment is within the responsibility and jurisdiction of Caltrans and TAMC and not the City of Salinas. Improvements to this road segment can and should be adopted by Caltrans and TAMC. The following improvements are recommended under cumulative no project no interchange conditions (RI #64):

i. *Consolidate access points and eliminate left-turns into and out of driveways and minor intersections*
ii. *Install acceleration and deceleration lanes to Caltrans Standards.*

These improvements are not included but should be added to the list of projects in the TAMC fee.

b. Foster Road – Hitchcock Road (Seg. #16b). This segment would operate at LOS D during the AM and PM peak hours. Per CEQA guidelines [Section 15091(a)(2)] this road segment is within the responsibility and jurisdiction of Caltrans and TAMC and not the City of Salinas. Improvements to this road segment can and should be adopted by Caltrans and TAMC. The following improvements are recommended under cumulative no project no interchange conditions (RI #65):

i. *Consolidate access points and eliminate left-turns into and out of driveways and minor intersections*
ii. *Install acceleration and deceleration lanes to Caltrans Standards.*

These improvements are not included but should be added to the list of projects in the TAMC fee.

c. Hitchcock Road – Hunter Lane (Seg.16c). This segment would operate at LOS D during the PM peak hour. Per CEQA guidelines [Section 15091(a)(2)] this road segment is within the responsibility and jurisdiction of Caltrans and TAMC and not the City of Salinas. Improvements to this road segment can and should be adopted by Caltrans and TAMC. The following improvements are recommended under cumulative no project no interchange conditions (RI #66):

i. *Consolidate access points and eliminate left-turns into and out of driveways and minor intersections*
ii. *Install acceleration and deceleration lanes to Caltrans Standards.*

These improvements are not included but should be added to the list of projects in the TAMC fee.

d. Hunter Lane – Blanco Road (Seg. #16d). This segment would operate at LOS D during the PM peak hour. Per CEQA guidelines [Section 15091(a)(2)] this road segment is within the responsibility and jurisdiction of Caltrans and TAMC and not the City of Salinas. Improvements to this road segment can and should be adopted by Caltrans and TAMC. The following improvements are recommended under cumulative no project no interchange conditions (RI #67):

i. *Consolidate access points and eliminate left-turns into and out of driveways and minor intersections*
ii. *Install acceleration and deceleration lanes to Caltrans Standards.*

These improvements are not included but should be added to the list of projects in the TAMC fee.

9. SR 156
    a. Castroville Boulevard – U.S. 101 (Seg. #17b). This segment would operate at LOS E and LOS F during the AM and PM peak hours, respectively. The following improvements are recommended under cumulative no project no interchange conditions (RI #7):

        i. *Widen and upgrade to a 4-lane freeway.*

        These improvements are included in the TAMC fee (#3).

10. SR 183
    a. Espinosa Road – Salinas City Limits (Seg. #18a). This segment would operate at LOS E during the AM and PM peak hours. Per CEQA guidelines [Section 15091(a)(2)] this road segment is within the responsibility and jurisdiction of Caltrans and TAMC and not the City of Salinas. Improvements to this road segment can and should be adopted by Caltrans and TAMC. The following improvements are recommended under cumulative no project no interchange conditions (RI #17):

        i. *Same as existing harvest season.*

        These improvements are not included but should be added to the list of projects in the TAMC fee.

Freeway Segments

1. U.S. 101
    a. Potter Road – Spence Road (Seg. #20a). This segment would operate at LOS E during the PM peak hour. The following improvements are recommended under cumulative no project no interchange conditions (RI #68):

        i. *Widen to a 6-lane freeway.*

        Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar. This would improve traffic operations on U.S. 101 by eliminating minor intersections along the corridor. This road segment is within the responsibility and jurisdiction of Caltrans, and not

the City of Salinas. Improvements along this corridor should be added to the TAMC fee.

b. Spence Road – Abbott Street (Seg. #20b). This segment would operate at LOS D and LOS F during the AM and PM peak hours, respectively. The following improvements are recommended under cumulative no project no interchange conditions (RI #69):

   i. Widen to a 6-lane freeway.

   Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar. This would improve traffic operations on U.S. 101 by eliminating minor intersections along the corridor. This road segment is within the responsibility and jurisdiction of Caltrans, and not the City of Salinas. Improvements along this corridor should be added to the TAMC fee.

c. Airport Boulevard – Sanborn Road (Seg. #20g). This segment would operate at LOS D during the PM peak hour. The following improvements are recommended under cumulative no project no interchange conditions (RI #70):

   i. Widen to a 6-lane freeway.

   These improvements are included in the City of Salinas TFO (#32).

d. Sanborn Road – John Street (Seg. #20h). This segment would operate at LOS E during the PM peak hour. The following improvements are recommended under cumulative no project no interchange conditions (RI #71):

   i. Same as background plus project phase 1.

   These improvements are included in the City of Salinas TFO (#32).

Freeway Ramps

1. Abbott Street Interchange
   a. Northbound offramp (Seg. #23a). This ramp would operate at LOS D during the AM peak hour. The following improvements are recommended under cumulative no project no interchange conditions (RI #72):

      i. Widen offramp from one lane to two lanes.

      Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the west side of U.S. 101 from the future Harris Road interchange to Chualar and removing the existing segment of Abbott Street from U.S. 101 to Harris Road.

Weaving Segments

The results of the weaving analysis are discussed in Chapter 11.

8 2030 Cumulative No Project With Interchange Traffic Conditions

This chapter presents a description of the traffic network, traffic volumes, and intersection and road segment levels of service within the study area under 2030 cumulative traffic conditions without the proposed project and with the future Harris Road interchange.

8.1 Future Harris Road Interchange

The U.S. 101 / Harris Road interchange is identified as a major improvement required for the buildout of the Salinas General Plan in the Salinas General Plan Circulation Element. (Salinas General Plan Circulation Element improvement #39 on Table C-4 – Roadway network improvements, Page C-25, September 2002). The Harris Road interchange would also be part of an eastern bypass which would extend from the Harris Road / U.S. 101 interchange to the Boronda Road / Williams Road intersection, around the south and east sides of the Salinas Airport. This improvement is identified as number 24 on page C-24 of Table C-4, "Roadway Network Improvements." Other components of this improvement include upgrades to Alisal Road from the City of Salinas City Limits to the eastern bypass, and the extension of Moffett Street from its current terminus in the industrial area west of the Salinas Airport to the eastern bypass. Partial funding for this improvement is included in the Salinas Traffic Fee Program and Ordinance, Final Draft Report, 2005 update. Relevant excerpts of this document are included in **Appendix K**.

The current draft of the "Regional Impact Fee Nexus Study Update," prepared for the Transportation Agency for Monterey County (TAMC), Kimley–Horn and Associates, Inc., March 26, 2008 identifies the Harris Road interchange and the eastside connector (which is identified as the eastern bypass in the Salinas General Plan) as improvements that will partially be funded by the Regional Traffic Impact Fee which went into affect August 27, 2008. Relevant excerpts of the current draft of the Regional Impact Fee Study are included as **Appendix L**.

Caltrans prepared the "Project Study Report – On Route 101 and Monterey County between Main Street Over-Crossing in Chualar and Airport Boulevard Over-Crossing in Salinas," which was approved on September 22, 2003. This document included four alternative strategies to upgrade U.S. 101 south of Salinas to a freeway and included various locations for the Harris Road interchange. This is the first document to develop alternatives for a more precise location for the Harris Road interchange. The most northerly interchange location is slightly more than one mile south of the existing Harris Road and about one mile north of the existing U.S. 101 / Abbott Street interchange. This is identified as Alternative 4 in the project study report.

One of the main challenges of constructing an interchange along U.S. 101 near Harris Road is the close proximity of the Union Pacific Railroad tracks to the west edge of pavement (southbound shoulder) on U.S. 101. The distance from the center line of the tracks to the edge of pavement is approximately 74 feet according to field measurements conducted as a part of this study. Further complicating this interchange is the close proximity of Abbott Street to the railroad tracks on the west side of the railroad tracks. The distance from the center line of the railroad tracks to the east curb line (northbound shoulder) of Abbott Street is about 70 feet

according to aerial photographs. The bridge that would be constructed over U.S. 101 as a part of a typical interchange will also have to span the Union Pacific Railroad tracks and Abbott Street.

In addition to this, Caltrans is indicating that the main line of U.S. 101 will need to be relocated to provide a greater separation between the railroad tracks and the main lines where the interchange ramps will be located. According to the project study report, a total of about 1.3 miles of freeway will need to be reconstructed. This would be a substantial expense because it would require right-of-way acquisition that would not be required if the interchange were simply located over the existing highway. There would also be substantial costs for the relocation of the freeway main line. The complications of handling high speed, high volume traffic during construction will dramatically increase the unit cost that would normally be applied for 1.3 miles of freeway. An option that would require vertical retaining walls in order to sandwich the southbound ramps between the existing southbound U.S. 101 main line and the railroad tracks should be explored as an alternative. This would result in a tight diamond configuration for the southbound U.S. 101 ramps. The northbound ramps could be located much further to the west, perhaps with a loop ramp for the northbound to westbound off-ramp in order to provide appropriate intersection spacing between the northbound and southbound ramp intersections with the Harris Road Extension over U.S. 101.

The AMBAG Travel Forecast Model includes a base year 2030 network that includes the equivalent of the Harris Road interchange by constructing a multi level interchange at the existing Abbott Street interchange location. The interchange depicted in the model includes extending Abbott Street over U.S. 101 and connecting it with Hartnell Road on the east side of U.S. 101. The existing southbound on-ramp and northbound off-ramp appear to be left in their current location. Ramps to and from the north would be constructed off of the additional structures that would connect the east and west sides of the freeway. The traffic volumes diverted to an interchange at this location are almost non-existent. The Abbott Street location would be located far too southerly to serve as a reasonable travel alternative for traffic between the east and west sides of U.S. 101 in the City of Salinas. In addition, virtually no traffic would use an interchange located this far south of Salinas to go to and from the north on U.S. 101.

Model runs were conducted to test an interchange location immediately south of the Cal Doors industrial facility which is located at the southeast corner of the Abbott Street / Harris Road intersection. A conceptual sketch of a possible interchange at this location is included as **Exhibit 17**. Model runs using year 2030 land use forecasts and the base AMBAG network at this location indicate that about 12,000 vehicles per day would use the Harris Road Extension (Eastern Bypass in the Salinas General Plan), also called the Eastside Connector in the TAMC Regional Impact Fee Study. Traffic is forecasted to utilize the southbound offramp and northbound onramp, and traffic would also be diverted off of the Abbott Street interchange ramps that currently provide access to and from the south on U.S. 101.

An interchange at this location appears to be the most appropriate in terms of providing traffic relief for the Airport Boulevard and Sanborn Road interchanges, as well as the Blanco Road – Sanborn Road corridor. **Exhibit 18** illustrates the approximate reductions in traffic along the Blanco Road – Sanborn Road corridor, as well as at the U.S. 101 / Sanborn Road and U.S. 101 / Airport Boulevard interchanges. Traffic will also divert from the SR 183 – Market Street corridor, SR 68 north of Spreckels Boulevard, and the SR 68-Main Street corridor through the

southerly portion of downtown Salinas, thus relieving traffic at the U.S. 101 / Market Street and U.S. 101 / John Street interchanges.

The construction of this interchange would result in traffic increases not only on Harris Road and Spreckels Boulevard, but also on SR 68 between Spreckels Boulevard and Reservation Road, and on Reservation Road between SR 68 and Blanco Road. The Spreckels Boulevard-Harris Road corridor has been identified in the Monterey County General Plan as requiring widening to four lanes under 2030 cumulative, which will be more than adequate to accommodate the additional traffic associated with this interchange.

The provision of traffic relief not only at the U.S. 101 interchanges with Airport Boulevard and Sanborn Road, but also along the Blanco Road – Sanborn Road corridors and at U.S. 101 / John Street is a substantial benefit for the City of Salinas. This will help mitigate otherwise "unmitigatable" impacts at the Blanco Road intersections with Main Street (SR 68) and Abbott Street. It will result in some reduction in traffic and thus congestion along Main Street south of John Street, and will result in a slight reduction in traffic along the otherwise impacted Market Street (SR 183) corridor north of downtown Salinas. Furthermore, it reduces traffic volumes on the substandard weaving sections between the Airport Boulevard, Sanborn Road, John Street and Market Street interchanges. Finally, it could result in a substantial reduction in traffic on the existing non-standard southbound onramp and northbound offramp at Airport Boulevard. This will reduce the weaving deficiencies between the Abbott Street interchange and Hartnell Road. It will, in fact, allow the elimination of the Hartnell intersection by allowing access between U.S. 101 and Alisal Road via the Eastern Bypass (Eastside Connector or Harris Road Extension, whatever the appropriate street name is).

The construction of the U.S. 101 / Harris Road interchange will be required to fully mitigate the impacts of regional growth throughout the southerly portion of the City of Salinas. The caveat for the effectiveness of this mitigation is that the interchange must be located as far as possible to the north (i.e., immediately south of Harris Road). The schematic plan included as **Exhibit 17** depicts the most effective connector road between Harris Road and the interchange to result in the maximum traffic diversions. The actual interchange location and roadway configuration may differ slightly from what is depicted on this exhibit.

In July, 2007 TAMC commissioned planning level cost estimates[9] for several projects as part of the TAMC Regional Impact Fee Nexus Study Update. One of these projects was the "Eastern Connector and Harris Road Interchange" project. This document provides a schematic of the future Harris Road interchange and shows it in nearly the same location as described in the preceding paragraph and as shown on **Exhibit 17**. An excerpt of this document is provided in **Appendix Z**.

[9] *TAMC Planning Level Cost Estimates for Transportation Agency for Monterey County Projects*, Wood Rodgers, Inc.

8.2 2030 Cumulative No Project With Interchange Intersection Operations

The 2030 cumulative no project with interchange intersection turning movement volumes were derived from the AMBAG regional travel demand model Average Daily Traffic (ADT) forecasts for the year 2030 road network. The amount of traffic that would be diverted from existing interchanges to the Harris Road interchange was estimated by comparing 2030 daily volume forecasts from the AMBAG model with and without the Harris Road interchange coded into the model. Traffic diversions from the Airport Boulevard and Sanborn Road interchanges, as well as the Blanco Road – Sanborn Road corridor were observed. In addition, the model also indicated traffic diversions would occur from other portions of the local road network, including the SR 183 – Market Street corridor, SR 68 north of Spreckels Boulevard, the SR 68-Main Street corridor through the southerly portion of downtown Salinas, and the U.S. 101 / Market Street and U.S. 101 / John Street interchanges. Manual adjustments for these traffic diversions were made, and are shown on **Diagrams 39A** and **40A** in **Appendix B**.

The 2030 cumulative no project no interchange volumes from **Diagrams 37** and **38** were combined with the traffic diversions shown in **Diagrams 39A** and **40A** to obtain 2030 cumulative no project with interchange volumes, which are shown on **Diagrams 39B** and **40B** in **Appendix B**. 2030 cumulative no project with interchange AM and PM intersection levels of service are summarized in **Exhibit 5B**. LOS calculation sheets are included as **Appendix M1**. LOS calculation sheets with recommended improvements are included as **Appendix M2**. A summary of all recommended intersection improvements is included in **Exhibit 6B**.

A description of each intersection that would operate deficiently under 2030 cumulative no project with interchange conditions follows below. Recommended improvements are discussed in italics below the description of each intersection's operations.

The following operational deficiencies would be caused by existing traffic in addition to cumulative traffic growth (i.e., traffic generated by approved and future projects) on the study road network. Since this scenario does not include traffic that would be generated by the proposed project, the project is not responsible for providing any of these recommended improvements.

1. SR 68 / Blanco Road (Int. #1) – Signalized

This intersection would operate at an overall LOS E and LOS F during the AM and PM peak hours, respectively, under 2030 cumulative no project with interchange traffic conditions. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #1):

1. *Same as existing non-harvest season (see Section 2.3).*

Improvements 1, 4 and 5 are included in the City of Salinas TFO (#59). Improvements 2, 3 and 6 are also recommended, but would only improve operations to level of service D during the AM and PM peak hours. The City will need to consider several challenges at this intersection. For example, widening the south leg of the intersection to accommodate a third receiving lane on southbound SR 68 may require the relocation of PG&E electrical equipment located on the southeast corner of the

intersection, and the addition of a westbound right-turn lane would require the reconfiguration of the parking lot on the northeast corner of the intersection. For these reasons, the City must determine whether or not the recommended improvements are feasible.

2. SR 68 / Hunter Lane (Int. #2) – Stop Controlled (WB)

The minor street approach of this intersection would operate at LOS F during the AM and PM peak hours under 2030 cumulative no project with interchange traffic conditions.

Options for improving operations at this intersection include consolidating access points and eliminating left-turns into and out of the driveways and minor intersections along SR 68 between Foster Road and Blanco Road, or the installation of a median barrier that would to allow left-turns into the minor streets but prevent left-turns out. These options would improve safety and the levels of service at the intersections along the corridor but would result in traffic diversions and the need to accommodate U-turns along the corridor. As pointed out by Monterey County Department of Public Works staff, the corridor merits a systems analysis to address these impacts, which is beyond the scope of this study. Caltrans should consider commissioning a systems analysis of the corridor.

It should be noted that installation of a traffic signal would improve operations at this intersection to an acceptable level of service. However, it would also have an adverse impact on the through traffic on SR 68 and could cause an increase in rear-end collisions. As a result, a traffic signal is not recommended for this intersection.

3. SR 68 WB Ramps / Spreckels Boulevard (Int. #3) – Stop Controlled (SB)

This intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative no project with interchange traffic conditions. The minor street approach would also operate at LOS F during both peak hours. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #42):

1. *Same as 2030 cumulative no project no interchange.*

Per CEQA guidelines [Section 15091(a)(2)] this intersection is within the responsibility and jurisdiction of Caltrans and not the City of Salinas, and the improvements at this intersection can and should be adopted by Caltrans and the County as a part of their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

4. SR 68 EB Off-Ramp / Spreckels Boulevard (Int. #4) – Stop Controlled (NB)

This intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative no project with interchange traffic conditions. The minor street approach would also operate at LOS F during both peak hours. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #43):

1. *Same as 2030 cumulative no project no interchange.*

   Per CEQA guidelines [Section 15091(a)(2)] this intersection is within the responsibility and jurisdiction of Caltrans and not the City of Salinas, and the improvements at this intersection can and should be adopted by Caltrans and the County as a part of their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

5. SR 68 EB On-Ramp / Spreckels Boulevard (Int. #5) – Stop Controlled (SB)

The minor street approach at this intersection would operate at LOS F during the AM and PM peak hours under 2030 cumulative no project with interchange traffic conditions. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #44):

1. *Same as 2030 cumulative no project no interchange*
2. *Results in LOS F on the minor street approach during the AM and PM peak hours*

   .

   Per CEQA guidelines [Section 15091(a)(2)] this intersection is within the responsibility and jurisdiction of Caltrans and not the City of Salinas, and the improvements at this intersection can and should be adopted by Caltrans and the County as a part of their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

6. Sanborn Road / Fairview Ave.-U.S. 101 NB Offramp (Int. #6) – Stop Controlled (EB & WB)

This intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative no project with interchange traffic conditions. The minor street approach would also operate at LOS F during both the AM and PM peak hours. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #18):

1. *Same as background.*

   Improvements along the Sanborn Road corridor are included in the City of Salinas TFO (#32 and #37).

7. U.S. 101 NB Ramps / Fairview Avenue (Int. #7) – Stop Controlled (NB)

The minor street approach at this intersection would operate at LOS F during the PM peak hour under 2030 cumulative no project with interchange traffic conditions. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #45):

1. *Same as 2030 cumulative no project no interchange.*

   These improvements are not included but are proposed to be added to the City of Salinas TFO.

8. Sanborn Road / Elvee Drive-U.S. 101 SB Ramps (Int. #8) – Signalized

This intersection would operate at an overall LOS E and LOS F during the AM and PM peak hours, respectively, under 2030 cumulative no project with interchange traffic conditions. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #46):

1. *Same as background. In addition:*
2. *Add a third northbound Sanborn Road through lane.*

Improvements along the Sanborn Road corridor are included in the City of Salinas TFO (#32, #37 and #66).

9. Sanborn Road / Work Street-Terven Avenue (Int. #9) – Signalized

This intersection would operate at an overall LOS F during both the AM and PM peak hours under 2030 cumulative no project with interchange traffic conditions. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #47):

1. *Same as 2030 cumulative no project no interchange.*

Improvements along the Sanborn Road corridor are included in the City of Salinas TFO (#37).

10. Blanco Road-Sanborn Road / Abbott Street (Int. #10) – Signalized

This intersection would operate at an overall LOS E and LOS F during the AM and PM peak hours, respectively, under 2030 cumulative no project with interchange traffic conditions. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #48):

1. *Same as 2030 cumulative no project no interchange.*

These improvements are not included but are proposed to be added to the City of Salinas TFO.

11. Airport Boulevard / De la Torre Street (Int. #12) – Signalized

This intersection would operate at an overall LOS D and LOS E during the AM and PM peak hours, respectively, under 2030 cumulative no project with interchange traffic conditions. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #13):

1. *Same as existing harvest season.*

Improvements at this intersection are funded by Caltrans (#0318) and the City of Salinas TFO (#32 and #38).

12. Airport Boulevard / Terven Avenue (Int. #13) – Signalized

This intersection would operate at an overall LOS D during the AM and PM peak hours under 2030 cumulative no project with interchange traffic conditions. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #14):

1. *Same as existing harvest season.*

   Improvements at this intersection are planned but not fully funded as Phase 2 of the Caltrans Airport Boulevard interchange project (#0318). Improvements at this intersection are included in the City of Salinas TFO (#32 and #38).

13. Harkins Road / Hansen Street (Int. #15) – Signalized

This intersection would operate at an overall LOS D during the AM and PM peak hours under 2030 cumulative no project with interchange traffic conditions. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #49):

1. *Same as 2030 cumulative no project no interchange.*

   These improvements are not included but are proposed to be added to the City of Salinas TFO. While the preceding improvements would enhance traffic operations at this intersection, it should be noted that the extensive queuing is caused by traffic congestion at the U.S. 101 / Airport Boulevard interchange, which is planned for improvements through a Caltrans PSR (#0318) and the City of Salinas TFO (#32 and #38).

14. Harkins Road / Abbott Street (Int. #16) – Signalized

This intersection would operate at an overall LOS E and LOS D during the AM and PM peak hours, respectively, under 2030 cumulative no project with interchange traffic conditions. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #28):

1. *Same as existing plus project phase 1.*

   Improvements at this intersection are not included in the City of Salinas TFO. It is proposed that the City add these improvements to the City of Salinas TFO.

15. Harkins Road / Dayton Street (Int. #18) – Stop Controlled (WB)

This intersection would operate at an overall LOS A and the worst approach would operate at LOS B during the AM and PM peak hours under 2030 cumulative no project with interchange traffic conditions. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #16):

1. *Same as existing harvest season.*

   Improvements at this intersection are not included in any fee program.

16. Harkins Road / Hunter Lane (Int. #19) – Stop Controlled (EB)

This intersection would operate at an overall LOS E during the AM peak hour under 2030 cumulative no project with interchange traffic conditions. The minor street approach would operate at LOS F during the AM peak hour. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #50):

1. *Same as 2030 cumulative no project no interchange.*

   The peak hour signal warrant and the all-way stop control warrant were assessed at this intersection under all traffic scenarios. The all-way stop control warrant is currently met under existing harvest season conditions, and the peak hour signal warrant would be met beginning under 2030 cumulative no project no interchange conditions. Although the peak hour signal warrant would be met under 2030 conditions, the intersection would operate acceptably with all-way stop control. It is recommended that either all-way stop control or a signal be installed at this intersection.

   Improvements at this intersection are not currently included in any fee program. This intersection would operate deficiently under 2030 cumulative no project no interchange conditions and is within the County's responsibility and jurisdiction. The County should include the preferred improvement at this intersection in their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

17. Hatton Avenue / Spreckels Boulevard (Int. #21) – Stop Controlled (SB)

This intersection would operate at an overall LOS D during the AM peak hour under 2030 cumulative no project with interchange traffic conditions. The minor street approach would operate at LOS F during the AM and PM peak hours. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #74):

1. *Same as 2030 cumulative no project no interchange. In addition:*
2. *Add a southbound Hatton Avenue right-turn lane.*

   Per CEQA guidelines [Section 15091(a)(2)] this intersection is within the responsibility and jurisdiction of the County and not the City of Salinas, and the improvements at this intersection can and should be adopted by the County as a part of their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

18. Harris Road / Abbott Street (Int. #22) – Signalized

This intersection would operate at an overall LOS E during the PM peak hour under 2030 cumulative no project with interchange traffic conditions. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #75):

1. *Add a second northbound Harris Road left-turn lane.*

Improvements at this intersection are not included in any fee program.

19. U.S. 101 / Gould Road (Int. #25) – Stop Controlled (WB)

The minor street approach would operate at LOS F during the AM and PM peak hours under 2030 cumulative no project with interchange traffic conditions. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #55):

1. *Same as 2030 cumulative no project no interchange.*

Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar. This would result in the elimination of this intersection.

20. U.S. 101 / Hartnell Road Connector (Int. #26) – Stop Controlled (WB)

This intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative no project with interchange traffic conditions. The minor street approach of this intersection would also operate at LOS F during the AM and PM peak hours. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #20):

1. *Same as background.*

Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar. This would result in the elimination of this intersection.

21. Harris Road / Harris Road Interchange Connector (Int. #34) – Future Intersection

The analysis at this intersection assumes the Harris Road interchange (and the connector road between the interchange and Harris Road) would be located as shown in **Exhibit 17**, which shows a conceptual sketch of a possible location for the interchange.

With the assumed roadway layout, as shown in **Exhibit 17**, this intersection would operate at an acceptable level of service during the AM and PM peak hours under 2030 cumulative no project with interchange traffic conditions with the following traffic control and lane configurations (RI #76).

Signalize intersection with the following proposed lane configurations:

1. *Northbound Harris Road approach: One through lane and two right-turn lanes.*
2. *Southbound Harris Road approach: One left-turn lane and one through lane.*
3. *Westbound Interchange Connector approach: Two left-turn lanes and one right-turn lane.*

22. Cooper Road / Blanco Road (Int. #37) – Stop Controlled (SB)

This intersection would operate at an overall LOS E during the AM peak hour and LOS F during the PM peak hour under 2030 cumulative no project with interchange traffic conditions. The minor street approach of this intersection would also operate at LOS F during both peak hours. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #2):

1. *Same as existing non-harvest season.*

Improvements at this intersection are not currently included in any fee program. This intersection operates deficiently under existing conditions and is within the County's responsibility and jurisdiction. The County should include the segment of Blanco Road in the vicinity of this intersection in their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

23. Davis Road / Blanco Road (Int. #38) – Signalized

This intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative no project with interchange traffic conditions. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #56):

1. *Same as 2030 cumulative no project no interchange.*

Improvements at this intersection are included in the City's TFO (#26 and #41) and the TAMC Regional Traffic Impact Fee (#8). In addition, the County should include these improvements in their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

24. SR 68 / Hitchcock Road (Int. #39) – Stop Controlled (EB)

The minor street approach of this intersection would operate at LOS F during the PM peak hour under 2030 cumulative no project with interchange traffic conditions.

Options for improving operations at this intersection include consolidating access points and eliminating left-turns into and out of the driveways and minor intersections along SR 68 between Foster Road and Blanco Road, or the installation of a median barrier that would to allow left-turns into the minor streets but prevent left-turns out. These options would improve safety and the levels of service at the intersections along the corridor but would result in traffic diversions and the need to accommodate U-turns along the corridor. As pointed out by Monterey County Department of Public Works staff, the corridor merits a systems analysis to address these impacts, which is beyond the scope of this study. Caltrans should consider commissioning a systems analysis of the corridor.

It should be noted that installation of a traffic signal would improve operations at this intersection to an acceptable level of service. However, it would also have an adverse impact on the through traffic on SR 68 and could cause an increase in rear-end collisions. As a result, a traffic signal is not recommended for this intersection.

25. Merrill Street / Abbott Street (Int. #42) – Stop Controlled (NB)

This intersection would operate at an overall LOS F during the PM peak hour under 2030 cumulative no project with interchange traffic conditions. The minor street approach would operate at LOS F during both the AM and PM peak hours. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #22):

1. *Same as background.*

Improvements at this intersection are not included in the City of Salinas TFO. It is proposed that the City add these improvements to the City of Salinas TFO.

26. Skyway Boulevard / E. Alisal Street (Int. #43) – Stop Controlled (NB & SB)

This intersection would operate at an overall LOS F during the AM peak hour under 2030 cumulative no project with interchange traffic conditions. The minor street approach of this intersection would operate at an overall LOS F during the AM and PM peak hours. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #23):

1. *Same as background.*

Improvements along E. Alisal Street are included in the City of Salinas TFO (#36).

27. U.S. 101 / Spence Road (Int. #44) – Stop Controlled (WB)

This intersection would operate at an overall LOS F during both the AM and PM peak hours under 2030 cumulative no project with interchange traffic conditions. The minor street approach would also operate at LOS F during both the AM and PM peak hours. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #4):

1. *Same as existing non-harvest season.*

Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar. This would result in the elimination of this intersection.

8.3 2030 Cumulative No Project With Interchange Road Segment Operations

2030 cumulative no project with interchange AM and PM peak hour levels of service on the study road segments are tabulated in **Exhibit 7B**. Freeway ramp, weaving, and non-freeway roadway segment volumes are based upon the intersection turning volumes shown on **Diagrams 39** and **40** in **Appendix B**.

A discussion of the traffic operations for the road and freeway segments and ramps with operational deficiencies under 2030 cumulative no project with interchange traffic conditions follows. Recommended road segment improvements are discussed in italics below the description of each segment's operations, and are shown on **Exhibits 7A and 7B**.

The following operational deficiencies would be caused by existing traffic in addition to cumulative traffic growth (i.e., traffic generated by approved and future projects) on the study road network. Since this scenario does not include traffic that would be generated by the proposed project, the project is not responsible for providing any of these recommended improvements.

Road Segments

1. Blanco Road
    a. Cooper Road – Davis Road (Seg. #3a). This segment would operate at LOS E during the AM and PM peak hours. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #5):

        i. Same as existing non-harvest season.

        Improvements on this road segment are included in the City of Salinas TFO (# 26 and #41).

    b. Davis Road – Alisal Street (Seg. #3b). This segment will operate at LOS E and LOS F during the AM and PM peak hours, respectively. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #57):

        i. Same as 2030 cumulative no project no interchange.

        Improvements along this road segment are included in the City of Salinas TFO (#41).

2. Davis Road
    a. Hitchcock Road – Blanco Road (Seg. #4a). This segment would operate at LOS E and LOS F during the AM and PM peak hours, respectively. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #26):

        i. Same as background.

        Improvements along this road segment are included in the TAMC fee (#4).

    b. Blanco Road – Ambrose Drive (Seg. #4b). This segment would operate at LOS F during the AM and PM peak hours. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #6):

        i. Same as existing non-harvest season.

        Improvements on this road segment are included in the TAMC fee (#8).

3. Harris Road
    a. Spreckels Boulevard – Harris Place (Seg. #9a). This segment would operate at LOS E during the AM and PM peak hours. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #58):

        i. Widen to a 4-lane divided arterial.

        This road segment would operate deficiently under 2030 cumulative without project conditions and is within the County's responsibility and jurisdiction. The County should include this road segment in their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

    b. Harris Place – Abbott Street (Seg. #9b). This segment would operate at LOS D during the AM and PM peak hours. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #41):

        i. Same as background plus project buildout.

        This road segment would operate deficiently under 2030 cumulative no project with interchange conditions and is within the County's responsibility and jurisdiction. The County should include this road segment in their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

4. Sanborn Road
    a. Terven Avenue – U.S. 101 (Seg. #13b). This segment would operate at LOS E during the PM peak hour. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #60):

        i. Same as 2030 cumulative no project no interchange.

        Improvements along the Sanborn Road corridor are included in the City of Salinas TFO (#37).

    b. U.S. 101 – Fairview Avenue (Seg. #13c). This segment would operate at LOS E during the PM peak hour. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #61):

        i. Same as 2030 cumulative no project no interchange.

        Improvements along the Sanborn Road corridor are included in the City of Salinas TFO (#37).

5. Spreckels Boulevard
    a. SR 68 – Hatton Avenue (Seg. #15a). This segment would operate at LOS F during the AM and PM peak hours. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #62):

        i. Same as 2030 cumulative no project no interchange.

        This road segment would operate deficiently under 2030 cumulative without project conditions and is within the County's responsibility and jurisdiction. The County should include this road segment in their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

    b. Hatton Avenue – Harris Road (Seg. #15b). This segment would operate at LOS E during the AM and PM peak hours. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #63):

        i. Same as 2030 cumulative no project no interchange.

        This road segment would operate deficiently under 2030 cumulative without project conditions and is within the County's responsibility and jurisdiction. The County should include this road segment in their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

6. SR 68
    a. Spreckels Boulevard – Foster Road (Seg. #16a). This segment would operate at LOS D during the PM peak hour. Per CEQA guidelines [Section 15091(a)(2)] this road segment is within the responsibility and jurisdiction of Caltrans and TAMC and not the City of Salinas. Improvements to this road segment can and should be adopted by Caltrans and TAMC. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #64):

        i. Same as 2030 cumulative no project no interchange.

        These improvements are not included but should be added to the list of projects in the TAMC fee.

    b. Foster Road – Hitchcock Road (Seg. #16b). This segment would operate at LOS D during the PM peak hour. Per CEQA guidelines [Section 15091(a)(2)] this road segment is within the responsibility and jurisdiction of Caltrans and TAMC and not the City of Salinas. Improvements to this road segment can and should be adopted by Caltrans and TAMC. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #65):

i. *Same as 2030 cumulative no project no interchange.*

These improvements are not included but should be added to the list of projects in the TAMC fee.

7. SR 156
   a. Castroville Boulevard – U.S. 101 (Seg. #17b). This segment would operate at LOS E and LOS F during the AM and PM peak hours, respectively. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #7):

      i. *Same as 2030 cumulative no project no interchange.*

      These improvements are included in the TAMC fee (#3).

8. SR 183
   a. Espinosa Road – Salinas City Limits (Seg. #18a). This segment would operate at LOS E during the AM and PM peak hours. Per CEQA guidelines [Section 15091(a)(2)] this road segment is within the responsibility and jurisdiction of Caltrans and TAMC and not the City of Salinas. Improvements to this road segment can and should be adopted by Caltrans and TAMC. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #17):

      i. *Same as existing harvest season.*

      These improvements are not included but should be added to the list of projects in the TAMC fee.

Freeway Segments

1. U.S. 101
   a. Potter Road – Spence Road (Seg. #20a). This segment would operate at LOS E during the PM peak hour. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #68):

      i. *Same as 2030 cumulative no project no interchange.*

      Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar. This would improve traffic operations on U.S. 101 by eliminating minor intersections along the corridor. This road segment is within the responsibility and jurisdiction of Caltrans, and not the City of Salinas. Improvements along this corridor should be added to the TAMC fee.

b. Spence Road – Abbott Street (Seg. #20b). This segment would operate at LOS D and LOS F during the AM and PM peak hours, respectively. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #69):

   i. Same as 2030 cumulative no project no interchange.

   Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar. This would improve traffic operations on U.S. 101 by eliminating minor intersections along the corridor. This road segment is within the responsibility and jurisdiction of Caltrans, and not the City of Salinas. Improvements along this corridor should be added to the TAMC fee.

c. Abbott Street – Gould Road (Seg. #20c). This segment would operate at LOS D during the PM peak hour. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #77):

   i. Widen to a 6-lane freeway.

   Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar.

d. Gould Road – Harris Road (Seg. #20e). This segment would operate at LOS D during the PM peak hour. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #78):

   i. Widen to a 6-lane freeway.

   Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar.

e. Airport Boulevard – Sanborn Road (Seg. #20g). This segment would operate at LOS D during the PM peak hour. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #70):

   i. Same as 2030 cumulative no project no interchange.

   These improvements are included in the City of Salinas TFO (#32).

f. Sanborn Road – John Street (Seg. #20h). This segment would operate at LOS D and LOS E during the AM and PM peak hours, respectively. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #71):

i. Same as background plus project phase 1.

These improvements are included in the City of Salinas TFO (#32).

Freeway Ramps

All of the study freeway ramps would operate at acceptable levels of service under 2030 cumulative no project with interchange traffic conditions.

Weaving Segments

The results of the weaving analysis are discussed in Chapter 11.

9 2030 Cumulative Plus Project No Interchange Traffic Conditions

This chapter presents a description of the traffic network, traffic volumes, and intersection and road segment levels of service within the study area under 2030 cumulative traffic conditions with the proposed project and without the Harris Road interchange.

It is important to note that no credit was given for the relocation of existing uses within the City to the project site. All of the project-generated traffic was assumed to be new traffic on the local and regional road network. Although it is reasonable to assume that some of the traffic generated by the project will be existing traffic diverted from other parts of the City, the amount would be difficult to quantify. It is also possible that new businesses could eventually occupy existing facilities that are vacated due to the proposed project. As a result, the following analysis is conservative.

9.1 2030 Cumulative Plus Project No Interchange Intersection Operations

The project's trips at project buildout were manually assigned to the local and regional road network as described in Section 6.2. The 2030 cumulative no project no interchange volumes were combined with the total project buildout trip assignment volumes to obtain 2030 cumulative plus project no interchange volumes, which are shown on **Diagrams 41** and **42** in **Appendix B**. 2030 cumulative plus project no interchange AM and PM intersection levels of service are summarized in **Exhibit 5B**. LOS calculation sheets are included as **Appendix N1**. LOS calculation sheets with recommended improvements are included as **Appendix N2**. A summary of all recommended intersection improvements is included in **Exhibit 6B**.

A description of each intersection that would operate deficiently under 2030 cumulative plus project no interchange traffic conditions follows below. Recommended improvements are discussed in italics below the description of each intersection's operations.

1. SR 68 / Blanco Road (Int. #1) – Signalized

This intersection would operate at an overall LOS E and LOS F during the AM and PM peak hours under 2030 cumulative plus project no interchange traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #1):

1. *Same as existing non-harvest season (see Section 2.3).*

Improvements 1, 4 and 5 are included in the City of Salinas TFO (#59). Improvements 2, 3 and 6 are also recommended, but would only improve operations to level of service D during the AM and PM peak hours. It is proposed that the City add these improvements to the City of Salinas TFO. If the City adds improvements 2, 3 and 6 to the City of Salinas TFO, the payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection. If the City does not add these improvements to the TFO, then the project will be responsible for its pro-rata fair-

share of these improvements. In that event, because an established improvement program for improvements 2, 3 and 6 would not exist, the impact would remain significant and unavoidable.

The City will need to consider several challenges at this intersection. For example, widening the south leg of the intersection to accommodate a third receiving lane on southbound SR 68 may require the relocation of PG&E electrical equipment located on the southeast corner of the intersection, and the addition of a westbound right-turn lane would require the reconfiguration of the parking lot on the northeast corner of the intersection. For these reasons, the City must determine whether or not the recommended improvements are feasible.

2. SR 68 / Hunter Lane (Int. #2) – Stop Controlled (WB)

This intersection would operate at an overall LOS D during the PM peak hour under 2030 cumulative plus project no interchange traffic conditions. The minor street approach would operate at LOS F during the AM and PM peak hours. Per the Caltrans significance criteria the project would have a significant impact at this intersection.

This intersection is within the responsibility and jurisdiction of Caltrans, and not the City of Salinas. Improvements along this corridor should be added to the TAMC fee. If they are, payment of the TAMC fee would mitigate project impacts at this intersection to a less than significant level. If improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of the improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

Options for improving operations at this intersection include consolidating access points and eliminating left-turns into and out of the driveways and minor intersections along SR 68 between Foster Road and Blanco Road, or the installation of a median barrier that would to allow left-turns into the minor streets but prevent left-turns out. These options would improve safety and the levels of service at the intersections along the corridor but would result in traffic diversions and the need to accommodate U-turns along the corridor. As pointed out by Monterey County Department of Public Works staff, the corridor merits a systems analysis to address these impacts, which is beyond the scope of this study. Caltrans should consider commissioning a systems analysis of the corridor.

It should be noted that installation of a traffic signal would improve operations at this intersection to an acceptable level of service. However, it would also have an adverse impact on the through traffic on SR 68 and could cause an increase in rear-end collisions. As a result, a traffic signal is not recommended for this intersection.

3. SR 68 WB Ramps / Spreckels Boulevard (Int. #3) – Stop Controlled (SB)

This intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative plus project no interchange traffic conditions. The minor street approach would also operate at LOS F during both peak hours. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #42):

1. *Same as 2030 cumulative no project no interchange.*

   This intersection is within the responsibility and jurisdiction of Caltrans, and not the City of Salinas. Improvements at this intersection are not included but should be added to the TAMC fee. If these improvements are added to the TAMC fee prior to project implementation, payment of the TAMC fee will mitigate cumulative project impacts at this intersection to a less than significant level. If these improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

4. SR 68 EB Off-Ramp / Spreckels Boulevard (Int. #4) – Stop Controlled (NB)

This intersection would operate at an overall LOS E during the AM peak hour under 2030 cumulative plus project no interchange traffic conditions. The minor street approach would operate at LOS F during the AM peak hour. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #43):

1. *Same as 2030 cumulative no project no interchange.*

   This intersection is within the responsibility and jurisdiction of Caltrans, and not the City of Salinas. Improvements at this intersection are not included but should be added to the TAMC fee. If these improvements are added to the TAMC fee prior to project implementation, payment of the TAMC fee will mitigate cumulative project impacts at this intersection to a less than significant level. If these improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

5. SR 68 EB On-Ramp / Spreckels Boulevard (Int. #5) – Stop Controlled (SB)

The minor street approach at this intersection would operate at LOS F during the AM peak hour under 2030 cumulative plus project no interchange traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #44):

1. *Same as 2030 cumulative no project no interchange.*

   This intersection is within the responsibility and jurisdiction of Caltrans, and not the City of Salinas. Improvements at this intersection are not included but should be added to the TAMC fee. If these improvements are added to the TAMC fee prior to project implementation, payment of the TAMC fee will mitigate cumulative project impacts at this intersection to a less than significant level. If these improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

6. Sanborn Road / Fairview Ave.-U.S. 101 NB Offramp (Int. #6) – Stop Controlled (EB & WB)

This intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative plus project no interchange traffic conditions. The minor street approach would also operate at LOS F during both the AM and PM peak hours. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #18):

1. *Same as background.*

   Improvements along the Sanborn Road corridor are included in the City of Salinas TFO. Payment of traffic impact fees per the City of Salinas TFO (#32 and #37) will mitigate cumulative project impacts at this intersection.

7. U.S. 101 NB Ramps / Fairview Avenue (Int. #7) – Stop Controlled (NB)

This intersection would operate at an overall LOS F during the PM peak hour under 2030 cumulative plus project no interchange traffic conditions. The minor street approach would operate at LOS F during the PM peak hour. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #45):

1. *Same as 2030 cumulative no project no interchange.*

   This intersection improvement is equivalent to the road segment improvement (RI #85) recommended for road segment 5a (Fairview Road between Sanborn Road and the U.S. 101 northbound ramps). This improvement is not included in the City of Salinas TFO. It is proposed that the City add this improvement to the TFO. If the City adds this improvement to the TFO, the payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts at this intersection. If the City does not add this improvement to the TFO, then the project will be responsible for its pro-rata fair-share of this improvement. In that event, because an established improvement program would not exist, the impact would remain significant and unavoidable.

8. Sanborn Road / Elvee Drive-U.S. 101 SB Ramps (Int. #8) – Signalized

This intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative plus project no interchange traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #79):

1. *Same as 2030 cumulative no project no interchange. In addition:*
2. *Add a second southbound Sanborn Road left-turn lane.*

   Improvements along the Sanborn Road corridor are included in the City of Salinas TFO (#32, #37 and #66). In addition, this intersection is within the responsibility and jurisdiction of Caltrans. Improvements at this intersection should be added to the TAMC fee. If they are, payment of the TAMC fee would mitigate project impacts at this intersection to a less than significant level. If improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of the improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

9. Sanborn Road / Work Street-Terven Avenue (Int. #9) – Signalized

This intersection would operate at an overall LOS F during both the AM and PM peak hours under 2030 cumulative plus project no interchange traffic conditions. Per the City of Salinas significance criteria, the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #47):

1. *Same as 2030 cumulative no project no interchange.*

   Improvements along the Sanborn Road corridor are included in the City of Salinas TFO (#37). Payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts at this intersection.

10. Blanco Road-Sanborn Road / Abbott Street (Int. #10) – Signalized

This intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative plus project no interchange traffic conditions. Per the City of Salinas significance criteria, the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #48):

1. *Same as 2030 cumulative no project no interchange.*
2. *Results in LOS E during the AM peak hour and LOS F during the PM peak hour.*

   Improvements at this intersection are not included in the City of Salinas TFO. It is proposed that the City add these improvements to the City of Salinas TFO. If the City adds these improvements to the City of Salinas TFO, the payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection. If the City does not add these improvements to the TFO, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program would not exist, the impact would remain significant and unavoidable.

11. Airport Boulevard / De la Torre Street (Int. #12) – Signalized

This intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative plus project no interchange traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #13):

1. *Same as existing harvest season.*

   Improvements at this intersection are funded by Caltrans (#0318) and the City of Salinas TFO (#32 and #38). Payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts at this intersection.

12. Airport Boulevard / Terven Avenue (Int. #13) – Signalized

This intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative plus project no interchange traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #14):

1. *Same as existing harvest season.*

Improvements at this intersection are planned but not fully funded as Phase 2 of the Caltrans Airport Boulevard interchange project (#0318). Improvements at this intersection are included in the City of Salinas TFO (#32 and #38). Payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts at this intersection.

13. Airport Boulevard / Hansen Street (Int. #14) – Stop Controlled (NB & WBT)
The minor street approach of this intersection would operate at LOS F during the AM and PM peak hours under 2030 cumulative plus project no interchange traffic conditions. Per the City of Salinas significance criteria, the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #27):

1. *Same as existing plus project phase 1.*
2. *Results in LOS F on the minor street approach during the AM peak hour.*

Improvements at this intersection are not included in the City of Salinas TFO. It is proposed that the City add this improvement to the City of Salinas TFO. If the City adds this improvement to the City of Salinas TFO, the payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts at this intersection. If the City does not add this improvement to the TFO, then the project will be responsible for its pro-rata fair-share of this improvement. In that event, because an established improvement program would not exist, the impact would remain significant and unavoidable.

14. Harkins Road / Hansen Street (Int. #15) – Signalized
This intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative plus project no interchange traffic conditions. Per the City of Salinas significance criteria, the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #49):

1. *Same as 2030 cumulative no project no interchange*
2. *Results in LOS E during the PM peak hour.*

While the preceding improvements would enhance traffic operations at this intersection, it should be noted that the extensive queuing is caused by traffic congestion at the U.S. 101 / Airport Boulevard interchange, which is planned for improvements through a Caltrans PSR (#0318) and the City of Salinas TFO (#32 and #38).

It is proposed that the City add these improvements to the City of Salinas TFO. If the City adds these improvements to the City of Salinas TFO, payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts at this intersection. If the City does not add these improvements to the TFO, then the project

will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program would not exist, the impact would remain significant and unavoidable.

15. Harkins Road / Abbott Street (Int. #16) – Signalized

This intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative plus project no interchange traffic conditions. Per the City of Salinas significance criteria, the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #80):

1. *Same as existing plus project phase 1. In addition:*
2. *Convert eastbound Abbott Street shared through/right to a through lane.*
3. *Add an eastbound Abbott Street right-turn lane with right turn overlap phasing.*
4. *Add a second westbound Abbott Street right-turn lane.*
5. *Convert southbound Harkins Road shared through/right to a through lane.*
6. *Add a southbound Harkins Road right-turn lane with right turn overlap phasing.*

Improvements at this intersection are not included in the City of Salinas TFO. It is proposed that the City add these improvements to the City of Salinas TFO. If the City adds these improvements to the City of Salinas TFO, the payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection. If the City does not add these improvements to the TFO, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program would not exist, the impact would remain significant and unavoidable.

16. Harkins Road / Dayton Street (Int. #18) – Stop Controlled (WB)

Although this intersection would operate at an acceptable level of service during the AM and PM peak hours under 2030 cumulative plus project no interchange traffic conditions, improvements are recommended due to the high volume of southbound left-turning vehicles in the AM peak hour. Per the City of Salinas significance criteria the project **would not** have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #16):

1. *Same as existing harvest season.*

Improvements at this intersection are not included in any fee program and no mitigation is required of the project at this intersection. However, the project is proposing to implement this improvement to enhance safety at this intersection.

17. Harkins Road / Hunter Lane (Int. #19) – Stop Controlled (EB)

This intersection would operate at an overall LOS F during the AM peak hour under 2030 cumulative plus project no interchange traffic conditions. The minor street approach would operate at LOS F during the AM peak hour. Per the Monterey County significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #50):

1. *Same as 2030 cumulative no project no interchange.*

   The peak hour signal warrant and the all-way stop control warrant were assessed at this intersection under all traffic scenarios. The all-way stop control warrant is currently met under existing harvest season conditions, and the peak hour signal warrant would be met beginning under 2030 cumulative no project no interchange conditions. Although the peak hour signal warrant would be met under 2030 conditions, the intersection would operate acceptably with all-way stop control. It is recommended that either all-way stop control or a signal be installed at this intersection.

   Improvements at this intersection are not currently included in any fee program. This intersection would operate deficiently under 2030 cumulative no project no interchange conditions and is within the County's responsibility and jurisdiction. The County should include the preferred improvement at this intersection in their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

   If the County adopts an impact fee program that includes this improvement prior to project implementation, payment of the fee will mitigate this impact to a less than significant level. If the County does not adopt an impact fee program including this improvement prior to project implementation, then the project will be responsible for its pro-rata fair-share of this improvement. In that event, because an established improvement program for this improvement would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that this improvement is within the responsibility and jurisdiction of another public agency (the County) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

18. Hatton Avenue / Spreckels Boulevard (Int. #21) – Stop Controlled (SB)

The minor street approach of this intersection would operate at LOS F during the AM and PM peak hours under 2030 cumulative plus project no interchange traffic conditions. Per the Monterey County significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #51):

1. *Same as 2030 cumulative no project no interchange.*

   The project will widen Harris Road to 4 lanes along the project frontage. This improvement will serve as the project's pro-rata fair share contribution to improvements along Harris Road and Spreckels Boulevard. Supporting calculations are included in Appendix X.

19. Harris Road / Abbott Street (Int. #22) – Signalized

This intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative plus project no interchange traffic conditions. Per the Monterey County

significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #81):

1. *Same as 2030 cumulative no project no interchange. In addition:*
2. *Add second northbound Harris Road left-turn lane.*
3. *Convert the eastbound Abbott Street shared through/right-turn lane to a through lane.*
4. *Add an eastbound Abbott Street right-turn lane.*

The project's frontage improvements will serve as the project's pro-rata fair share contribution to improvements at this intersection.

20. Harris Road / Harris Place (Int. #23) – Stop Controlled (EB & WB)

A fourth (west) leg would be constructed at this intersection with the implementation of the proposed project. Without additional improvements, this intersection would operate at an overall LOS F during the AM and PM peak hours, respectively under 2030 cumulative plus project no interchange traffic conditions. The minor street approach of this intersection would operate at LOS F during the AM and PM peak hours. Per the City of Salinas significance criteria, the project would have a significant impact at this intersection.

The project applicant is proposing to design this intersection with the following lane configurations and traffic controls under existing plus project phase 1 conditions (RI #29):

1. *Signalize intersection.*
2. *Northbound Harris Road approach: One left-turn lane, one shared through/right lane*
3. *Southbound Harris Road approach: One left-turn lane, one through lane, one right-turn lane.*
4. *Eastbound Harris Place approach: One left-turn lane, one shared through/right lane*
5. *Westbound Harris Place approach: One shared left/through/right lane*

The same improvements recommended under existing plus project phase 1 conditions (RI #29) would also be recommended under 2030 cumulative plus project no interchange conditions. In addition to RI #29, the following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #82):

1. *Add a second northbound Harris Road through lane.*
2. *Add a second southbound Harris Road through lane.*

The project's frontage improvements will serve as the project's pro-rata fair share contribution to improvements at this intersection.

21. Firestone Driveway / Abbott Street (Int. #24) – Stop Controlled (NB)

The minor street approach of this intersection would also operate at LOS F during the PM peak hour under 2030 cumulative plus project no interchange traffic conditions. Per the Monterey County significance criteria, the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #83):

1. *Signalize intersection. In addition:*
2. *Add a second eastbound Abbott Street through lane.*
3. *Add a second westbound Abbott through lane.*

Improvements along Abbott Street are included in the TAMC fee (#7). Payment of the TAMC fee will mitigate cumulative project impacts at this intersection.

22. U.S. 101 / Gould Road (Int. #25) – Stop Controlled (WB)

The minor street approach at this intersection would operate at LOS F during the PM peak hour under 2030 cumulative plus project no interchange traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #55):

1. *Same as 2030 cumulative no project no interchange.*

Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar. This would result in the elimination of this intersection. Payment of the TAMC fee will mitigate cumulative project impacts at this intersection.

23. U.S. 101 / Hartnell Road Connector (Int. #26) – Stop Controlled (WB)

This intersection would continue to operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative plus project no interchange traffic conditions. The minor street approach of this intersection would also continue to operate at LOS F during the AM and PM peak hours. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #20):

1. *Same as background.*

Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar. This would result in the elimination of this intersection. Payment of the TAMC fee will mitigate cumulative project impacts at this intersection.

24. Street A Project Road / Abbott Street (Int. #27) – Future Project Intersection

This intersection will be created with the implementation of the proposed project. The project applicant is proposing to design this intersection with the following lane configurations and traffic controls under existing plus project phase 1 conditions. The same lane configurations and traffic controls are recommended under 2030 cumulative plus project no interchange conditions (RI #30).

1. *Signalize intersection.*
2. *Northbound Street A Project Road approach: Two left-turn lanes, one right-turn lane.*
3. *Eastbound Abbott Street approach: Two through lanes and one right-turn lane*

4. *Westbound Abbott Street approach: One left-turn lane and two through lanes*

If the intersection is designed with these lane configurations and traffic controls, the project would not have a significant impact at this location.

25. Harris Road / Street B Project Road (Int. #34) – Future Project Intersection

This intersection will be created with the implementation of the proposed project. The project applicant is proposing to design this intersection with the following lane configurations under existing plus project phase 1 conditions (RI #31):

1. *Northbound Harris Road approach: One left-turn lane and one through lane.*
2. *Southbound Harris Road approach: One through lane and one right-turn lane.*
3. *Eastbound Street B Project Road approach: One left-turn lane and one right-turn lane.*
4. *In addition, a signal will be required at this intersection under 2030 cumulative plus project no interchange traffic conditions (RI #84).*

The project's frontage improvements will serve as the project's pro-rata fair share contribution to improvements at this intersection.

26. Cooper Road / Blanco Road (Int. #37) – Stop Controlled (SB)

This intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative plus project no interchange traffic conditions. The minor street approach of this intersection would also operate at LOS F during both peak hours. Per the Monterey County significance criteria, the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #2):

1. *Same as existing non-harvest season.*

Improvements at this intersection are not currently included in any fee program. This intersection operates deficiently under existing conditions and is within the County's responsibility and jurisdiction. The County should include the recommended improvements at this intersection in their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

If the County adopts an impact fee program that includes these improvements prior to project implementation, payment of the fee will mitigate this impact to a less than significant level. If the County does not adopt an impact fee program including these improvements prior to project implementation, then the project will be responsible for its pro-rata fair-share of these improvements as mitigation as provided in Section 3 of the Agreement Regarding Supplement to the Final Program EIR for the Salinas Future Growth Area between the City of Salinas and the County of Monterey (March 27, 2008). In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public

agency (the County) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

27. Davis Road / Blanco Road (Int. #38) – Signalized

This intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative plus project no interchange traffic conditions. Per the Monterey County significance criteria, the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #56):

1. *Same as 2030 cumulative no project no interchange.*

Improvements at this intersection are included in the City's TFO (#26 and #41) and the TAMC Regional Traffic Impact Fee (#8). In addition, the County should include this intersection in their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

If the County adopts an impact fee program that includes these improvements prior to project implementation, payment of the fee will mitigate this impact to a less than significant level. If the County does not adopt an impact fee program including these improvements prior to project implementation, then the project will be responsible for its pro-rata fair-share of these improvements as mitigation as provided in Section 3 of the Agreement Regarding Supplement to the Final Program EIR for the Salinas Future Growth Area between the City of Salinas and the County of Monterey (March 27, 2008). In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (the County) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

28. SR 68 / Hitchcock Road (Int. #39) – Stop Controlled (EB)

The minor street approach of this intersection would operate at LOS F during the AM and PM peak hours under 2030 cumulative plus project no interchange traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection.

This intersection is within the responsibility and jurisdiction of Caltrans, and not the City of Salinas. Improvements along this corridor should be added to the TAMC fee. If they are, payment of the TAMC fee would mitigate project impacts at this intersection to a less than significant level. If improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of the improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and

should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

Options for improving operations at this intersection include consolidating access points and eliminating left-turns into and out of the driveways and minor intersections along SR 68 between Foster Road and Blanco Road, or the installation of a median barrier that would to allow left-turns into the minor streets but prevent left-turns out. These options would improve safety and the levels of service at the intersections along the corridor but would result in traffic diversions and the need to accommodate U-turns along the corridor. As pointed out by Monterey County Department of Public Works staff, the corridor merits a systems analysis to address these impacts, which is beyond the scope of this study. Caltrans should consider commissioning a systems analysis of the corridor.

It should be noted that installation of a traffic signal would improve operations at this intersection to an acceptable level of service. However, it would also have an adverse impact on the through traffic on SR 68 and could cause an increase in rear-end collisions. As a result, a traffic signal is not recommended for this intersection.

29. <u>SR 68 / Foster Road (Int. #40) – Stop Controlled (EB)</u>

The minor street approach of this intersection would operate at LOS F during the PM peak hour under 2030 cumulative plus project no interchange traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection.

This intersection is within the responsibility and jurisdiction of Caltrans, and not the City of Salinas. Improvements along this corridor should be added to the TAMC fee. If they are, payment of the TAMC fee would mitigate project impacts at this intersection to a less than significant level. If improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of the improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

Options for improving operations at this intersection include consolidating access points and eliminating left-turns into and out of the driveways and minor intersections along SR 68 between Foster Road and Blanco Road, or the installation of a median barrier that would to allow left-turns into the minor streets but prevent left-turns out. These options would improve safety and the levels of service at the intersections along the corridor but would result in traffic diversions and the need to accommodate U-turns along the corridor. As pointed out by Monterey County Department of Public Works staff, the corridor merits a systems analysis to address these impacts, which is beyond the scope of this study. Caltrans should consider commissioning a systems analysis of the corridor.

It should be noted that installation of a traffic signal would improve operations at this intersection to an acceptable level of service. However, it would also have an adverse impact on the through traffic on SR 68 and could cause an increase in rear-end collisions. As a result, a traffic signal is not recommended for this intersection.

30. Merrill Street / Abbott Street (Int. #42) – Stop Controlled (NB)

This intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative plus project no interchange traffic conditions. The minor street approach of this intersection would also operate at LOS F during both peak hours. Per the City of Salinas significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #22):

1. *Same as background.*

Improvements at this intersection are not included in the City of Salinas TFO. It is proposed that the City add these improvements to the City of Salinas TFO. If the City adds these improvements to the TFO, payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts at this intersection. If the City does not add these improvements to the TFO, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program would not exist, the impact would remain significant and unavoidable.

31. Skyway Boulevard / E. Alisal Street (Int. #43) – Stop Controlled (NB & SB)

This intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative plus project no interchange traffic conditions. The minor street approach of this intersection would also operate at LOS F during both peak hours. Per the City of Salinas significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #23):

1. *Same as background.*

Improvements along E. Alisal Street are included in the City of Salinas TFO (#36). Payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts at this intersection.

32. U.S. 101 / Spence Road (Int. #44) – Stop Controlled (WB)

This intersection would continue to operate at an overall LOS F during both the AM and PM peak hours under 2030 cumulative plus project no interchange traffic conditions. The minor street approach would also continue to operate at LOS F during both the AM and PM peak hours. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #4):

1. *Same as existing non-harvest season.*

Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar. This would result in the elimination of this intersection. Payment of the TAMC fee will mitigate cumulative project impacts at this intersection.

9.2 2030 Cumulative Plus Project No Interchange Road Segment Operations

2030 cumulative plus project no interchange AM and PM peak hour levels of service on the study road segments are tabulated in **Exhibit 7B**. Freeway ramp, weaving, and non-freeway roadway segment volumes are based upon the intersection turning volumes shown on **Diagrams 41** and **42** in **Appendix B**.

A discussion of the traffic operations for the road and freeway segments and ramps with operational deficiencies under 2030 cumulative plus project no interchange traffic conditions follows. Recommended road segment improvements are discussed in italics below the description of each segment's operations, and are shown on **Exhibits 7A and 7B**.

Road Segments

1. Abbott Street
   a. Harris Road – Firestone Driveway (Seg. #1f). This segment would operate at LOS F during the AM and PM peak hours. Per Monterey County significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #40):

      i. Same as background plus project buildout.

      Improvements on this road segment are included in the TAMC fee (#7 and #10). Payment of the TAMC fee will mitigate cumulative project impacts on this road segment.

2. Airport Boulevard
   a. Terven Avenue – De la Torre Street (Seg. #2b). This segment would operate at LOS F during the AM and PM peak hours. Per Caltrans significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #24):

      i. Same as background.

      Improvements along this road segment are included in the City of Salinas TFO (#38). Payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts on this road segment. Improvements on this road segment are also planned but not

fully funded as Phase 2 of the Caltrans Airport Boulevard interchange project (#0318).[10]

3. Blanco Road
   a. Cooper Road – Davis Road (Seg. #3a). This segment would operate at LOS E during the AM and PM peak hours. Per Monterey County significance criteria the project **would not** have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #5):

      i. Same as existing non-harvest season.

      No mitigation is required of the project.

   b. Davis Road – Alisal Street (Seg. #3b). This segment will operate at LOS F during the AM and PM peak hours. Per the City of Salinas significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #57):

      i. Same as 2030 cumulative no project no interchange.

      Improvements along this road segment are included in the City of Salinas TFO (#41). Payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts on this road segment.

4. Davis Road
   a. Hitchcock Road – Blanco Road (Seg. #4a). This segment would operate at LOS E and LOS F during the AM and PM peak hours, respectively. Per Monterey County significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #26):

      i. Same as background.

      Improvements along this road segment are included in the TAMC fee (#4). Payment of the TAMC fee will mitigate cumulative project impacts on this road segment.

   b. Blanco Road – Ambrose Drive (Seg. #4b). This segment would operate at LOS F during the AM and PM peak hours. Per Monterey County significance criteria the project would have a significant impact on this road segment. The following

[10] The analysis indicates that construction of the eastside connector and Harris Road interchange, which are discussed in Section 8.1 of this report, would divert traffic from this road segment under 2030 Cumulative traffic conditions, resulting in an acceptable level of service on this road segment.

improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #6):

i. *Same as existing non-harvest season.*

Improvements on this road segment are included in the TAMC fee (#8). Payment of the TAMC fee will mitigate cumulative project impacts on this road segment.

5. Fairview Avenue
   a. Sanborn Road – U.S. 101 NB Ramps (Seg. #5a). This segment would operate at LOS E during the PM peak hour. Per the City of Salinas significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #85):

      i. *Widen this segment from a 2-lane arterial to a 3-lane arterial. This would best be accomplished by extending the eastbound Fairview Avenue right-turn lane that was recommended under 2030 cumulative no project no interchange conditions at the U.S. 101 NB Ramps / Fairview Avenue intersection (Int. #7) west towards Sanborn Road as a trap lane onto the northbound U.S. 101 onramp.*

      This improvement is not included in the City of Salinas TFO. It is proposed that the City add this improvement to the TFO. If the City adds this improvement to the TFO, the payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts on this road segment. If the City does not add this improvement to the TFO, then the project will be responsible for its pro-rata fair-share of this improvement. In that event, because an established improvement program would not exist, the impact would remain significant and unavoidable.

6. Harris Road
   a. Spreckels Boulevard – Harris Place (Seg. #9a). This segment would operate at LOS E during the AM and PM peak hours. Per the Monterey County significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #58):

      i. *Same as 2030 cumulative no project no interchange.*

      The project will widen Harris Road to 4 lanes along the project frontage. This improvement will serve as the project's fair share contribution to improvements along Harris Road and Spreckels Boulevard. Supporting calculations are included in Appendix X.

b. Harris Place – Abbott Street (Seg. #9b). This segment would operate at LOS E during the AM and PM peak hours. Per the Monterey County significance criteria the project would have a significant impact on this road segment. This road segment will come under the jurisdiction of the City of Salinas as part of the annexation that will occur with the implementation of the proposed project and will be subject to a level of service standard D (per City of Salinas standards). Per the City of Salinas significance criteria, the project would also have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #41):

   i. *Same as background plus project buildout.*

   The project will widen Harris Road to 4 lanes along the project frontage with the implementation of the project.

7. Sanborn Road
   a. Abbott Street – Terven Avenue (Seg. #13a). This segment would operate at LOS E and LOS F during the AM and PM peak hours, respectively. Per the City of Salinas significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #59):

      i. *Same as 2030 cumulative no project no interchange.*

      Improvements along Sanborn Road are included in the City of Salinas TFO (#37). Payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts on this road segment.

   b. Terven Avenue – U.S. 101 (Seg. #13b). This segment would operate at LOS E and LOS F during the AM and PM peak hours, respectively. Per the City of Salinas significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #60):

      i. *Same as 2030 cumulative no project no interchange.*

      Improvements along Sanborn Road are included in the City of Salinas TFO (#37). Payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts on this road segment.

   c. U.S. 101 – Fairview Avenue (Seg. #13c). This segment would operate at LOS F during the PM peak hour. Per the City of Salinas significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #61):

i. Same as 2030 cumulative no project no interchange.

Improvements along Sanborn Road are included in the City of Salinas TFO (#37). Payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts on this road segment.

8. Spreckels Boulevard
   a. SR 68 – Hatton Avenue (Seg. #15a). This segment would operate at LOS E during the AM and PM peak hours. Per the Monterey County significance criteria the project **would not** have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #62):

      i. Same as 2030 cumulative no project no interchange.

      No mitigation is required of the project.

   b. Hatton Avenue – Harris Road (Seg. #15b). This segment would operate at LOS E during the AM and PM peak hours. Per the Monterey County significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #63):

      i. Same as 2030 cumulative no project no interchange.

      The project will widen Harris Road to 4 lanes along the project frontage. This improvement will serve as the project's fair share contribution to improvements along Harris Road and Spreckels Boulevard. Supporting calculations are included in Appendix X.

9. SR 68
   a. Spreckels Boulevard – Foster Road (Seg. #16a). This segment would operate at LOS D during the AM and PM peak hours. Per CEQA guidelines [Section 15091(a)(2)] this road segment is within the responsibility and jurisdiction of Caltrans and TAMC and not the City of Salinas. Improvements to this road segment can and should be adopted by Caltrans and TAMC. Per the Caltrans significance criteria the project **would not** have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #64):

      i. Same as 2030 cumulative no project no interchange.

      No mitigation is required of the project.

   b. Foster Road – Hitchcock Road (Seg. #16b). This segment would operate at LOS D during the AM and PM peak hours. Per CEQA guidelines [Section 15091(a)(2)] this road segment is within the responsibility and jurisdiction of

Caltrans and TAMC and not the City of Salinas. Improvements to this road segment can and should be adopted by Caltrans and TAMC. Per the Caltrans significance criteria the project **would not** have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #65):

i. Same as 2030 cumulative no project no interchange.

No mitigation is required of the project.

c. Hitchcock Road – Hunter Lane (Seg. #16c). This segment would operate at LOS D during the AM and PM peak hours. Per CEQA guidelines [Section 15091(a)(2)] this road segment is within the responsibility and jurisdiction of Caltrans and TAMC and not the City of Salinas. Improvements to this road segment can and should be adopted by Caltrans and TAMC. Per the Caltrans significance criteria the project **would not** have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #66):

i. Same as 2030 cumulative no project no interchange.

No mitigation is required of the project.

d. Hunter Lane – Blanco Road (Seg. #16d). This segment would operate at LOS D during the PM peak hour. Per CEQA guidelines [Section 15091(a)(2)] this road segment is within the responsibility and jurisdiction of Caltrans and TAMC and not the City of Salinas. Improvements to this road segment can and should be adopted by Caltrans and TAMC. Per the Caltrans significance criteria the project **would not** have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #67):

i. Same as 2030 cumulative no project no interchange.

No mitigation is required of the project.

10. SR 156

a. Castroville Boulevard – U.S. 101 (Seg. #17b). This segment would operate at LOS E and LOS F during the AM and PM peak hours, respectively. Per Caltrans significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #7):

i. Same as 2030 cumulative no project no interchange.

Improvements on this road segment are included in the TAMC fee (#3). Payment of the TAMC fee will mitigate cumulative project impacts on this road segment.

11. SR 183
    a. Espinosa Road – Salinas City Limits (Seg. #18a). This segment would operate at LOS E during the AM and PM peak hours. Per CEQA guidelines [Section 15091(a)(2)] this road segment is within the responsibility and jurisdiction of Caltrans and TAMC and not the City of Salinas. Improvements to this road segment can and should be adopted by Caltrans and TAMC. Per Caltrans significance criteria the project **would not** have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #17):

        i. Same as existing non-harvest season.

        No mitigation is required of the project.

Freeway Segments

1. U.S. 101
    a. Potter Road – Spence Road (Seg. #20a). This segment would operate at LOS D and LOS F during the AM and PM peak hours, respectively. Per Caltrans significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #68):

        i. Same as 2030 cumulative no project no interchange.

        Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar. This would improve traffic operations on U.S. 101 by eliminating minor intersections along the corridor. This road segment is within the responsibility and jurisdiction of Caltrans, and not the City of Salinas. Improvements along this corridor should be added to the TAMC fee. If they are, payment of the TAMC fee would mitigate project impacts at this intersection to a less than significant level. If improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of the improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

b. Spence Road – Abbott Street (Seg. #20b). This segment would operate at LOS D and LOS F during the AM and PM peak hours, respectively. Per Caltrans significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #69):

   i. *Same as 2030 cumulative no project no interchange.*

   Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar. This would improve traffic operations on U.S. 101 by eliminating minor intersections along the corridor. This road segment is within the responsibility and jurisdiction of Caltrans, and not the City of Salinas. Improvements along this corridor should be added to the TAMC fee. If they are, payment of the TAMC fee would mitigate project impacts at this intersection to a less than significant level. If improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of the improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

c. Airport Boulevard – Sanborn Road (Seg. #20g). This segment would operate at LOS E during the PM peak hour. Per Caltrans significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #70):

   i. *Same as 2030 cumulative no project no interchange.*

   These improvements are included in the City of Salinas TFO (#32). Payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts on this road segment.

d. Sanborn Road – John Street (Seg. #20h). This segment would operate at LOS D and LOS F during the AM and PM peak hours, respectively. Per Caltrans significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #71):

   i. *Same as 2030 cumulative no project no interchange.*

These improvements are included in the City of Salinas TFO (#32). Payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts on this road segment.

Freeway Ramps

1. Airport Boulevard Interchange
    a. Southbound offramp (Seg. #21d). This ramp would operate at LOS D during the AM peak hour. Per Caltrans significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #86):

        i. Widen offramp from one lane to two lanes.

        Improvements at this interchange are planned but not fully funded as Phase 2 of the Caltrans Airport Boulevard interchange project (#0318). Improvements at this interchange are also included in the City of Salinas TFO (#32 and #38). Payment of the City of Salinas TFO will mitigate cumulative project impacts on this road segment.

2. Abbott Street Interchange
    a. Northbound offramp (Seg. #23a). This ramp would operate at LOS D during the AM peak hour. Per Caltrans significance criteria the project **would not** have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #72):

        i. Same as 2030 cumulative no project no interchange.

        No mitigation is required of the project.

    b. Southbound onramp (Seg. #23b). This ramp would operate at LOS D and LOS F during the AM and PM peak hours, respectively. Per Caltrans significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #87):

        i. Widen onramp from one lane to two lanes.

        Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar and removing the segment of Abbott Street from U.S. 101 to Harris Road. This road segment is within the responsibility and jurisdiction of Caltrans, and not the City of Salinas. The necessary improvements at this location should be included in the TAMC fee. If they are, payment of the TAMC fee would mitigate cumulative project

impacts on this road segment to a less than significant level. If improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of the improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

Weaving Segments

The results of the weaving analysis are discussed in Chapter 11.

10 2030 Cumulative Plus Project With Interchange Traffic Conditions

This chapter presents a description of the traffic network, traffic volumes, and intersection and road segment levels of service within the study area under 2030 cumulative plus project with interchange traffic conditions.

It is important to note that no credit was given for the relocation of existing uses within the City to the project site. All of the project-generated traffic was assumed to be new traffic on the local and regional road network. Although it is reasonable to assume that some of the traffic generated by the project will be existing traffic diverted from other parts of the City, the amount would be difficult to quantify. It is also possible that new businesses could eventually occupy existing facilities that are vacated due to the proposed project. As a result, the following analysis is conservative.

10.1 2030 Cumulative Plus Project With Interchange Intersection Operations

The project's trips at project buildout were manually assigned to the local and regional road network as described in Section 6.2. Manual adjustments were made to account for the travel pattern changes in project traffic that would occur with the Harris Road interchange. Project buildout AM and PM trip assignments with the Harris Road interchange are shown in **Diagrams 43** and **44**, respectively. The 2030 cumulative no project with interchange volumes were combined with the volumes in **Diagrams 43** and **44** to obtain 2030 cumulative plus project with interchange volumes, which are shown on **Diagrams 45** and **46** in **Appendix B**. 2030 cumulative plus project with interchange AM and PM intersection levels of service are summarized in **Exhibit 5B**. LOS calculation sheets are included as **Appendix O1**. LOS calculation sheets with recommended improvements are included as **Appendix O2**. A summary of all recommended intersection improvements is included in **Exhibit 6B**.

A description of each intersection that would operate deficiently under 2030 cumulative plus project with interchange conditions follows below. Recommended improvements are discussed in italics below the description of each intersection's operations.

1. SR 68 / Blanco Road (Int. #1) – Signalized

This intersection would operate at an overall LOS D and LOS F during the AM and PM peak hours under 2030 cumulative plus project with interchange traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #1):

1. *Same as existing non-harvest season (see Section 2.3).*

Improvements 1, 4 and 5 are included in the City of Salinas TFO (#59). Improvements 2, 3 and 6 are also recommended, but would only improve operations to level of service D during the AM and PM peak hours. It is proposed that the City add these improvements to the City of Salinas TFO. If the City adds improvements 2, 3 and 6 to

the City of Salinas TFO, the payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection. If the City does not add these improvements to the TFO, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program for improvements 2, 3 and 6 would not exist, the impact would remain significant and unavoidable.

The City will need to consider several challenges at this intersection. For example, widening the south leg of the intersection to accommodate a third receiving lane on southbound SR 68 may require the relocation of PG&E electrical equipment located on the southeast corner of the intersection, and the addition of a westbound right-turn lane would require the reconfiguration of the parking lot on the northeast corner of the intersection. For these reasons, the City must determine whether or not the recommended improvements are feasible.

2. SR 68 / Hunter Lane (Int. #2) – Stop Controlled (WB)

The minor street approach of this intersection would operate at LOS F during the AM and PM peak hours under 2030 cumulative plus project with interchange traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection.

This intersection is within the responsibility and jurisdiction of Caltrans, and not the City of Salinas. Improvements along this corridor should be added to the TAMC fee. If they are, payment of the TAMC fee would mitigate project impacts at this intersection to a less than significant level. If improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of the improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

Options for improving operations at this intersection include consolidating access points and eliminating left-turns into and out of the driveways and minor intersections along SR 68 between Foster Road and Blanco Road, or the installation of a median barrier that would to allow left-turns into the minor streets but prevent left-turns out. These options would improve safety and the levels of service at the intersections along the corridor but would result in traffic diversions and the need to accommodate U-turns along the corridor. As pointed out by Monterey County Department of Public Works staff, the corridor merits a systems analysis to address these impacts, which is beyond the scope of this study. Caltrans should consider commissioning a systems analysis of the corridor.

It should be noted that installation of a traffic signal would improve operations at this intersection to an acceptable level of service. However, it would also have an adverse

impact on the through traffic on SR 68 and could cause an increase in rear-end collisions. As a result, a traffic signal is not recommended for this intersection.

3. SR 68 WB Ramps / Spreckels Boulevard (Int. #3) – Stop Controlled (SB)

This intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative plus project with interchange traffic conditions. The minor street approach would also operate at LOS F during both peak hours. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #42):

1. *Same as 2030 cumulative no project no interchange.*

This intersection is within the responsibility and jurisdiction of Caltrans, and not the City of Salinas. Improvements at this intersection are not included but should be added to the TAMC fee. If these improvements are added to the TAMC fee prior to project implementation, payment of the TAMC fee will mitigate cumulative project impacts at this intersection to a less than significant level. If these improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

4. SR 68 EB Off-Ramp / Spreckels Boulevard (Int. #4) – Stop Controlled (NB)

This intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative plus project with interchange traffic conditions. The minor street approach would also operate at LOS F during the AM and PM peak hours. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #43):

1. *Same as 2030 cumulative no project no interchange.*

This intersection is within the responsibility and jurisdiction of Caltrans, and not the City of Salinas. Improvements at this intersection are not included but should be added to the TAMC fee. If these improvements are added to the TAMC fee prior to project implementation, payment of the TAMC fee will mitigate cumulative project impacts at this intersection to a less than significant level. If these improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and

should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

5. SR 68 EB On-Ramp / Spreckels Boulevard (Int. #5) – Stop Controlled (SB)

The minor street approach at this intersection would operate at LOS F during the AM and PM peak hours under 2030 cumulative plus project with interchange traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #44):

1. *Same as 2030 cumulative no project no interchange.*

This intersection is within the responsibility and jurisdiction of Caltrans, and not the City of Salinas. Improvements at this intersection are not included but should be added to the TAMC fee. If these improvements are added to the TAMC fee prior to project implementation, payment of the TAMC fee will mitigate cumulative project impacts at this intersection to a less than significant level. If these improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

6. Sanborn Road / Fairview Ave.-U.S. 101 NB Offramp (Int. #6) – Stop Controlled (EB & WB)

This intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative plus project with interchange traffic conditions. The minor street approach would also operate at LOS F during both the AM and PM peak hours. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #18):

1. *Same as background.*

Improvements along the Sanborn Road corridor are included in the City of Salinas TFO. Payment of traffic impact fees per the City of Salinas TFO (#32 and #37) will mitigate cumulative project impacts at this intersection.

7. U.S. 101 NB Ramps / Fairview Avenue (Int. #7) – Stop Controlled (NB)

This intersection would operate at an overall LOS D during the PM peak hour under 2030 cumulative plus project with interchange traffic conditions. The minor street approach would operate at LOS F during the PM peak hour. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #45):

1. *Same as 2030 cumulative no project no interchange.*

This intersection improvement is equivalent to the road segment improvement (RI #85) recommended for road segment 5a (Fairview Road between Sanborn Road and the U.S. 101 northbound ramps). This improvement is not included in the City of Salinas TFO. It is proposed that the City add this improvement to the TFO. If the City adds this improvement to the TFO, the payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts at this intersection. If the City does not add this improvement to the TFO, then the project will be responsible for its pro-rata fair-share of this improvement. In that event, because an established improvement program would not exist, the impact would remain significant and unavoidable.

8. Sanborn Road / Elvee Drive-U.S. 101 SB Ramps (Int. #8) – Signalized

This intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative plus project with interchange traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #88):

1. *Same as background. In addition:*
2. *Add a third northbound Sanborn Road through lane.*

Improvements along the Sanborn Road corridor are included in the City of Salinas TFO (#32, #37 and #66). In addition, this intersection is within the responsibility and jurisdiction of Caltrans. Improvements at this intersection should be added to the TAMC fee. If they are, payment of the TAMC fee would mitigate project impacts at this intersection to a less than significant level. If improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of the improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

9. Sanborn Road / Work Street-Terven Avenue (Int. #9) – Signalized

This intersection would operate at an overall LOS F during both the AM and PM peak hours under 2030 cumulative plus project with interchange traffic conditions. Per the City of Salinas significance criteria, the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #47):

1. *Same as 2030 cumulative no project no interchange.*

   Improvements along the Sanborn Road corridor are included in the City of Salinas TFO (#37). Payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts at this intersection.

10. Blanco Road-Sanborn Road / Abbott Street (Int. #10) – Signalized

This intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative plus project with interchange traffic conditions. Per the City of Salinas significance criteria, the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #48):

1. *Same as 2030 cumulative no project no interchange.*
2. *Results in LOS D in the AM peak hour and LOS E in the PM peak hour.*

   Improvements at this intersection are not included in the City of Salinas TFO. It is proposed that the City add these improvements to the City of Salinas TFO. If the City adds these improvements to the City of Salinas TFO, the payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts at this intersection. If the City does not add these improvements to the TFO, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program would not exist, the impact would remain significant and unavoidable.

11. Airport Boulevard / De la Torre Street (Int. #12) – Signalized

This intersection would operate at an overall LOS D and LOS E during the AM and PM peak hours, respectively, under 2030 cumulative plus project with interchange traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #13):

1. *Same as existing harvest season.*

   Improvements at this intersection are funded by Caltrans (#0318) and the City of Salinas TFO (#32 and #38). Payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts at this intersection.

12. Airport Boulevard / Terven Avenue (Int. #13) – Signalized

This intersection would operate at an overall LOS D during the AM and PM peak hours under 2030 cumulative plus project with interchange traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #14):

1. *Same as existing harvest season.*

Improvements at this intersection are planned but not fully funded as Phase 2 of the Caltrans Airport Boulevard interchange project (#0318). Improvements at this intersection are included in the City of Salinas TFO (#32 and #38). Payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts at this intersection.

13. Harkins Road / Hansen Street (Int. #15) – Signalized

This intersection would operate at an overall LOS E during the PM peak hour under 2030 cumulative plus project with interchange traffic conditions. Per the City of Salinas significance criteria, the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #49):

1. *Same as 2030 cumulative no project no interchange*
2. *Results in LOS E during the PM peak hour.*

While the preceding improvements would enhance traffic operations at this intersection, it should be noted that the extensive queuing is caused by traffic congestion at the U.S. 101 / Airport Boulevard interchange, which is planned for improvements through a Caltrans PSR (#0318) and the City of Salinas TFO (#32 and #38).

It is proposed that the City add these improvements to the City of Salinas TFO. If the City adds these improvements to the City of Salinas TFO, payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts at this intersection. If the City does not add these improvements to the TFO, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program would not exist, the impact would remain significant and unavoidable.

14. Harkins Road / Abbott Street (Int. #16) – Signalized

This intersection would operate at an overall LOS E during the AM and PM peak hours under 2030 cumulative plus project with interchange traffic conditions. Per the City of Salinas significance criteria, the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #28):

1. *Same as existing plus project phase 1.*

Improvements at this intersection are not included in the City of Salinas TFO. It is proposed that the City add these improvements to the City of Salinas TFO. If the City adds these improvements to the City of Salinas TFO, the payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts at this intersection. If the City does not add these improvements to the TFO, then the project will be responsible for its pro-rata fair-share of these improvements. In that event,

because an established improvement program would not exist, the impact would remain significant and unavoidable.

15. Harkins Road / Dayton Street (Int. #18) – Stop Controlled (WB)

Although this intersection would operate at an acceptable level of service during the AM and PM peak hours, improvements are recommended due to the high volume of southbound left-turning vehicles in the AM peak hour. Per the City of Salinas significance criteria the project **would not** have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #16):

1. *Same as existing harvest season.*

Improvements at this intersection are not included in any fee program and no mitigation is required of the project at this intersection. However, the project is proposing to implement this improvement to enhance safety at this intersection.

16. Harkins Road / Hunter Lane (Int. #19) – Stop Controlled (EB)

This intersection would operate at an overall LOS F during the AM peak hour under 2030 cumulative plus project with interchange traffic conditions. The minor street approach would operate at LOS F during the AM peak hour. Per the Monterey County significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #50):

1. *Same as 2030 cumulative no project no interchange.*

The peak hour signal warrant and the all-way stop control warrant were assessed at this intersection under all traffic scenarios. The all-way stop control warrant is currently met under existing harvest season conditions, and the peak hour signal warrant would be met beginning under 2030 cumulative no project no interchange conditions. Although the peak hour signal warrant would be met under 2030 conditions, the intersection would operate acceptably with all-way stop control. It is recommended that either all-way stop control or a signal be installed at this intersection.

Improvements at this intersection are not currently included in any fee program. This intersection would operate deficiently under 2030 cumulative no project no interchange conditions and is within the County's responsibility and jurisdiction. The County should include the preferred improvement at this intersection in their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

If the County adopts an impact fee program that includes the preferred improvement prior to project implementation, payment of the fee will mitigate this impact to a less than significant level. If the County does not adopt an impact fee program including the preferred improvement prior to project implementation, then the project will be responsible for its pro-rata fair-share of this improvement. In that event, because an established improvement program for this improvement would not exist, the impact

would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that this improvement is within the responsibility and jurisdiction of another public agency (the County) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

17. Hatton Avenue / Spreckels Boulevard (Int. #21) – Stop Controlled (SB)

This intersection would operate at an overall LOS E and LOS D during the AM and PM peak hours under 2030 cumulative plus project with interchange traffic conditions. The minor street approach would operate at LOS F during the AM and PM peak hours. Per the Monterey County significance criteria the project would have a significant impact at this intersection. Assuming the Harris Road interchange is constructed in the location shown in **Exhibit 17**, the following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #89):

1. *Same as 2030 cumulative no project no interchange. In addition:*
2. *Signalize intersection.*

The project will widen Harris Road to 4 lanes along the project frontage. This improvement will serve as the project's pro-rata fair share contribution to improvements along Harris Road and Spreckels Boulevard. Supporting calculations are included in Appendix X.

18. Harris Road / Abbott Street (Int. #22) – Signalized

This intersection would operate at an overall LOS E and LOS F during the AM and PM peak hours, respectively, under 2030 cumulative plus project with interchange traffic conditions. Per the Monterey County significance criteria the project would have a significant impact at this intersection. Assuming the Harris Road interchange is constructed in the location shown in **Exhibit 17**, the following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #90):

1. *Add second northbound Harris Road left-turn lane.*
2. *Convert the eastbound Abbott Street shared through/right-turn lane to a through lane.*
3. *Add an eastbound Abbott Street right-turn lane.*
4. *Add a second westbound Abbott Street left-turn lane.*

The project's frontage improvements will serve as the project's pro-rata fair share contribution to improvements at this intersection.

19. Harris Road / Harris Place (Int. #23) – Stop Controlled (EB & WB)

A fourth (west) leg would be constructed at this intersection with the implementation of the proposed project. Without additional improvements, intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative plus project with interchange traffic conditions. The minor street approach of this intersection would also operate at LOS F during the AM and PM peak hours. Per the City of Salinas significance criteria, the project would have a significant impact at this intersection.

The project applicant is proposing to design this intersection with the following lane configurations and traffic controls under existing plus project phase 1 conditions (RI #29):

1. *Signalize intersection.*
2. *Northbound Harris Road approach: One left-turn lane, one shared through/right lane*
3. *Southbound Harris Road approach: One left-turn lane, one through lane, one right-turn lane.*
4. *Eastbound Harris Place approach: One left-turn lane, one shared through/right lane*
5. *Westbound Harris Place approach: One shared left/through/right lane*

The same improvements recommended under existing plus project phase 1 conditions (RI #29) would also be recommended under 2030 cumulative plus project with interchange conditions. In addition to RI #29, the following improvements (RI #82) are recommended under 2030 cumulative plus project with interchange conditions:

1. *Add a second northbound Harris Road through lane.*
2. *Add a second southbound Harris Road through lane.*

The project's frontage improvements will serve as the project's pro-rata fair share contribution to improvements at this intersection.

20. U.S. 101 / Gould Road (Int. #25) – Stop Controlled (WB)

The minor street approach of this intersection would operate at LOS F during the AM and PM peak hours under 2030 cumulative plus project with interchange traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #55):

1. *Same as 2030 cumulative no project no interchange.*

Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar. This would result in the elimination of this intersection. Payment of the TAMC fee will mitigate cumulative project impacts at this intersection.

21. U.S. 101 / Hartnell Road Connector (Int. #26) – Stop Controlled (WB)

This intersection would continue to operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative plus project with interchange traffic conditions. The minor street approach of this intersection would also continue to operate at LOS F during the AM and PM peak hours. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #20):

1. *Same as background.*

Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar. This would result in the elimination of this intersection. Payment of the TAMC fee will mitigate cumulative project impacts at this intersection.

22. Street A Project Road / Abbott Street (Int. #27) – Future Project Intersection

This intersection will be created with the implementation of the proposed project. Assuming the Harris Road interchange is constructed in the location shown in **Exhibit 17**, this intersection would require the following lane configurations and traffic controls (RI #92):

1. *Signalize intersection.*
2. *Northbound Project Road approach: One left-turn lane and one right-turn lane.*
3. *Eastbound Abbott Street approach: One through lane, one shared through/right lane.*
4. *Westbound Abbott Street approach: One left-turn lane and two through lanes.*

The project's frontage improvements will serve as the project's pro-rata fair share contribution to improvements at this intersection.

23. Harris Road / Street B Project Road (Int. #34) – Future Project Intersection

This intersection will be created with the implementation of the proposed project. The analysis at this intersection assumes the Harris Road interchange (and the connector road between the interchange and Harris Road) would be located as shown in **Exhibit 17**, which shows a conceptual sketch of a possible location for the interchange. With the assumed roadway layout, as shown in **Exhibit 17**, this intersection would operate at an acceptable level of service during the AM and PM peak hours under 2030 cumulative plus project with interchange traffic conditions with the following traffic control and lane configurations (RI #93).

Assuming the Harris Road interchange is constructed in the location shown in **Exhibit 17**, the following lane configurations and traffic controls would result in an acceptable level of service:

1. *Signalize the intersection.*
2. *Northbound Harris Road approach: One left-turn lane, two through lanes and two right-turn lanes.*
3. *Southbound Harris Road approach: Two left-turn lanes, two through lanes, and one right-turn lane.*
4. *Eastbound Project Road approach: One left-turn lane, one through lane and one shared through/right-turn lane.*
5. *Westbound approach: Three left-turn lanes, one though lane, and one right-turn lane.*

The project's frontage improvements will serve as the project's pro-rata fair share contribution to improvements at this intersection.

24. Cooper Road / Blanco Road (Int. #37) – Stop Controlled (SB)

This intersection would operate at an overall LOS E during the AM peak hour and LOS F during the PM peak hour under 2030 cumulative plus project with interchange traffic conditions. The

minor street approach of this intersection would operate at LOS F during the AM and PM peak hours. Per the Monterey County significance criteria, the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #2):

1. *Same as existing non-harvest season.*

   Improvements at this intersection are not currently included in any fee program. This intersection operates deficiently under existing conditions and is within the County's responsibility and jurisdiction. The County should include the recommended improvements at this intersection in their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

   If the County adopts an impact fee program that includes these improvements prior to project implementation, payment of the fee will mitigate this impact to a less than significant level. If the County does not adopt an impact fee program including these improvements prior to project implementation, then the project will be responsible for its pro-rata fair-share of these improvements as mitigation as provided in Section 3 of the Agreement Regarding Supplement to the Final Program EIR for the Salinas Future Growth Area between the City of Salinas and the County of Monterey (March 27, 2008). In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (the County) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

25. Davis Road / Blanco Road (Int. #38) – Signalized

This intersection would operate at an overall LOS F during the AM and PM peak hours under 2030 cumulative plus project with interchange traffic conditions. Per the Monterey County significance criteria, the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #56):

1. *Same as 2030 cumulative no project no interchange.*

   Improvements at this intersection are included in the City's TFO (#26 and #41) and the TAMC Regional Traffic Impact Fee (#8). In addition, the County should include this intersection in their proposed future impact fee per the Greater Salinas Memorandum of Understanding (MOU) dated August 2006.

   If the County adopts an impact fee program that includes these improvements prior to project implementation, payment of the fee will mitigate this impact to a less than significant level. If the County does not adopt an impact fee program including these improvements prior to project implementation, then the project will be responsible for its pro-rata fair-share of these improvements as mitigation as provided in Section 3 of the Agreement Regarding Supplement to the Final Program EIR for the Salinas

Future Growth Area between the City of Salinas and the County of Monterey (March 27, 2008). In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (the County) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

26. SR 68 / Hitchcock Road (Int. #39) – Stop Controlled (EB)

The minor street approach of this intersection would operate at LOS F during the PM peak hour under 2030 cumulative plus project with interchange traffic conditions. Per the Caltrans significance criteria the project would have a significant impact at this intersection.

This intersection is within the responsibility and jurisdiction of Caltrans, and not the City of Salinas. Improvements along this corridor should be added to the TAMC fee. If they are, payment of the TAMC fee would mitigate project impacts at this intersection to a less than significant level. If improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of the improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

Options for improving operations at this intersection include consolidating access points and eliminating left-turns into and out of the driveways and minor intersections along SR 68 between Foster Road and Blanco Road, or the installation of a median barrier that would to allow left-turns into the minor streets but prevent left-turns out. These options would improve safety and the levels of service at the intersections along the corridor but would result in traffic diversions and the need to accommodate U-turns along the corridor. As pointed out by Monterey County Department of Public Works staff, the corridor merits a systems analysis to address these impacts, which is beyond the scope of this study. Caltrans should consider commissioning a systems analysis of the corridor.

It should be noted that installation of a traffic signal would improve operations at this intersection to an acceptable level of service. However, it would also have an adverse impact on the through traffic on SR 68 and could cause an increase in rear-end collisions. As a result, a traffic signal is not recommended for this intersection.

27. Merrill Street / Abbott Street (Int. #42) – Stop Controlled (NB)

This intersection would operate at an overall LOS E and LOS F during the AM and PM peak hours under 2030 cumulative plus project with interchange traffic conditions. The minor street approach of this intersection would also operate at LOS F during both peak hours. Per the City of Salinas significance criteria the project would have a significant impact at this intersection.

The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #22):

1. *Same as background.*

   Improvements at this intersection are not included in the City of Salinas TFO. It is proposed that the City add these improvements to the City of Salinas TFO. If the City adds these improvements to the TFO, payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts at this intersection. If the City does not add these improvements to the TFO, then the project will be responsible for its pro-rata fair-share of these improvements. In that event, because an established improvement program would not exist, the impact would remain significant and unavoidable.

28. Skyway Boulevard / E. Alisal Street (Int. #43) – Stop Controlled (NB & SB)

This intersection would operate at an overall LOS F during the AM peak hour under 2030 cumulative plus project with interchange traffic conditions. The minor street approach of this intersection would also operate at LOS F during both peak hours. Per the City of Salinas significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #23):

1. *Same as background.*

   Improvements along E. Alisal Street are included in the City of Salinas TFO (#36). Payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts at this intersection.

29. U.S. 101 / Spence Road (Int. #44) – Stop Controlled (WB)

This intersection would continue to operate at an overall LOS F during both the AM and PM peak hours under 2030 cumulative plus project with interchange traffic conditions. The minor street approach would also continue to operate at LOS F during both the AM and PM peak hours. Per the Caltrans significance criteria the project would have a significant impact at this intersection. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #4):

1. *Same as existing non-harvest season.*

   Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar. This would result in the elimination of this intersection. Payment of the TAMC fee will mitigate cumulative project impacts at this intersection.

10.2 2030 Cumulative Plus Project With Interchange Road Segment Operations

2030 cumulative plus project with interchange AM and PM peak hour levels of service on the study road segments are tabulated in **Exhibit 7B**. Freeway ramp, weaving, and non-freeway

roadway segment volumes are based upon the intersection turning volumes shown on **Diagrams 45** and **46** in **Appendix B**.

A discussion of the traffic operations for the road and freeway segments and ramps with operational deficiencies under 2030 cumulative plus project with interchange traffic conditions follows. Recommended road segment improvements are discussed in italics below the description of each segment's operations, and are shown on **Exhibits 7A and 7B**.

Road Segments

1. Abbott Street
    a. Harris Road – Firestone Driveway (Seg. #1f). This segment would operate at LOS D and LOS E during the AM and PM peak hours, respectively. Per Monterey County significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #40):

        i. Same as background plus project buildout.

        Improvements on this road segment are included in the TAMC fee (#7 and #10). Payment of the TAMC fee will mitigate cumulative project impacts on this road segment.

2. Blanco Road
    a. Cooper Road – Davis Road (Seg. #3a). This segment would operate at LOS E during the AM and PM peak hours. Per Monterey County significance criteria the project **would not** have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #5):

        i. Same as existing non-harvest season.

        No mitigation is required of the project.

    b. Davis Road – Alisal Street (Seg. #3b). This segment will operate at LOS E and LOS F during the AM and PM peak hours, respectively. Per the City of Salinas significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #57):

        i. Same as 2030 cumulative no project no interchange.

        Improvements along this road segment are included in the City of Salinas TFO (#41). Payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts on this road segment.

3. Davis Road

a. Hitchcock Road – Blanco Road (Seg. #4a). This segment would operate at LOS E and LOS F during the AM and PM peak hours, respectively. Per Monterey County significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #26):

   i. *Same as background.*

   Improvements along this road segment are included in the TAMC fee (#4). Payment of the TAMC fee will mitigate cumulative project impacts on this road segment.

b. Blanco Road – Ambrose Drive (Seg. #4b). This segment would operate at LOS F during the AM and PM peak hours. Per Monterey County significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #6):

   i. *Same as existing non-harvest season.*

   Improvements on this road segment are included in the TAMC fee (#8). Payment of the TAMC fee will mitigate cumulative project impacts on this road segment.

4. Harris Road
   a. Spreckels Boulevard – Harris Place (Seg. #9a). This segment would operate at LOS E and LOS F during the AM and PM peak hours, respectively. Per the Monterey County significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #58):

      i. *Same as 2030 cumulative no project no interchange.*

      The project will widen Harris Road to 4 lanes along the project frontage. This improvement will serve as the project's fair share contribution to improvements along Harris Road and Spreckels Boulevard. Supporting calculations are included in Appendix X.

   b. Harris Place – Abbott Street (Seg. #9b). This segment would operate at LOS D and LOS E during the AM and PM peak hours, respectively. Per the Monterey County significance criteria the project would have a significant impact on this road segment. This road segment will come under the jurisdiction of the City of Salinas as part of the annexation that will occur with the implementation of the proposed project and will be subject to a level of service standard D (per City of Salinas standards). Per the City of Salinas significance criteria, the project would also have a significant impact on this road segment. The following improvements

are recommended under 2030 cumulative plus project with interchange conditions (RI #41):

i. *Same as background plus project buildout.*

The project will widen Harris Road to 4 lanes along the project frontage with the implementation of the project.

5. Sanborn Road
   a. Abbott Street – Terven Avenue (Seg. #13a). This segment would operate at LOS E during the PM peak hour. Per the City of Salinas significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #59):

      i. *Same as 2030 cumulative no project no interchange.*

      Improvements along Sanborn Road are included in the City of Salinas TFO (#37). Payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts on this road segment.

   b. Terven Avenue – U.S. 101 (Seg. #13b). This segment would operate at LOS E during the PM peak hour. Per the City of Salinas significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #60):

      i. *Same as 2030 cumulative no project no interchange.*

      Improvements along Sanborn Road are included in the City of Salinas TFO (#37). Payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts on this road segment.

   c. U.S. 101 – Fairview Avenue (Seg. #13c). This segment would operate at LOS F during the PM peak hour. Per the City of Salinas significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #61):

      i. *Same as 2030 cumulative no project no interchange.*

      Improvements along Sanborn Road are included in the City of Salinas TFO (#37). Payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts on this road segment.

6. Spreckels Boulevard

a. SR 68 – Hatton Avenue (Seg. #15a). This segment would operate at LOS F during the AM and PM peak hours. Per the City of Salinas significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #62):

   i. Same as 2030 cumulative no project no interchange.

   The project will widen Harris Road to 4 lanes along the project frontage. This improvement will serve as the project's fair share contribution to improvements along Harris Road and Spreckels Boulevard. Supporting calculations are included in Appendix X.

b. Hatton Avenue – Harris Road (Seg. #15b). This segment would operate at LOS F during the AM and PM peak hours. Per the City of Salinas significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #63):

   i. Same as 2030 cumulative no project no interchange.

   The project will widen Harris Road to 4 lanes along the project frontage. This improvement will serve as the project's fair share contribution to improvements along Harris Road and Spreckels Boulevard. Supporting calculations are included in Appendix X.

7. SR 68

a. Spreckels Boulevard – Foster Road (Seg. #16a). This segment would operate at LOS D during the PM peak hour. Per CEQA guidelines [Section 15091(a)(2)] this road segment is within the responsibility and jurisdiction of Caltrans and TAMC and not the City of Salinas. Improvements to this road segment can and should be adopted by Caltrans and TAMC. Per the Caltrans significance criteria the project **would not** have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #64):

   i. Same as 2030 cumulative no project no interchange.

   No mitigation is required of the project.

b. Foster Road – Hitchcock Road (Seg. #16b). This segment would operate at LOS D during the PM peak hour. Per CEQA guidelines [Section 15091(a)(2)] this road segment is within the responsibility and jurisdiction of Caltrans and TAMC and not the City of Salinas. Improvements to this road segment can and should be adopted by Caltrans and TAMC. Per the Caltrans significance criteria the project **would not** have a significant impact on this road segment. The following

improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #65):

i. *Same as 2030 cumulative no project no interchange.*

No mitigation is required of the project.

8. SR 156
   a. Castroville Boulevard – U.S. 101 (Seg. #17b). This segment would operate at LOS E and LOS F during the AM and PM peak hours, respectively. Per the Caltrans significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #7):

      i. *Same as 2030 cumulative no project no interchange.*

      Improvements on this road segment are included in the TAMC fee (#3). Payment of the TAMC fee will mitigate cumulative project impacts on this road segment.

9. SR 183
   a. Espinosa Road – Salinas City Limits (Seg. #18a). This segment would operate at LOS E during the AM and PM peak hours. Per CEQA guidelines [Section 15091(a)(2)] this road segment is within the responsibility and jurisdiction of Caltrans and TAMC and not the City of Salinas. Improvements to this road segment can and should be adopted by Caltrans and TAMC. Per the Caltrans significance criteria the project **would not** have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #17):

      i. *Same as existing harvest season.*

      No mitigation is required of the project.

Freeway Segments

1. U.S. 101
   a. Potter Road – Spence Road (Seg. #20a). This segment would operate at LOS D and LOS F during the AM and PM peak hours, respectively. Per the Caltrans significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #68):

      i. *Same as 2030 cumulative no project no interchange.*

      Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar. This would improve traffic

operations on U.S. 101 by eliminating minor intersections along the corridor. This road segment is within the responsibility and jurisdiction of Caltrans, and not the City of Salinas. Improvements along this corridor should be added to the TAMC fee. If they are, payment of the TAMC fee would mitigate project impacts at this intersection to a less than significant level. If improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of the improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

b. Spence Road – Abbott Street (Seg. #20b). This segment would operate at LOS D and LOS F during the AM and PM peak hours, respectively. Per the Caltrans significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #69):

   i. Same as 2030 cumulative no project no interchange.

   Improvements in the TAMC fee (#7) include constructing 2-lane frontage roads on the east and west sides of U.S. 101 from the future Harris Road interchange to Chualar. This would improve traffic operations on U.S. 101 by eliminating minor intersections along the corridor. This road segment is within the responsibility and jurisdiction of Caltrans, and not the City of Salinas. Improvements along this corridor should be added to the TAMC fee. If they are, payment of the TAMC fee would mitigate project impacts at this intersection to a less than significant level. If improvements are not added to the TAMC fee prior to project implementation, then the project will be responsible for its pro-rata fair-share of the improvements. In that event, because an established improvement program for such improvements would not exist, the impact would remain significant and unavoidable, and the City would need to either adopt findings of overriding considerations or find that such improvements are within the responsibility and jurisdiction of another public agency (Caltrans and TAMC) and should be adopted by such other agency (CEQA Guidelines Section 15091[a][2] and [3]).

c. Abbott Street – Gould Road (Seg. #20c). This segment would operate at LOS D during the PM peak hour. Per the Caltrans significance criteria the project **would not** have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #77):

i. *Same as 2030 cumulative without project and with interchange.*

No mitigation is required of the project.

d. Gould Road – Harris Road (Seg. #20e). This segment would operate at LOS D during the PM peak hour. Per the Caltrans significance criteria the project **would not** have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #78):

i. *Same as 2030 cumulative without project and with interchange.*

No mitigation is required of the project.

e. Harris Road – Airport Boulevard (Seg. #20f). This segment would operate at LOS D and during the PM peak hour. Per the Caltrans significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #94):

i. *Widen to a 6-lane freeway.*

Improvements on this road segment are included in the City of Salinas TFO (#32). Payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts on this road segment.

f. Airport Boulevard – Sanborn Road (Seg. #20g). This segment would operate at LOS D and LOS E during the AM and PM peak hours, respectively. Per the Caltrans significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #70):

i. *Same as 2030 cumulative no project no interchange.*

These improvements are included in the City of Salinas TFO (#32). Payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts on this road segment.

g. Sanborn Road – John Street (Seg. #20h). This segment would operate at LOS D and LOS F during the AM and PM peak hours, respectively. Per the Caltrans significance criteria the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #71):

i. *Same as background plus project phase 1.*

Improvements on this road segment are included in the City of Salinas TFO (#32). Payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts on this road segment.

Freeway Ramps

All of the study freeway ramps would operate at acceptable levels of service under 2030 cumulative plus project with interchange traffic conditions.

Weaving Segments

The results of the weaving analysis are discussed in Chapter 11.

11 Freeway Segment Weaving Analysis

11.1 Traffic Operation Evaluation Methodologies

The weaving analysis performed on the U.S. 101 freeway was based on the methodologies identified within the Caltrans Highway Design Manual (6th Edition). The Caltrans level of service standard for weaving segments is LOS C. This procedure for evaluating weaving segment levels of service was developed by Jack E. Leisch & Associates in 1985, and uses weaving volumes and nomographs in the evaluation. The analysis presented within this report primarily utilizes spreadsheets developed and provided by Caltrans District 5 staff. Due to the configuration of the on-and off-ramps for one study weaving segment, Northbound U.S. 101 between Hartnell Road and Abbott Street, a second style of nomograph from Jack E. Leisch & Associates is utilized in this analysis, to analyze just that specific weaving segment. This latter nomograph is contained within the Jack E. Leisch & Associates publication *Procedure for Analysis and Design of Weaving Sections,* October 1985. **Appendix P** contains the weaving level of service calculation sheets.

The volumes utilized within the weaving analysis are expressed in passenger car equivalents (PCEs). A PCE is the equivalent number of standard passenger vehicles that would have the same operating characteristics of a heavy vehicle. A PCE of 3.0 was applied to the heavy vehicle portion of the volumes analyzed within this report. The heavy vehicle portion was derived based upon the percent heavy vehicles on the ramps at either end of the weaving segment, as well as the heavy vehicle percentage along mainline U.S. 101. These heavy vehicle percentages are taken from both the traffic counts at the ramp intersections (or other adjacent intersections) and the Caltrans daily heavy vehicle percentage immediately north of the Airport Boulevard interchange (as published in the report *2006 Annual Average Daily Truck Traffic on the California State Highway System*, California Department of Transportation, December 2007).

11.2 Scope of Work

Weaving Segments

1. Northbound U.S. 101, between Hartnell Road and Abbott Street;
2. Southbound U.S. 101, between Hartnell Road and Abbott Street;
3. Northbound U.S. 101, between Airport Boulevard and Fairview Avenue;
4. Southbound U.S. 101, between Airport Boulevard and Sanborn Road; and
5. Northbound U.S. 101, between Fairview Avenue and Sanborn Road.

11.3 Existing Non-Harvest Season

Existing morning and evening peak hour level of service results on the study street segments are tabulated on the LOS Table in **Exhibit 7A**.

Weaving roadway segment volumes are based upon the intersection turning volumes at the ramp intersections, as well as along the U.S. 101 corridors through the study area.
The weaving analyses of the U.S 101 freeway found that three of the five weaving segments would operate at acceptable levels of service under existing non-harvest season traffic conditions. However, two weaving segments would operate at unacceptable levels of service –

Northbound U.S. 101 between Hartnell and Abbott, and Northbound U.S. 101 between Airport and Fairview. The recommended improvements at each location are discussed in italics below:

The following operational deficiencies would be caused by existing traffic on the study road network. Since this scenario does not include traffic that would be generated by the proposed project, the project is not responsible for providing any of these recommended improvements.

1. Northbound U.S. 101 between Hartnell Road and Abbott Street (Seg. #26). This weaving area operates at LOS F during the AM and PM peak hours. The following improvements are recommended under existing non-harvest season conditions (RI #8):

    i. *It is recommended that the westbound Hartnell Road right turn movement be prohibited at the U.S. 101/Hartnell Road connector intersection, and relocated to the existing on-ramp to northbound U.S. 101 from Hartnell Road just north of Abbott Street. This improvement would effectively eliminate the study weaving section. Implementation of this improvement would be best accomplished through the conversion of Hartnell Road to one-way traffic (in the northwest direction) between the Hartnell Road connector and the Hartnell Road onramp. It is also recommended that an existing driveway to a residence on Hartnell Road near U.S. 101 be relocated to the intersection of Hartnell Road and the northbound on-ramp to U.S. 101. As a consequence of these improvements, the westbound Hartnell Road left turn movement onto southbound U.S. 101 would also be removed from the U.S. 101/Hartnell intersection.*

    Improvements along this segment of U.S. 101 are included in the TAMC fee (#7).

2. Northbound U.S. 101 between Airport Boulevard and Fairview Avenue (Seg. #28). This weaving area operates at LOS A during the AM and LOS D during the PM peak hour. The following improvements are recommended under existing non-harvest season conditions (RI #9):

    i. *The planned reconstruction and relocation of the northbound off- and on-ramps at the Airport Boulevard interchange would increase the weaving distance between the ramps at the two interchanges by over 400 meters (1,300 feet), thereby resulting in weaving operations of LOS C.*

    Improvements along this segment of U.S. 101 are planned as part of the Caltrans Airport Boulevard reconstruction project (#0318) and are included in the City of Salinas TFO (#38).

11.4 Existing Harvest Season

Existing morning and evening peak hour level of service results on the study street segments are tabulated on the LOS Table in **Exhibit 7A**.

Weaving roadway segment volumes are based upon the intersection turning volumes at the ramp intersections, as well as along the US 101 corridors through the study area.

The weaving analyses of the U.S. 101 freeway found that two of the five weaving segments would operate at unacceptable levels of service. The recommended improvements at each location are discussed in italics below:

The following operational deficiencies would be caused by existing traffic on the study road network. Since this scenario does not include traffic that would be generated by the proposed project, the project is not responsible for providing any of these recommended improvements.

1. Northbound U.S. 101 between Hartnell Road and Abbott Street (Seg. #26). This weaving area operates at LOS F during the AM and PM peak hours. The following improvements are recommended under existing harvest season conditions (RI #8):

    i. *The previously recommended improvement, prohibition of the westbound Hartnell Road right turn movement at the U.S. 101/Hartnell Road intersection, is again recommended. This improvement would eliminate the weaving section entirely.*

    Improvements along this segment of U.S. 101 are included in the TAMC fee (#7).

2. Northbound U.S. 101 between Airport Boulevard and Fairview Avenue (Seg. #28). This weaving area operates at LOS A during the AM and LOS D during the PM peak hour. The following improvements are recommended under existing harvest season conditions (RI #9):

    i. *Implementation of the planned reconstruction and relocation of the northbound off- and on-ramps at the Airport Boulevard interchange would result in weaving operations of LOS C.*

    Improvements along this segment of U.S. 101 are planned as part of the Caltrans Airport Boulevard reconstruction project (#0318) and are included in the City of Salinas TFO (#38).

11.5 Background No Project

Background No Project conditions morning and evening peak hour level of service results on the study street segments are tabulated on **Exhibit 7A**.

Two of the five study weaving segments would operate at unacceptable levels of service under background conditions. The recommended improvements at each deficient weaving area are discussed in italics below:

The following operational deficiencies would be caused by existing traffic in addition to background traffic growth (i.e., traffic generated by approved projects) on the study road network. Since this scenario does not include traffic that would be generated by the

proposed project, the project is not responsible for providing any of these recommended improvements.

1. Northbound U.S. 101 between Hartnell Road and Abbott Street (Seg. #26). This weaving area would operate at LOS D during the AM peak hour and LOS E during the PM peak hour. The following improvements are recommended under background no project conditions (RI #8):

    i. The previously recommended improvement, prohibition of the westbound Hartnell Road right turn movement at the U.S. 101/Hartnell Road intersection, is again recommended. This improvement would eliminate the weaving section entirely.

    Improvements along this segment of U.S. 101 are included in the TAMC fee (#7).

2. Northbound U.S. 101 between Airport Boulevard and Fairview Avenue (Seg. #28). This weaving area would operate at LOS D during the PM peak hour. The following improvements are recommended under background no project conditions (RI #9):

    i. Implementation of the planned reconstruction and relocation of the northbound off- and on-ramps at the Airport Boulevard interchange would result in weaving operations of LOS C.

    Improvements along this segment of U.S. 101 are planned as part of the Caltrans Airport Boulevard reconstruction project (#0318) and are included in the City of Salinas TFO (#38).

11.6 Existing Plus Project Phase 1

Existing plus project phase 1 conditions morning and evening peak hour level of service results on the study street segments are tabulated in **Exhibit 7A**.

Two of the five study weaving segments would operate at unacceptable levels of service under existing plus project phase 1 conditions. The recommended improvements at each deficient weaving area are discussed in italics below:

1. Northbound U.S. 101 between Hartnell Road and Abbott Street (Seg. #26). This weaving area would operate at LOS F during the AM and PM peak hours. Per the Caltrans significance criteria, the project would have a significant impact on this road segment. The following improvements are recommended under existing plus project phase 1 conditions (RI #8):

    i. The previously recommended improvement, prohibition of the westbound Hartnell Road right turn movement at the U.S. 101/Hartnell Road intersection, is again recommended. This improvement would eliminate the weaving section entirely.

    Improvements along this segment of U.S. 101 are included in the TAMC fee (#7). Payment of the TAMC fee would mitigate project impacts on this road segment.

2. Northbound U.S. 101 between Airport Boulevard and Fairview Avenue (Seg. #28). This weaving area would operate at LOS E during the PM peak hour. The following improvements are recommended under existing plus project phase 1 conditions (RI #9):

    i. Implementation of the planned reconstruction and relocation of the northbound off- and on-ramps at the Airport Boulevard interchange would result in weaving operations of LOS C.

    Improvements along this segment of U.S. 101 are planned as part of the Caltrans Airport Boulevard reconstruction project (#0318) and are included in the City of Salinas TFO (#38). Payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts on this road segment.

11.7 Background Plus Project Phase 1

Background plus project phase 1 conditions morning and evening peak hour level of service results on the study street segments are tabulated in **Exhibit 7A**.

All five study weaving segments would operate at unacceptable levels of service under background plus project phase 1 conditions. The recommended improvements at each deficient weaving area are discussed in italics below:

1. Northbound U.S. 101 between Hartnell Road and Abbott Street (Seg. #26). This weaving area would operate at LOS F during the AM and PM peak hours. Per the Caltrans significance criteria, the project would have a significant impact on this road segment. The following improvements are recommended under background plus project phase 1 conditions (RI #8):

    i. The previously recommended improvement, prohibition of the westbound Hartnell Road right turn movement at the U.S. 101/Hartnell Road intersection, is again recommended. This improvement would eliminate the weaving section entirely.

    Improvements along this segment of U.S. 101 are included in the TAMC fee (#7). Payment of the TAMC fee will mitigate project impacts on this road segment.

2. Southbound U.S. 101 between Hartnell Road and Abbott Street (Seg. #27). This weaving area would operate at LOS D during the PM peak hour. Per the Caltrans significance criteria, the project would have a significant impact on this road segment. The following improvements are recommended under background plus project phase 1 conditions (RI #36):

    i. It is recommended that the southbound U.S. 101 left turn movement onto eastbound Hartnell Road be prohibited. This can best be accomplished through a complete median closure at the U.S. 101/Hartnell Road intersection. Implementation of this improvement would eliminate the weaving segment entirely.

Improvements along this segment of U.S. 101 are included in the TAMC fee (#7). Payment of the TAMC fee will mitigate project impacts on this road segment.

3. Northbound U.S. 101 between Airport Boulevard and Fairview Avenue (Seg. #28). This weaving area would operate at LOS E during the PM peak hour. Per the Caltrans significance criteria, the project would have a significant impact on this road segment. The following improvements are recommended under background plus project phase 1 conditions (RI #8):

    i. *Implementation of the planned reconstruction and relocation of the northbound off- and on-ramps at the Airport Boulevard interchange would result in weaving operations of LOS C.*

    Improvements along this segment of U.S. 101 are planned as part of the Caltrans Airport Boulevard reconstruction project (#0318) and are included in the City of Salinas TFO (#38). Payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts on this road segment.

4. Southbound U.S. 101 between Airport Boulevard and Sanborn Road (Seg. #29). This weaving area would operate at an unacceptable LOS D during the AM peak hour. Per the Caltrans significance criteria, the project would have a significant impact on this road segment. The following improvements are recommended under background plus project phase 1 conditions (RI #37):

    i. *It is recommended that a third through lane be added along southbound U.S. 101 between the Sanborn Road and Airport Boulevard interchanges. When combined with the existing two through lanes and one auxiliary lane, this would result in a total of four travel lanes within the weaving section. Implementation of this improvement would result in acceptable weaving operations.*

    Improvements along this segment of U.S. 101 are included in the City of Salinas TFO (#38). Payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts on this road segment.

5. Northbound U.S. 101 between Fairview Avenue and Sanborn Road (Seg. #30). This weaving area would operate at a deficient LOS D during the PM peak hour. The following improvements are recommended under background plus project phase 1 conditions (RI #38):

    i. *It is recommended that a collector-distributor roadway be constructed between the northbound U.S. 101 ramps to and from Fairview Road and Sanborn Road. A collector-distributor road is a distinct roadway separated from the mainline freeway lanes whose sole purpose is to access the on- and off-ramps. By moving the ramps to the collector-distributor roadway, fewer vehicles would be present within the weaving area, thereby providing more weaving opportunities. Both ramps to and from Fairview Avenue and Sanborn Road are recommended to connect to this collector-distributor roadway, and Caltrans should also consider incorporating the*

northbound Airport Boulevard ramps as well. Implementation of this improvement would result in acceptable weaving operations.

Improvements along this segment of U.S. 101 are included in the City of Salinas TFO (#32 and #37). Payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts on this road segment.

11.8 Background Plus Project Buildout

Background plus project buildout conditions morning and evening peak hour level of service results on the study street segments are tabulated in **Exhibit 7A**.

All five study weaving segments would operate at unacceptable levels of service under background plus project buildout conditions. The recommended improvements at each deficient weaving area are discussed in italics below:

1. Northbound U.S. 101 between Hartnell Road and Abbott Street (Seg. #26). This weaving area would operate at LOS D during the AM peak hour and LOS E during the PM peak hour. Per the Caltrans significance criteria, the project would have a significant impact on this road segment. The following improvements are recommended under background plus project buildout conditions (RI #8).

    i. The previously recommended improvement, prohibition of the westbound Hartnell Road right turn movement at the U.S. 101/Hartnell Road intersection, is again recommended. This improvement would eliminate the weaving section entirely.

    Improvements along this segment of U.S. 101 are included in the TAMC fee (#7). Payment of the TAMC fee will mitigate project impacts on this road segment.

2. Southbound U.S. 101 between Hartnell Road and Abbott Street (Seg. #27). This weaving area would operate at LOS D during the PM peak hour. Per the Caltrans significance criteria, the project would have a significant impact on this road segment. The following improvements are recommended under background plus project buildout conditions (RI #36):

    i. It is recommended that the southbound U.S. 101 left turn movement onto eastbound Hartnell Road be prohibited. This can best be accomplished through a complete median closure at the U.S. 101/Hartnell Road intersection. Implementation of this improvement would eliminate the weaving segment entirely.

    Improvements along this segment of U.S. 101 are included in the TAMC fee (#7). Payment of the TAMC fee will mitigate project impacts on this road segment.

3. Northbound U.S. 101 between Airport Boulevard and Fairview Avenue (Seg. #28). This weaving area would operate at LOS E during the PM peak hour. Per the Caltrans significance criteria, the project would have a significant impact on this road segment. The following improvements are recommended under background plus project buildout conditions (RI #9):

i. Implementation of the planned reconstruction and relocation of the northbound off- and on-ramps at the Airport Boulevard interchange would result in weaving operations of LOS C.

Improvements along this segment of U.S. 101 are planned as part of the Caltrans Airport Boulevard reconstruction project (#0318) and are included in the City of Salinas TFO (#38). Payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts on this road segment.

4. Southbound U.S. 101 between Airport Boulevard and Sanborn Road (Seg. #29). This weaving area would operate at an unacceptable LOS D during the AM peak hour. Per the Caltrans significance criteria, the project would have a significant impact on this road segment. The following improvements are recommended under background plus project buildout conditions (RI #37):

i. It is recommended that a third through lane be added along southbound U.S. 101 between the Sanborn Road and Airport Boulevard interchanges. When combined with the existing two through lanes and one auxiliary lane, this would result in a total of four travel lanes within the weaving section. Implementation of this improvement would result in acceptable weaving operations.

Improvements along this segment of U.S. 101 are included in the City of Salinas TFO (#38). Payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts on this road segment.

5. Northbound U.S. 101 between Fairview Avenue and Sanborn Road (Seg. #30). This weaving area would operate at a deficient LOS D during the PM peak hour. The following improvements are recommended under background plus project buildout conditions (RI #38):

i. It is recommended that a collector-distributor roadway be constructed between the northbound U.S. 101 ramps to and from Fairview Road and Sanborn Road. A collector-distributor road is a distinct roadway separated from the mainline freeway lanes whose sole purpose is to access the on- and off-ramps. By moving the ramps to the collector-distributor roadway, fewer vehicles would be present within the weaving area, thereby providing more weaving opportunities. Both ramps to and from Fairview Avenue and Sanborn Road are recommended to connect to this collector-distributor roadway, and Caltrans should also consider incorporating the northbound Airport Boulevard ramps as well. Implementation of this improvement would result in acceptable weaving operations.

Improvements along this segment of U.S. 101 are included in the City of Salinas TFO (#32 and #37). Payment of traffic impact fees per the City of Salinas TFO will mitigate project impacts on this road segment.

11.9 2030 Cumulative No Project No Interchange

2030 cumulative no project no interchange conditions morning and evening peak hour level of service results on the study street segments are tabulated in **Exhibit 7B**.

All five study weaving segments would operate at unacceptable levels of service under 2030 cumulative no project no interchange conditions. The recommended improvements at each deficient weaving area are discussed in italics below:

The following operational deficiencies would be caused by existing traffic in addition to cumulative traffic growth (i.e., traffic generated by approved and future projects) on the study road network. Since this scenario does not include traffic that would be generated by the proposed project, the project is not responsible for providing any of these recommended improvements.

1. Northbound U.S. 101 between Hartnell Road and Abbott Street (Seg. #26). This weaving area would operate at LOS F during the AM and PM peak hours. The following improvements are recommended under 2030 cumulative no project no interchange conditions (RI #8):

    i. The previously recommended improvement, prohibition of the westbound Hartnell Road right turn movement at the U.S. 101/Hartnell Road intersection, is again recommended. This improvement would eliminate the weaving section entirely.

    Improvements along this segment of U.S. 101 are included in the TAMC fee (#7).

2. Southbound U.S. 101 between Hartnell Road and Abbott Street (Seg. #27). This weaving area would operate at LOS D during the PM peak hour. The following improvements are recommended under 2030 cumulative no project no interchange conditions (RI #36):

    i. It is recommended that the southbound U.S. 101 left turn movement onto eastbound Hartnell Road be prohibited. This can best be accomplished through a complete median closure at the U.S. 101/Hartnell Road intersection. Implementation of this improvement would eliminate the weaving segment entirely.

    Improvements along this segment of U.S. 101 are included in the TAMC fee (#7).

3. Northbound U.S. 101 between Airport Boulevard and Fairview Avenue (Seg. #28). This weaving area would operate at LOS E during the PM peak hour. The following improvements are recommended under 2030 cumulative no project no interchange conditions (RI #9):

    i. Implementation of the previously recommended improvement – the planned reconstruction and relocation of the northbound off- and on-ramps at the Airport Boulevard interchange – would result in acceptable weaving operations.

Improvements along this segment of U.S. 101 are planned as part of the Caltrans Airport Boulevard reconstruction project (#0318) and are included in the City of Salinas TFO (#38).

4. Southbound U.S. 101 between Airport Boulevard and Sanborn Road (Seg. #29). This weaving area would operate at an unacceptable LOS D during the AM peak hour. The following improvements are recommended under 2030 cumulative no project no interchange conditions (RI #37):

    i. The conversion of the southbound Sanborn on-ramp and southbound Airport Boulevard off-ramp into braided ramps is recommended. Implementation of this improvement would eliminate this weaving section.

    Improvements along this segment of U.S. 101 are included in the City of Salinas TFO (#38).

5. Northbound U.S. 101 between Fairview Avenue and Sanborn Road (Seg. #30). This weaving area would operate at a deficient LOS D during the PM peak hour. The following improvements are recommended under 2030 cumulative no project no interchange conditions (RI #38):

    i. Implementation of the previously recommended improvement, a northbound collector-distributor lane, would result in acceptable weaving operations.

    Improvements along this segment of U.S. 101 are included in the City of Salinas TFO (#32 and #37).

11.10 2030 Cumulative No Project With Interchange

2030 cumulative no project with interchange conditions morning and evening peak hour level of service results on the study street segments are tabulated in **Exhibit 7B**.

Four of the five study weaving segments would operate at unacceptable levels of service under 2030 cumulative no project with interchange conditions. The recommended improvements at each deficient weaving area are discussed in italics in italics below:

The following operational deficiencies would be caused by existing traffic in addition to cumulative traffic growth (i.e., traffic generated by approved and future projects) on the study road network. Since this scenario does not include traffic that would be generated by the proposed project, the project is not responsible for providing any of these recommended improvements.

1. Northbound U.S. 101 between Hartnell Road and Abbott Street (Seg. #26). This weaving area would operate at LOS F during the AM and PM peak hours. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #8).

i. The previously recommended improvement, prohibition of the westbound Hartnell Road right turn movement at the U.S. 101/Hartnell Road intersection, is again recommended. This improvement would eliminate the weaving section entirely.

Improvements along this segment of U.S. 101 are included in the TAMC fee (#7).

2. Northbound U.S. 101 between Airport Boulevard and Fairview Avenue (Seg. #28). This weaving area would operate at LOS E during the PM peak hour. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #9):

i. Implementation of the previously recommended improvement – the planned reconstruction and relocation of the northbound off- and on-ramps at the Airport Boulevard interchange – would result in acceptable weaving operations.

Improvements along this segment of U.S. 101 are planned as part of the Caltrans Airport Boulevard reconstruction project (#0318) and are included in the City of Salinas TFO (#38).

3. Southbound U.S. 101 between Airport Boulevard and Sanborn Road (Seg. #29). This weaving area would operate at an unacceptable LOS D during the AM peak hour. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #37):

i. The conversion of the southbound Sanborn on-ramp and southbound Airport Boulevard off-ramp into braided ramps is recommended. Implementation of this improvement would eliminate this weaving section.

Improvements along this segment of U.S. 101 are included in the City of Salinas TFO (#38).

4. Northbound U.S. 101 between Fairview Avenue and Sanborn Road (Seg. #30). This weaving area would operate at a deficient LOS D during the PM peak hour. The following improvements are recommended under 2030 cumulative no project with interchange conditions (RI #38):

i. Implementation of the previously recommended improvement, a northbound collector-distributor lane, would result in acceptable weaving operations.

Improvements along this segment of U.S. 101 are included in the City of Salinas TFO (#32 and #37).

11.11 2030 Cumulative Plus Project No Interchange

2030 cumulative plus project no interchange conditions morning and evening peak hour level of service results on the study street segments are tabulated in **Exhibit 7B**.

All five study weaving segments would operate at unacceptable levels of service under 2030 cumulative plus project no interchange conditions. The recommended improvements at each deficient weaving area are discussed below:

1. Northbound U.S. 101 between Hartnell Road and Abbott Street (Seg. #26). This weaving area would operate at LOS F during the AM and PM peak hours. Per the Caltrans significance criteria, the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #8):

   i. *The previously recommended improvement, prohibition of the westbound Hartnell Road right turn movement at the U.S. 101/Hartnell Road intersection, is again recommended. This improvement would eliminate the weaving section entirely.*

   Improvements along this segment of U.S. 101 are included in the TAMC fee (#7). Payment of the TAMC fee will mitigate cumulative project impacts on this road segment.

2. Southbound U.S. 101 between Hartnell Road and Abbott Street (Seg. #27). This weaving area would operate at LOS D during the AM peak hour and LOS E during the PM peak hour. Per the Caltrans significance criteria, the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #36):

   i. *It is recommended that the southbound U.S. 101 left turn movement onto eastbound Hartnell Road be prohibited. This can best be accomplished through a complete median closure at the U.S. 101/Hartnell Road intersection. Implementation of this improvement would eliminate the weaving segment entirely.*

   Improvements along this segment of U.S. 101 are included in the TAMC fee (#7). Payment of the TAMC fee will mitigate cumulative project impacts on this road segment.

3. Northbound U.S. 101 between Airport Boulevard and Fairview Avenue (Seg. #28). This weaving area would operate at LOS E during the PM peak hour. Per the Caltrans significance criteria, the project **would not** have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #9):

   i. *Implementation of the planned reconstruction and relocation of the northbound off- and on-ramps at the Airport Boulevard interchange would result in weaving operations of LOS C.*

   Improvements along this segment of U.S. 101 are planned as part of the Caltrans Airport Boulevard reconstruction project (#0318) and are included in the City of Salinas TFO (#38). No mitigation is required of the project under 2030 cumulative plus project no interchange conditions.

4. Southbound U.S. 101 between Airport Boulevard and Sanborn Road (Seg. #29). This weaving area would operate at an unacceptable LOS E during the AM peak hour and LOS D during the PM peak hour. Per the Caltrans significance criteria, the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #37):

    i. *It is recommended that a third through lane be added along southbound U.S. 101 between the Sanborn Road and Airport Boulevard interchanges. When combined with the existing two through lanes and one auxiliary lane, this would result in a total of four travel lanes within the weaving section. Implementation of this improvement would result in acceptable weaving operations.*

    Improvements along this segment of U.S. 101 are included in the City of Salinas TFO (#38). Payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts on this road segment.

5. Northbound U.S. 101 between Fairview Avenue and Sanborn Road (Seg. #30). This weaving area would operate at a deficient LOS E during the PM peak hour. Per the Caltrans significance criteria, the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project no interchange conditions (RI #38):

    i. *It is recommended that a collector-distributor roadway be constructed between the northbound U.S. 101 ramps to and from Fairview Road and Sanborn Road. A collector-distributor road is a distinct roadway separated from the mainline freeway lanes whose sole purpose is to access the on- and off-ramps. By moving the ramps to the collector-distributor roadway, fewer vehicles would be present within the weaving area, thereby providing more weaving opportunities. Both ramps to and from Fairview Avenue and Sanborn Road are recommended to connect to this collector-distributor roadway, and Caltrans should also consider incorporating the northbound Airport Boulevard ramps as well. Implementation of this improvement would result in acceptable weaving operations.*

    Improvements along this segment of U.S. 101 are included in the City of Salinas TFO (#32 and #37). Payment of traffic impact fees per the City of Salinas TFO will mitigate cumulative project impacts on this road segment.

11.12 2030 Cumulative Plus Project With Interchange

2030 cumulative plus project with interchange conditions morning and evening peak hour level of service results on the study street segments are tabulated in **Exhibit 7B**.

All five study weaving segments would operate at unacceptable levels of service under 2030 cumulative plus project with interchange conditions. The recommended improvements at each deficient weaving area are discussed in italics below:

1. Northbound U.S. 101 between Hartnell Road and Abbott Street (Seg. #26). This weaving area would operate at LOS F during the AM and PM peak hours. Per the Caltrans significance criteria, the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #8):

   i. The previously recommended improvement, prohibition of the westbound Hartnell Road right turn movement at the U.S. 101/Hartnell Road intersection, is again recommended. This improvement would eliminate the weaving section entirely.

   Improvements along this segment of U.S. 101 are included in the TAMC fee (#7). Payment of the TAMC fee will mitigate cumulative project impacts on this road segment.

2. Southbound U.S. 101 between Hartnell Road and Abbott Street (Seg. #27). This weaving area would operate at LOS D during the PM peak hour. Per the Caltrans significance criteria, the project would have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #36):

   i. It is recommended that the southbound U.S. 101 left turn movement onto eastbound Hartnell Road be prohibited. This can best be accomplished through a complete median closure at the U.S. 101/Hartnell Road intersection. Implementation of this improvement would eliminate the weaving segment entirely.

   Improvements along this segment of U.S. 101 are included in the TAMC fee (#7). Payment of the TAMC fee will mitigate cumulative project impacts on this road segment.

3. Northbound U.S. 101 between Airport Boulevard and Fairview Avenue (Seg. #28). This weaving area would operate at LOS E during the PM peak hour. Per the Caltrans significance criteria, the project **would not** have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #9):

   i. Implementation of the planned reconstruction and relocation of the northbound off- and on-ramps at the Airport Boulevard interchange would result in weaving operations of LOS C.

   Improvements along this segment of U.S. 101 are planned as part of the Caltrans Airport Boulevard reconstruction project (#0318) and are included in the City of Salinas TFO (#38). No mitigation is required of the project under 2030 cumulative plus project with interchange conditions.

4. Southbound U.S. 101 between Sanborn Road and Airport Boulevard (Seg. #29). This weaving area would operate at an unacceptable LOS D during the AM peak hour. Per the

Caltrans significance criteria, the project **would not** have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #37):

i. *It is recommended that a third through lane be added along southbound U.S. 101 between the Sanborn Road and Airport Boulevard interchanges. When combined with the existing two through lanes and one auxiliary lane, this would result in a total of four travel lanes within the weaving section. Implementation of this improvement would result in acceptable weaving operations.*

Improvements along this segment of U.S. 101 are included in the City of Salinas TFO (#38). No mitigation is required of the project under 2030 cumulative plus project with interchange conditions.

5. Northbound U.S. 101 between Fairview Avenue and Sanborn Road (Seg. #30). This weaving area would operate at a deficient LOS D during the PM peak hour. Per the Caltrans significance criteria, the project **would not** have a significant impact on this road segment. The following improvements are recommended under 2030 cumulative plus project with interchange conditions (RI #38):

i. *It is recommended that a collector-distributor roadway be constructed between the northbound U.S. 101 ramps to and from Fairview Road and Sanborn Road. A collector-distributor road is a distinct roadway separated from the mainline freeway lanes whose sole purpose is to access the on- and off-ramps. By moving the ramps to the collector-distributor roadway, fewer vehicles would be present within the weaving area, thereby providing more weaving opportunities. Both ramps to and from Fairview Avenue and Sanborn Road are recommended to connect to this collector-distributor roadway, and Caltrans should also consider incorporating the northbound Airport Boulevard ramps as well. Implementation of this improvement would result in acceptable weaving operations.*

Improvements along this segment of U.S. 101 are included in the City of Salinas TFO (#32 and #37). No mitigation is required of the project under 2030 cumulative plus project with interchange conditions.

12 Highway-Rail Crossing Evaluation

12.1 Introduction

The California Public Utilities Commission (CPUC) is the state agency responsible for rail safety within the state of California. Since the proposed project is in the vicinity of an existing rail corridor, the CPUC has requested that this traffic study evaluate any potential project-related rail safety impacts, and measures to reduce possible adverse impacts created by the project. Of primary concern is the potential for traffic queues to extend across railroad tracks, thus increasing the possibility that a motorist could stop on the tracks and be unable to clear the tracks as a train approaches.

As previously discussed, there are a total of five highway-rail crossings within the study street network. Two are grade-separated and three are at-grade highway-rail crossings. The locations of the highway-rail crossings are shown in **Exhibit 11**.

Unlike grade-separated crossings, at-grade railroad crossings present the possibility of traffic queues extending across the railroad tracks due to circumstances such as traffic congestion or the presence of traffic control devices (e.g., stop signs, traffic signals). The following is a description of each of the at-grade highway-rail crossings in the vicinity of the project site that were evaluated in this study.

Location #1 – Harkins Road Crossing North of Abbott Street (at-grade) – The northerly Harkins Road highway-rail crossing is an at-grade crossing and is located approximately 610 feet north of the Harkins Road / Abbott Street intersection and 530 feet south of the Harkins Road / Hansen Street intersection. This crossing is controlled by flashing light signals and gates.

Location #2 – Abbott Street Crossing (at-grade) – The highway-rail crossing at Abbott Street is an at-grade crossing and is located immediately east of the Growers Street / Abbott Street intersection and approximately 1,010 feet west of the Harkins Road / Abbott Street intersection. This crossing is controlled by flashing light signals and gates.

Location #3 – Harkins Road Crossing South of Abbott Street (at-grade) – The southerly Harkins Road highway-rail crossing is an at-grade crossing and is located approximately 230 feet north of the Harkins Road / Nutting Street intersection and 930 feet south of the Harkins Road / Dayton Street intersection. This crossing is controlled by flashing light signals and gates.

12.2 Evaluation Methodologies

Vehicle queue lengths were estimated using the Synchro analysis software (Version 7), based on the *Highway Capacity Manual 2000* methodologies for signalized and un-signalized intersections. The Synchro queue reports show the 50th percentile and 95th percentile queue. As a worst-case scenario, the 95th percentile queue length was used in determining whether or not vehicles would extend across the railroad tracks for each scenario studied.

12.3 Queuing Analysis for At-Grade Highway Rail Crossings

The findings from the queuing analysis performed for the three at-grade highway-rail crossings are summarized below. **Exhibit 19** presents a summary of the queuing analysis results for each analysis scenario (i.e., existing non-harvest through 2030 cumulative plus project with interchange). Synchro queuing reports are included in **Appendix Q**.

12.3.1 Location #1 – Harkins Road Crossing North of Abbott Street

Northbound and southbound vehicles crossing the railroad tracks on Harkins Road north of Abbott Street (location #1) are uncontrolled (i.e., do not have to stop at stop signs or traffic signals). However, this crossing is located between two signalized intersections; the Harkins Road / Abbott Street intersection, which is approximately 600 feet south of the crossing, and the Harkins Road / Hansen Street intersection, which is approximately 530 feet north of the crossing.

Northbound Approach at Location #1 – Queue lengths for the northbound approach at the Harkins Road / Hansen Street intersection are tabulated in **Exhibit 19**. As shown, vehicle queues for the northbound approach at the Harkins Road / Hansen Street intersection currently extend onto the railroad tracks during existing harvest season conditions.

1. It is recommended that the traffic signal at the Harkins Road / Hansen Street intersection be connected to the railroad crossing signal in order to allow vehicles to clear the railroad tracks in advance of an approaching train.

   Connecting the traffic signal at this intersection to the railroad crossing signal is recommended based on existing traffic conditions and shall be the City's responsibility. This improvement is not included in the City of Salinas TFO. It is proposed that the City add this improvement to the TFO. Since this improvement is based on existing deficiencies, it cannot be funded directly by the TFO. Therefore, it is recommended it be funded through the City's Capital Improvement Program (CIP), or other sources as determined by the City of Salinas.

Southbound Approach at Location #1 – Queue lengths for the southbound approach at the Harkins Road / Abbott Street are tabulated in **Exhibit 19**. Vehicle queues for the southbound approach at the Harkins Road / Abbott Street intersection are anticipated to extend onto the railroad tracks under existing plus project phase I conditions.

1. It is recommended that the traffic signal at the Harkins Road / Abbott Street intersection be connected to the railroad crossing signal in order to allow vehicles to clear the railroad tracks in advance of an approaching train.

   Connecting the traffic signal at this intersection to the railroad crossing signal is recommended based on existing plus project phase 1 traffic conditions and represents a project impact. This improvement is not included in the City of Salinas TFO. It is proposed that the City add this improvement to the TFO. If the City adds this improvement to the TFO, the payment of traffic impact fees per the City of Salinas

TFO will mitigate the project's impacts. If the City does not add this improvement to the TFO, then the project will be responsible for its pro-rata fair-share of this improvement.

12.3.2 Location #2 – Abbott Street Crossing East of Growers Street

Eastbound and westbound vehicles crossing the railroad tracks on Abbott Street east of Growers Street (location #2) are uncontrolled. Currently, the closest signalized intersection is Harkins Road / Abbott Street, which is located approximately 1,000 feet east of the railroad crossing.

Eastbound Approach at Location #2 – Queue lengths for the eastbound approach at the Harkins Road / Abbott Street intersection are tabulated in **Exhibit 19**. As shown, vehicle queues in the eastbound direction are not anticipated to extend onto the railroad tracks under any of the traffic scenarios analyzed.

Westbound Approach at Location #2 – The Merrill Street / Abbott Street intersection is located approximately 425 feet west of the railroad crossing. The existing intersection control at this intersection is side-street stop control on the northbound approach. Signalizing the intersection is recommended under background No Project traffic conditions in Chapter 3 of this report. If this intersection is signalized, the westbound traffic will no longer be free flowing and may have to come to a stop at the signal. Queue lengths for the westbound approach under mitigated conditions at the Merrill Street / Abbott Street intersection are tabulated in **Exhibit 19**. As shown, vehicle queues in the westbound direction are not anticipated to extend onto the railroad tracks under any of the traffic scenarios analyzed.

12.3.3 Westbound Left-Turns at Abbott Street Crossing East of Growers Street

The intersection of Growers Street / Abbott Street is side-street stop controlled. Traffic on Abbott Street is free flowing and vehicular queues in the eastbound and westbound through movements are not anticipated at this intersection. However, it should be noted that trucks on the westbound Abbott Street approach are allowed to make left-turns into Growers Street, and these vehicles may be stopped on the railroad tracks as drivers wait for gaps from the eastbound traffic in order to execute the westbound left turn. Based on conversations with the City, the frequency of rail cars passing this location is one rail car per week. Due to the infrequent rail activity through this location, the likelihood of a vehicle being stopped on the railroad tracks as a train approaches is quite low. Nevertheless, if such an event were to occur, the gates on Abbott Street would stop both eastbound and westbound traffic prior to the railroad tracks, and vehicles waiting on the railroad tracks should be able to clear the tracks.

It is recommended that a "Keep Clear" pavement legend be installed in the eastbound direction in the intersection to allow westbound left turning vehicles to clear the tracks if necessary. As an additional precautionary measure, the City may consider installing a railroad crossing gate for the eastbound traffic, just west of the Growers Street / Abbott Street intersection. This would help ensure that eastbound vehicles would stay clear of the area between the new railroad crossing gate and the railroad tracks, which would allow the

westbound vehicles to turn left without conflict. The new railroad crossing gate would need to work in conjunction with the existing gates. Coordination with the CPUC and Union Pacific Railroad would be necessary to establish responsibility for installation and maintenance of the new equipment.

This is recommended based on existing traffic conditions and shall be the City's responsibility. This improvement is not included in the City of Salinas TFO. It is proposed that the City add this improvement to the TFO. Since this improvement is based on existing deficiencies, it cannot be funded directly by the TFO. Therefore, it is recommended it be funded through the City's Capital Improvement Program (CIP), or other sources as determined by the City of Salinas.

12.3.4 Location #3 – Harkins Road Crossing South of Abbott Street

Northbound and southbound vehicles crossing the railroad tracks on Harkins Road south of Abbott Street (location #3) are uncontrolled. In addition, the closest signalized intersection is over 3,000 feet (0.6 miles) north of the railroad crossing. While there is an intersection approximately 230 feet south of the railroad crossing (at Nutting Street), the southbound left-turn volumes at Nutting Street are extremely low (3 southbound left-turning vehicles during the AM peak hour and 10 southbound left-turning vehicles during the PM peak hour) and would not result in queues extending onto the railroad tracks. Therefore, location #3 was not included in the queuing analysis.

13 Traffic Index

13.1 Traffic Index Calculations

The Salinas Ag-Industrial Park will generate truck traffic that will increase the loading on the pavements in the study street network. This section of the report describes the methodology and results of the estimates of the pavement loading for all of the development scenarios analyzed for traffic operations as described previously in the report.

The methodology involved the computation of the 20 year Traffic Index (TI) for each of the major street segments analyzed for segment levels of service. The TI accounts for the structural load imposed on a pavement proportional to the amount of truck traffic of various numbers of axles that the roadway currently carries, or is expected to carry in the future. The methodology is based on the Highway Design Manual, "Chapter 610 - Pavement Engineering Considerations," Sixth Edition, Caltrans, 2006. The TI follows an exponential formula similar to a Richter scale. The pavement repetitive loading factor, or Equivalent Single Axle Load (ESAL), must nearly double for a 0.5 increase in the TI. It therefore does not require precise truck volumes in order to obtain a reasonable estimate of the TI. This is especially helpful when forecasting future conditions for which detailed vehicle classification data is not possible to estimate with any precision. It is also helpful when analyzing over 50 street segments for 12 development scenarios (600 calculations), 10 of which are in the future with some 20 years into the future. Therefore, simplified calculations have been employed. These have been calibrated with detailed calculations performed throughout the study street system.

A comprehensive pavement analysis would include not only the TI computation, but also an analysis of the structural capability of the underlying soil, which is known as the "R-value." The final step required for the analysis of existing pavements is the evaluation of the adequacy of the existing pavement. This includes a determination of the current pavement structural section (thickness of asphalt concrete and base rock) as well as the current pavement condition (amount of pavement distress, cracking and stability). All of the above data would be used to determine if pavement upgrading of various types are already warranted, as well as the determination of pavement reinforcement required to handle future increases in loading. These additional steps can be conducted on the specific segments of roadway identified to potentially be impacted by the project.

The Traffic Indexes for the study street system are tabulated in **Appendix R**. The table indicates the existing evening peak hour volume, percent trucks, heavy truck factor (.25 if 3, 4 and 5 axle trucks represent less than 30% of the total truck traffic, .5 if between 30% and 60%, and 1.00 if over 60%), the computed ESAL (Equivalent Single Axle Load) and corresponding TI. To be conservative, a minimum of 5% trucks is assumed throughout the street network, even if data would support using a lower percentage. The conservative 5% assumption is also used for the assignment of future background, cumulative and project traffic.

A summary table is provided as **Exhibit 20**. This only includes the segments that are expected to experience an increase of 0.5 or more in the TI above the existing values in a future scenario. The TI's are indicated in bold type for the specific scenarios that will experience this increase. This is the increment that would require additional pavement thickness if designing a new

pavement. Typically, an increase in TI of 0.5 would require about 1.5 inches of aggregate base or about ¾ inches of asphalt. Smaller increments are considered insignificant.

13.2 Existing Conditions

The Traffic Indexes on most of the major arterial streets serving the industrial area in the project vicinity currently range between 9.5 and 12.5. One freeway ramp at the Abbott Street interchange has 20 year Traffic Indexes of as much as 13. Caltrans considers a TI of 12 to carry a heavy truck load. A TI of 13 implies about two times as much truck traffic as a TI of 12. It is evident that most of the study street system carries substantial truck traffic.

13.3 Existing Plus Project Phase 1

Portions of the following streets would experience an increase from the existing TI under existing plus project phase 1 conditions. All of these increases would be due to the addition of project traffic.

1. Abbott Street
2. Airport Boulevard
3. Fairview Avenue
4. Hansen Street
5. Harkins Road
6. Harris Road
7. Sanborn Road
8. Highway 101 / Airport Boulevard Northbound On Ramp
9. Highway 101 / Airport Boulevard Southbound Off Ramp
10. Highway 101 / Sanborn Road Northbound On Ramp (Fairview Avenue)
11. Highway 101 / Sanborn Road Northbound Off Ramp (Fairview Avenue)
12. Highway 101 / Sanborn Road Southbound Off Ramp (Sanborn Road)
13. Highway 101 / Abbott Street Northbound Off Ramp
14. Highway 101 / Abbott Street Southbound On Ramp
15. Highway 68 / Spreckels Boulevard Eastbound Off Ramp

13.4 Background No Project

Background traffic growth will result in an increase from the existing TI of 10 to 10.5 on Blanco Road between Davis Road and Abbott Street, and an increase from 9.5 to 10 on Davis Road between Hitchcock Road and Blanco Road. An increase from the existing TI of 7 to 7.5 on Foster Road between Davis Road and Highway 68 and an increase from 10.5 to 11 on the southbound offramp at the Airport Boulevard interchange would also result from background traffic growth.

13.5 Background Plus Project Phase 1

Portions of the following streets would experience an increase from the existing TI under background plus project phase 1 conditions. Street names followed by an asterisk indicate streets that will experience increases in TI due to the addition of project traffic.

1. Abbott Street*
2. Airport Boulevard*
3. Blanco Road
4. Davis Road
5. Fairview Avenue*
6. Foster Road
7. Hansen Street*
8. Harkins Road*
9. Harris Road*
10. Sanborn Road*
11. Spreckels Boulevard*
12. Highway 101 / Airport Boulevard Northbound On Ramp*
13. Highway 101 / Airport Boulevard Southbound Off Ramp*
14. Highway 101 / Sanborn Road Northbound On Ramp (Fairview Avenue)*
15. Highway 101 / Sanborn Road Northbound Off Ramp (Fairview Avenue)*
16. Highway 101 / Sanborn Road Southbound Off Ramp (Sanborn Road)*
17. Highway 101 / Abbott Street Northbound Off Ramp*
18. Highway 101 / Abbott Street Southbound On Ramp*
19. Highway 68 / Spreckels Boulevard Eastbound Off Ramp*

13.6 Background Plus Project Buildout

Portions of the following streets would experience an increase from the existing TI under background plus project buildout conditions. Street names followed by an asterisk indicate streets that will experience increases in TI due to the addition of project traffic.

1. Abbott Street*
2. Airport Boulevard*
3. Blanco Road
4. Davis Road
5. Fairview Avenue*
6. Foster Road
7. Hansen Street*
8. Harkins Road*
9. Harris Road*
10. Sanborn Road*
11. Spreckels Boulevard*
12. Highway 101 / Airport Boulevard Northbound On Ramp*
13. Highway 101 / Airport Boulevard Southbound Off Ramp*
14. Highway 101 / Sanborn Road Northbound On Ramp (Fairview Avenue)*
15. Highway 101 / Sanborn Road Northbound Off Ramp (Fairview Avenue)*
16. Highway 101 / Sanborn Road Southbound Off Ramp (Sanborn Road)*
17. Highway 101 / Abbott Street Northbound Off Ramp*
18. Highway 101 / Abbott Street Southbound On Ramp*
19. Highway 68 / Spreckels Boulevard Eastbound On Ramp*
20. Highway 68 / Spreckels Boulevard Eastbound Off Ramp*

13.7 2030 Cumulative No Project No Interchange

Portions of the following streets would experience an increase from the existing TI under 2030 cumulative no project no interchange traffic conditions.

1. Abbott Road
2. Blanco Road
3. Davis Road
4. Fairview Avenue
5. Foster Road
6. Harris Road
7. Hunter Lane
8. Sanborn Road
9. Spreckels Boulevard
10. Highway 68
11. Highway 101/Airport Boulevard Southbound Off Ramp
12. Highway 101 / Sanborn Road Northbound On Ramp (Fairview Avenue)
13. Highway 68/Spreckels Boulevard Eastbound Off Ramp

13.8 2030 Cumulative No Project With Interchange

Portions of the following streets would experience an increase from the existing TI under 2030 cumulative no project with interchange traffic conditions.

1. Abbott Street
2. Blanco Road
3. Davis Road
4. Foster Road
5. Harris Road
6. Hunter Lane
7. Spreckels Boulevard
8. Highway 68/Spreckels Boulevard Eastbound Off Ramp
9. Highway 68/Spreckels Boulevard Westbound On Ramp

The Harris Road interchange will divert traffic from the Highway 101/Airport Boulevard interchange as well as Highway 101/Sanborn Road and all access roads to these interchanges through Salinas, including Highway 183. This will reduce pavement loading on these streets and highways. However, Spreckels Boulevard and Harris Road as well as Abbott Street north of Harris Road will experience corresponding increases in truck traffic because these will be the access roads to the new interchange. Traffic Indexes are provided for the freeway ramps at the future Highway 101/Harris Road Extension interchange.

13.9 2030 Cumulative Plus Project No Interchange

Portions of the following streets would experience an increase from the existing TI under 2030 cumulative plus project no interchange traffic conditions. Street names followed by an asterisk indicate streets that will experience increases in TI due to the addition of project traffic.

1. Abbott Street*
2. Airport Boulevard*
3. Blanco Road
4. Davis Road
5. Fairview Avenue
6. Foster Road
7. Hansen Street*
8. Harkins Road*
9. Harris Road*
10. Hunter Lane
11. Sanborn Road*
12. Spreckels Boulevard
13. Highway 68
14. Highway 101/Airport Boulevard Northbound On Ramp*
15. Highway 101/Airport Boulevard Southbound Off Ramp*
16. Highway 101/Sanborn Road Northbound On Ramp (Fairview Avenue)*
17. Highway 101/Sanborn Road Northbound Off Ramp (Fairview Avenue)*
18. Highway 101/Sanborn Road Southbound Off Ramp (Sanborn Road)*
19. Highway 101/Abbott Street Northbound Off Ramp*
20. Highway 101/Abbott Street Southbound On Ramp*
21. Highway 68/Spreckels Boulevard Eastbound On Ramp*
22. Highway 68/Spreckels Boulevard Eastbound Off Ramp*
23. Highway 68/Spreckels Boulevard Westbound On Ramp*

13.10 2030 Cumulative Plus Project With Interchange

Portions of the following streets would experience an increase from the existing TI under 2030 cumulative plus project with interchange traffic conditions. Street names followed by an asterisk indicate streets that will experience increases in TI due to the addition of project traffic.

1. Abbott Street*
2. Airport Boulevard*
3. Blanco Road*
4. Davis Road
5. Fairview Avenue*
6. Foster Road
7. Hansen Street*
8. Harris Road*
9. Hunter Lane
10. Sanborn Road*
11. Spreckels Boulevard
12. Highway 101/Airport Boulevard Northbound On Ramp*
13. Highway 101/Airport Boulevard Southbound Off Ramp*
14. Highway 101/Sanborn Road Northbound On Ramp (Fairview Road)*
15. Highway 101/Sanborn Road Southbound Off Ramp (Sanborn Road)*
16. Highway 101/Abbott Street Northbound Off Ramp*
17. Highway 68/Spreckels Boulevard Eastbound On Ramp*

18. Highway 68/Spreckels Boulevard Eastbound Off Ramp*
19. Highway 68/Spreckels Boulevard Westbound On Ramp*

Traffic Indexes are provided for the freeway ramps at the future Highway 101/Harris Road Extension interchange.

Water Supply Assessment for Salinas Ag-Industrial Center Salinas, California

Final

March 2, 2009

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on behalf of
California Water Service Company
Salinas, California

For:
City of Salinas, California

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Attachments

Figure 1-A from the March 14, 2008 Engineering Report for Development of the Project prepared by RJA shows Ag-Industrial Center location

Exhibit 1, from the March 14, 2008, Draft Project Description and Operational/Environmental Statement prepared by RJA shows the Specific Plan area.

1. Introduction

The City of Salinas (City) has initiated planning for a project designated as the Salinas Ag-Industrial Center. An environmental impact report (EIR) will be prepared for this project. Since the proposed scale of development exceeds the criteria set forth in California state law pertaining to the requirement for preparation of a Water Supply Assessment (WSA) report (SB 610, CA Water Code Section 10910, et. al.), the City requested in a letter dated March 25, 2008, that California Water Service Company (Cal Water) as the water service provider for the proposed project prepare a WSA.

The location of the Ag-Industrial Center, which encompasses an area of 257 acres, is located in an unincorporated area on the south side of the City. The area is bounded on the east by Abbott Street and the south by Harris Road. Figure 1-A from the March 14, 2008 Engineering Report for Development of the Project prepared by RJA shows the location. Development of the property will require amendment of the City's adopted Sphere of Influence and annexation to the City and will be subject to a specific plan that defines allowable agricultural-industrial uses. Exhibit 1, taken from the March 14, 2008, Draft Project Description and Operational/Environmental Statement prepared by RJA shows the Specific Plan area.

Cal Water's Salinas District encompasses most of the Salinas urban area. Salinas is primarily a residential community supported by an agricultural economy. Cal Water's Salinas District serves the City of Salinas and the unincorporated communities of Las Lomas, Oak Hills, Country Meadows, Salinas Hills and Indian Springs. A single distribution system provides service to the City of Salinas, which includes the Bolsa Knolls division. Small hydraulically isolated distribution systems provide service to the other communities.

SB 610 requires an assessment of whether the proposed water supply for the Ag-Industrial Center and for Cal Water's Salinas District will meet the combined water demands during normal, single dry and multiple dry water years for the next 20 years.

Following is a summary description of the proposed development, its projected water demand, the projected water demands for Cal Water's Salinas District, the combined water demands and a description and assessment of the proposed water supply as to its adequacy to meet those demands in accordance with the requirements of CWC 10912 to10915, and implementation requirements on the part of the City of Salinas, Cal Water and other parties.

2. Project Description

The Specific Plan for the Ag-Industrial Center in Table 3-1 lists permitted, non-permitted and conditionally permitted uses within the plan area. Included are "Agricultural Industrial Uses" defined as:

Major Agricultural Processing.

This use provides for a broad range of activities associated with agricultural product preservation, processing and distribution. Businesses in these categories can take raw food from the field and process them into consumable products for distribution. Produce, food products and wineries are major agricultural processes. Typical processes include refinement, treatment, conversion, cooling, dehydration, fermenting, sorting, cleaning, packaging, canning, freezing, bottling, storing, and distributing. Ancillary facilities include office space for employees, shop buildings, supply buildings, warehouses, fabrication facilities and cooling.

Industries that could be located in the project area include but are not limited to:

- Vegetable packing plants
- Industrial rendering
- Canneries
- Meat packing
- Shipping

Large-scale equipment associated with industries includes: tumblers, conveyors, coolers, sorters, vacuum packers, weighing systems and sealers.

Minor Agricultural Processing.
Other agricultural related industries that provide services related to the development and production of food products. This includes assembly and integration activities, and providing supplies, tools, equipment, vehicles. It could include businesses in energy, pharmaceuticals, and other industrial goods serve or support the agricultural industry. Also, included are agriculturally related research, development, testing, management, sales, education, training, rentals, equipment repairs, laboratory analyses, etc.
Subcategories of Minor Agricultural Processing include:

1. Agricultural Manufacturing. This use includes businesses that design, manufacture, fabricate, assemble, maintain and repair tools, equipment, and vehicles required for growing, cultivating, harvesting, processing, packaging, and transporting agricultural commodities and products. This also includes cooling and packing of products. Examples include farm machinery assembly or box manufacturing. Typical businesses will have office space, a shop building, supply buildings and/or a supply yard and fabrication buildings that constitute most of the building area.
2. Agricultural Support. This use covers a wide range of businesses that provide support services and products to the agricultural industry including research, design, development and testing, management and sales. Examples of businesses in this category are: equipment rental and sales, vehicle maintenance and repair, laboratories, education and training, and research and development.
3. Abbott Street Frontage Zone. This 16-acre area, which is within City limits, will allow for uses defined as General Industrial as defined in the Municipal Code including businesses that may or may not be related to agricultural activities. Both previous land use activities will be allowed in this area. The plan intends to regard these uses as mainly commercial/office/retail.

The Project Description acknowledges that parcels for public facilities such as water wells may be needed on site. Such uses are allowable anywhere within the site.

Table 1 presents the target acreages for these proposed uses.

Table 1
Salinas Ag Industrial Center Land Use Plan

Use	Probable Acreage
Major Ag Processing	90
Minor Ag Processing	130
Abbott Street Frontage	15
Subtotal:	235
Public Street Right of Way	22
Total	257

The site is currently in partial agricultural production. Lettuce, cauliflower and broccoli have been grown on this site. Two farm buildings are located on the site near the intersection of Abbott Street and Harris Road. The entire site is intended to be cleared for new development. Homes, fuel tanks and wells (agricultural irrigation) will be removed or destroyed.

In the Draft Operational/Environmental Statement (March 14, 2008), it is indicated that some businesses located within the project site could operate on a seasonal basis while others would operate year round. Seasonally based, crop dependent processing and manufacturing activities would operate intensively from April – November, seven days a week and 24 hours per day. Year round operations would work on five or six day workweek for 8 to 12 hours per day. It is noted for a processing facility on a 50-acre site, as many as 1,000 employees could be working over the course of a 3-shift workday.

Cooling facilities are much less labor intensive. A 75-acre facility could have three coolers processing 150,000 – 200,000 cartons per day. Staffing generally consists of 5-10 supervisors/managers and 40-50 production employees per shift with overlapping shifts. Thus, total employees on-site during peak production might be 60 for a facility of this size.

Agricultural support businesses are the least employee intensive with a typical warehouse operation employing about 29 people.

Estimated building square footage in the Draft Ag-Industrial Center Specific Plan (November 2008) ranges from a maximum of 6,443,000 square feet to a "probable" scenario of 4,334,220 square feet (using average floor area ratios).

Based on information provided by the project applicant (RJA, J Duran, January 16, 2009 e-mail), three development scenarios are being considered. Scenario 1, which has the

highest water use and is shown in Table 2(a), is the development plan that is assessed in this WSA.

Table 2(a)
Salinas Ag-Industrial Center
Scenario 1: Estimated Building Space Area

Use	Square Footage
Major Ag Processing	1,319,868
Minor Ag Processing*	2,918,520
Total	4,238,388

* Includes Abbott St Frontage

Scenario 2, referred as the probable plan in Table 3-3 from the Draft Ag-Industrial Center Specific Plan is shown here as Table 2(b) will use less water because of reduced building space for major agricultural processing activities, which has an approximately 28 times greater water use rate per square foot of building space than the rate for minor agricultural processing activities. The difference between Scenario 1 water use and Scenario 2 based on data developed in the following sections is:
143,748 sq ft x 1.9758 gallons/day/sq ft – 239,580 sq ft x 0.07 gallons/day/sq ft = 284,020 - 16,770 = 267,250 gallon/day.

Table 2(b)
Salinas Ag-Industrial Center
Scenario 2: Estimated Building Space Area

Use	Square Footage
Major Ag Processing	1,176,120
Minor Ag Processing*	3,158,100
Total	4,334,220

* Includes Abbott St Frontage

Scenario 3, which has no Major Agricultural Processing businesses, would have the lowest water usage and is not assessed. Its estimated average annual use is: 0.07 gal/day/sq ft x 5,118,300 sq ft = 358,280 gal/day. Scenario 3 is shown here as Table 2(c).

Table 2(c)
Salinas Ag-Industrial Center
Scenario 3: Estimated Building Space Area

Use	Square Footage
Major Ag Processing	0
Minor Ag Processing*	5,118,300
Total	5,118,300

* Includes Abbott St Frontage

3. Water Demand Forecast

Salinas Ag-Industrial Center Demand Estimate.

Method for Estimating Project Demands.
Cal Water retrieved water consumption data for 5 years (2003 – 2007) for a variety of agricultural-industrial and commercial businesses in proximity to the proposed Ag-Industrial Center and the 5-year average daily water use was calculated. In addition, average daily water use during the maximum month in the 60-month period from January 2003 to 2007 was identified and the maximum month daily use to 5-year average daily use ratio was computed. The type of business activity was identified by Cal Water staff.

Major Agricultural Processing.

Estimates of water demand for agricultural processing are based on two sources of water consumption data from nearby existing produce processing plants in Salinas served by Cal Water.

Cal Water serves a plant that processes packaged salads, occupies 321,000 square feet of space and operates on a 24-hour schedule. Table 3 summarizes 2003 to 2007 water consumption data for this facility.

Table 3: Salinas Produce Processing Plant: Water Consumption Data

				100 cubic feet									
Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual Ave
2007	29,697	28,310	28,446	29,999	30,325	27,173	37,140	34,152	38,135	34,754	29,310	34,930	31,681
2006	40,489	23,678	30,920	34,448	31,355	35,890	35,911	31,984	39,533	35,750	22,056	32,836	32,904
2005	28,706	24,937	27,973	29,558	33,331	35,219	33,983	32,557	33,745	33,262	31,472	30,898	31,303
2004	41,646	32,419	36,997	40,889	39,394	45,891	39,694	45,000	39,156	38,246	37,647	13,342	37,526
2003	29,190	30,634	29,664	33,846	34,627	42,601	41,936	44,179	40,763	40,040	43,928	34,417	37,171
5 Year Ave	33,986	27,996	30,800	33,748	33,844	37,355	37,733	37,574	38,270	36,410	32,883	29,285	34,157
				Gallons/Day									
5 Year Ave	820,040	747,882	743,174	841,450	816,633	931,360	910,466	906,634	954,209	878,546	819,573	706,609	839,741
Max Month						1,144,216							
Max Mo/5 Yr													1.36

Average annual water use consumption for the period of record shown is 839,741 gallons/day.
Average water use per day for the maximum month is 1,144,216 gallons/day or 1.36 times the average annual day use.

The average annual water use factor for the plant is: 839,741 gallons/day/321,000 square feet = 2.616 gallons/day/square foot.

The maximum month average day use factor for the plant is: 2.616 x 1.36 = 3.56 gallons/day/square foot.

Water consumption data for 22 other businesses representative of those proposed for the Ag-Industrial Center were compiled and are shown in Table 4.

Through use of GoogleEarth, each business was located on an aerial map and the GoogleEarth measurement tool used to estimate outside building dimensions, which were then used to calculate the square footage of the buildings at each address.

The estimated building square footage was divided by the 5-year average daily water use to derive an estimate of the average water use in gallons/day/ft^2.

Table 4: Cal Water Salinas Water Use Data: Ag-Industrial & Commercial

			Average Consumption: Gallons/day								
Activity	Address	Est Sq Ft	2007	2006	2005	2004	2003	5-Year Ave	Max Month	MM/5 Yr Ave	G/day/ft2
Parts Distributor	1334 Dayton St	7,430	865	734	766	1,166	1,379	982	2,461	2.51	0.1322
Sales?	1315 Dayton St	5,940	1,035	418	318	252	193	443	2,123	4.79	0.0746
Sales?	1311 Dayton St	15,270	908	674	652	730	949	782	3,089	3.95	0.0512
Supplier -Tanks	1310 Dayton St	13,630	691	687	762	678	660	696	1,047	1.51	0.0510
Processing?	1129 Harkins Rd	25,680	24,182	31,928	15,915	20,743	18,567	22,267	46,810	2.10	0.8671
Seed Company	1155 Harkins Rd	15,400	373	1,123	508	422	359	557	3,909	7.02	0.0362
Sales?	1107 Harkins Rd	7,200	473	594	461	467	564	512	1,297	2.53	0.0711
Sales?	1111 Harkins Rd	5,310	488	461	342	422	1,027	648	2,413	4.40	0.1032
Office?	1355 Abbott St	5,760	295	414	490	264	236	340	1,279	3.76	0.0590
Warehouse?	1800 Abbott St	1,794,000	5,615	8,431	8,347	7,892	7,554	7,568	20,341	2.69	0.0042
Seed Company	7 Harris Place	14,260	350	271	225	291	307	289	723	2.50	0.0203
Processing/Cooler?	20 Harris Place	8,510	4,367	14,798	23,600	32,736	26,504	20,801	63,677	3.06	2.4443
Sales/Repair	10 Harris Place	11,660	1,293	898	3,260	2,810	1,668	1,986	6,804	3.43	0.1674
Large Box Mfg	1345 Harkins Rd	529,000	8,494	12,304	11,368	14,401	11,691	11,652	23,063	1.98	0.0220
Box Mfg	1293 Harkins Rd	18,000	1,482	1,492	1,750	1,611	1,125	1,492	3,016	2.02	0.0829
Cooler/Packing?	1370 Dayton St	56,450	3,533	3,017	3,562	4,797	23,368	7,655	41,574	5.43	0.1356
Warehouse	1359 Dayton St	33,660	461	338	227	164	162	271	748	2.77	0.0080
Packing/Storage?	1311 Schilling Pl	382,000	9,382	21,159	25,071	26,895	28,342	22,170	38,462	1.73	0.0580
Office Ag Parts	1306 Burton Ave	7,120	39	35	117	109		60	241	4.03	0.0084
Truck Center	1095 Harkins Rd	7,950	1,572	1,305	1,379	1,312	752	1,264	3,668	2.90	0.1590
Ag Equipment	1090 Harkins Rd	9,510	875	535	670	752	986	764	2,509	3.29	0.0803
Ag Support	1428 Abbott St	17,230	912	834	701	2,187	2,160	1,359	3,716	2.73	0.0789

For the major agricultural processing category, the following water consumption values are summarized:
Processing: 0.8671 gallons/day/ft^2
Processing/Cooler: 2.4443 gallons/day/ft^2
Processing plant (using data following Table 3): 2.616 gallons/day/ft^2
Average for mix of processing plants: 1.9758 gallons/day/ft^2

The estimated area for major agricultural processing buildings is 1,319,868 square feet.
If the water consumption factor developed using the above computed average value is representative of what will be developed in the Ag-Industrial Center, then the estimated water demand for that use is as follows:

Average annual daily use: 1,319,868 square feet x 1.9758 gallons/day/square foot = 2,607,800 gallons/day or 2.61 mgd

The estimated average ratio of peak month to average daily use is:
(1.36 + 2.10 + 3.06)/3 = 2.17

Therefore, estimated maximum month daily use: 1,319,868 square feet x 1.9758 x 2.17 gallons/day/square foot = 5,659,000 gallons/day or 5.66 mgd.

Water demand in processing plants is usually is highest in the morning, drops to a lower steady rate during the day, drops further during the work shift change in the afternoon (3 - 4 PM) and returns to a higher steady level until morning when it again increases. While time of water use over a production day is not a requirement to be addressed in a WSA, it is important to Cal Water because of effects on flow rates and pressures in the distribution system. Therefore, Cal Water plans to work with the companies that will be developing processing plants to assess the magnitude and changes in flow rates over a 24-hour period to determine water system capacity requirements to insure adequate flows and pressures in the connected distribution system at all times.

Minor Agricultural Processing.

Minor agricultural processing was initially divided into three subcategories and water consumption data for each of three subcategories from nearby businesses in Salinas were used to develop representative water use rates for this overall category.

For the agricultural manufacturing subcategory, the following water consumption values are summarized:
Large Box Manufacturer: 0.0220 gallons/day/ft^2
Box Manufacturer: 0.0829 gallons/day/ft^2
Cooler/Packing: 0.1356 gallons/day/ft^2

Average for the three plants: 0.0802 gallons/day/ft^2

The estimated average ratio of peak month to average daily use is:
(1.98+2.02)/2 = 2.00

The value of 5.43 for the cooling/packer appears to be a high outlying value and was not used.

For the agricultural support subcategory, the following water consumption values are summarized:

Parts Distributor: 0.1322 gallons/day/ft^2
Supplier - Tanks: 0.0510 gallons/day/ft^2
Seed Company: 0.0362 gallons/day/ft^2
Warehouse: 0.0042 gallons/day/ft^2
Seed Company: 0.0203 gallons/day/ft^2
Warehouse: 0.0080 gallons/day/ft^2
Office Ag Parts: 0.0084 gallons/day/ft^2
Truck Center: 0.1590 gallons/day/ft^2
Ag Equipment: 0.0803 gallons/day/ft^2
Ag Support: 0.0789 gallons/day/ft^2

Average for the mix of agricultural support businesses: 0.0578 gallons/day/ft^2

The estimated average ratio of peak month to average daily use is:
(2.51+1.51+2.69+2.50+2.77+4.03+2.90+3.29+2.73)/9 = 24.93/9 = 2.77

The value of 7.02 for the first seed company appears to be a high outlying value and was not used.

For the Abbott Street frontage subcategory, which most likely will consist of commercial retail and office space, the following water consumption values are summarized:

Sales: 0.0746 gallons/day/ft^2
Sales: 0.0512 gallons/day/ft^2
Sales: 0.0711 gallons/day/ft^2
Sales: 0.1032 gallons/day/ft^2
Office: 0.0590 gallons/day/ft^2

Average for the selected mix of agricultural support businesses: 0.0718 gallons/day/ft^2

The estimated average ratio of peak month to average daily use is:
(4.79+3.95+2.53+4.40+3.76)/5 = 19.43/5 = 3.89

The overall estimated average annual daily water usage rate for minor agricultural processing is:
(0.0802 gallons/day/ft^2 + 0.0578 gallons/day/ft^2 + 0.0718 gallons/day/ft^2)/3 = 0.07 gallons/day/ft^2

Estimated average annual daily water usage for Minor Agricultural Processing is: 0.07 gallons/day/ft^2 x 2,918,520 ft^2 = 204,300 gallons/day

The overall average ratio of peak month daily use to average daily use for Minor Agricultural Processing is: (2.00 + 2.77 +3.89)/3 = 2.89

Therefore, the overall estimated peak month daily water use rate is: 2.80 x 0.07 gallons/day/ft^2 = 0.2023 gallons/day/ft^2

Estimated peak month daily water usage for Minor Agricultural Processing is: 0.2023 gallons/day/ft^2 x 2,918,520 ft^2 = 590,420 gallons/day

Total estimated water demands for the Ag-Industrial Center at build out are summarized in Table 5.

Table 5: Salinas Ag-Industrial Center: Estimated Build out Water Demands		
Use	Annual Ave Day	Max Month Daily
	Gallons/day	Gallons/day
Major Ag Processing	2,607,800	5,659,000
Minor Ag Processing	204,300	590,420
Total	2,812,100	6,249,420

California Water Code 10631, Paragraph (e) (2), requires a water use projection (average annual demand forecast) in five-year increments for the 20-year forecasted period. City representatives estimate that preparation and approval of the Ag-Industrial Center Specific Plan, certification of the EIR, and completion of the annexation process will likely occur in the first half of 2009. If City approval of initial tenant applications for site plan approval and building permits for projects within the plan area occurs in the second half of 2009, then construction of plan area infrastructure will start in summer 2009. If it takes 20 months for infrastructure and facilities to be built and business uses to start, then Ag-Industrial Center water demands will start in 2011. It is assumed that it will take 9 years for the Ag-Industrial Center to be completely built out or full use will be by 2020. Table 6 presents the Ag-Industrial Center estimated 20-year schedule for average annual daily and maximum month daily water demand.

Table 6: Ag-Industrial Center

Year	Average Annual Daily Water Demand
2008	none
2013	624,910 gallons/day or 700 acre-ft/yr
2018	2,500,000 gallons/day or 2,802 acre-ft/yr
2023	2,812,100 gallons/day or 3,152 acre-ft/yr
2028	2,812,100 gallons/day or 3,152 acre-ft/yr

Ag-Industrial Center

Year	Maximum Month Daily Water Demand
2008	none
2013	1,388,760 gallons/day
2018	5,555,000 gallons/day
2023	6,249,420 gallons/day
2028	6,249,420 gallons/day

Salinas District Water Demand Forecast.

Cal Water's projected total water demand forecasts in its draft Urban Water Management Plan (UWMP) June 2007 for the Salinas District are based on multiplying the forecast of projected services for each customer class (residential, commercial, industrial, institutional/government, other) by the anticipated demand per service for that class. Forecasts of growth in services are based on the five-year (2001 to 2005) or ten-year (1996-2005) average of growth in services by customer class. Three different demand

scenarios per service per customer class (low, average and high) were developed based on data from 1996 - 2005. Low demand is calculated using the lowest recorded demand per service for each customer class during this period. Average or medium demand is calculated as the mean value for this period. High demand is based on the highest recorded demand per service for each customer class. Maximum day demand forecasts are calculated for each of these three demand scenarios by multiplying 1.6 times the low, average or high day.

City of Salinas water demand was 94.6% of total Salinas District demand in 2005. That percentage is applied to the 20 year Salinas District demand forecast to derive a demand forecast for the City of Salinas.

Projected service connections based on past service counts growth rates are calculated in the UWMP for a 5-year average and a 10-year average. The 5-year average, which is calculated using data from 2002 to 2006, is 0.65% per year. The 10-year average, which is calculated using data from 1997 to 2006, is 1.68% per year. Analysis shows that the 10-year growth rate correlates more closely with the longer-term historic growth trend in Salinas.

Use of the 10-year growth rate results in an increase of 12,609 total services for the 25 years between 2006 and 2030. Approximately, 96.5% of the new services are projected to be residential. That is an increase of 12,082 residential service connections or dwelling units for the Salinas District as a whole. For the City of Salinas service area, which is 94.6% of the demand of Salinas District that would result in an estimated increase in residential service connections of 11,426. Prorating this projection to the year 2028 results in an estimated increase in residential service connections of 10,512.

Cal Water may be the water service provider for three major development areas: West Area Specific Plan, Central Area Specific Plan and the East Area Specific plan. Currently, Cal Water is designated as the service provider for only the West Area and ½ of the Central. However, Cal Water at the request of the City of Salinas prepared a Water Supply Assessment of the other ½ of the Central Area and all of the East Area. Whether Cal Water will be ultimately responsible for serving all three areas has yet to be determined.

For consistency and completeness, this WSA assumes that Cal Water will serve all three Specific Plan areas.

For the West, Central and East (WCE) Growth Specific Plan areas, the estimated build out water demand based on information in the WCE WSA is: 5,929,600 gallons/day or 6,648 acre-ft/yr.

The estimated Maximum Day Flow is equal to 1.6 times the average annual daily demand. It is based on historical data from Cal Water's Salinas service area (Cal Water's June 2007 Urban Water Management Plan) and was calculated as the average ratio of maximum day demand in a given year to the annual average daily demand.

Total Estimated Maximum Day Water Demand for the West, Central and East Specific Plans: 1.6 x 5,929,600 gallons/day = 9,487,400 gallons/day or 6,588 gpm.

Assuming development occurs linearly, the water demand forecast for the West, Central and East Area Specific Plans in five-year increments is as follows:

Year	West, Central and East Area Specific Plans Average Annual Daily Water Demand
2008	none
2013	1,185,920 gallons/day or 1,330 acre-ft/yr
2018	3,162,450 gallons/day or 3,545 acre-ft/yr
2023	5,139,000 gallons/day or 5,760 acre-ft/yr
2028	5,929,600 gallons/day or 6,648 acre-ft/yr

Year	West, Central and East Area Specific Plans Maximum Day Water Demand
2008	none
2013	1,897,000 gallons/day
2018	5,060,000 gallons/day
2023	8,222,400 gallons/day
2028	9,487,400 gallons/day

The number of residential dwelling units for each Specific Plan at build out is summarized as follows:

Estimated Dwelling Units: West Area SP and ½ Central Area SP	
Specific Plan	Dwelling Units
West Area Specific Plan	4,243
½ Central Area Specific Plan	1,657
Total	5,900

Estimated Dwelling Units: ½ Central Area SP and East SP Area	
Specific Plan	Dwelling Units
East Area Specific Plan	3,958
½ Central Area Specific Plan	1,657
Total	5,615

Total estimated residential dwelling units for all three specific plan areas at build out are: 11,515.

Total estimated residential dwelling units for Cal Water's currently designated service area (West and ½ of Central Area Specific Plans) at build out is: 5,900.

If the latter figure is used, the balance of estimated new residential service connections in the.City of Salinas Cal Water service area for other developments after subtracting 5,900 are: 4,612 dwelling units
The City of Salinas has eight Focused Growth areas located in Cal Water's service area as follows:

1. West Laurel at Main Street
2. North Main at Soledad Street
3. Central City
4. South Main Street
5. Abbott Street
6. East Alisal Street
7. East Market Street
8. North Davis Road at West Laurel Drive

The estimated number of dwelling units at build out for these Focused Growth areas based on information contained with Cal Water's Water Supply and Facilities Master Plan (WSFMP) prepared by Luhdorff and Scalmanini (L&S) in June 2004 is 1,706.

L&S also calculated water demand for the City's growth areas on the western area of the City (bordered by Boronda Road, Union Pacific Railroad and Davis Road) for industrial, commercial and open space and public area using the City's land use plans and Cal Water's historic water consumption data by user class and estimated a total demand of 770 acre-ft/yr. Using L&S consumption estimates (0.3922 acre-ft/yr/dwelling unit), this equals about 1,963 dwelling units at build out.

L&S also calculated water demand for the City's growth areas on the southeastern area of the City (bordered by Highway 101, Harris Road and the Salinas Municipal airport) for industrial purposes using the City's land use plans and Cal Water's historic water consumption data for industrial use and estimated a total demand of 631 acre-ft/yr. Again using L&S consumption estimates (0.3922 acre-ft/yr/dwelling unit), this equals about 1,609 dwelling units at build out.

If it is assumed that build out of the above areas occurs by 2035, then the estimated number of equivalent units that will be built by 2028 (20 years from now) is:
2/3 x (1,706 + 1,963 + 1,609) = 3,519.

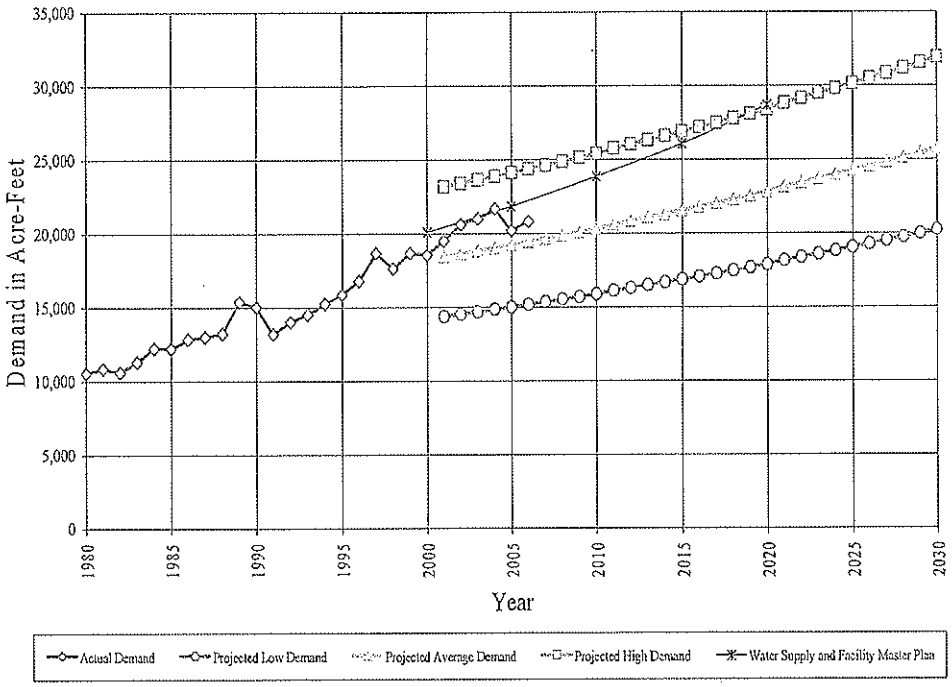
So deducting these equivalent numbers from the above balance yields: 4,612 – 3, 519 = 1,093 residential service connections or new dwelling units for other areas within the City of Salinas Cal Water service area. Note this excludes the other ½ of the Central Area Specific Plan and all of the East Area Specific Plan, which currently are in the Alco Water Company service area.

So clearly, if Cal Water provides service to the other half of the Central Area Specific Plan and all of the East Area Specific plan as well as those previously described within its existing service area, the new demands for these areas must be added to the forecasted

demand developed for the entirety of the City of Salinas Cal Water service area and in turn the demands associated with the Salinas Ag-Industrial Center.

Cal Water developed three future water demand scenarios for the Salinas District based on the 10-year service connection growth rate and three different levels of demand per service type. Figure 1 is a graph of actual and projected water demand for all three scenarios including the unaccounted-for-system losses. The starting point for each demand projection is actual annual number of services in 2001. Figure 1 includes the projected water demand developed by Luhdorff and Scalmanini in the Salinas District Water Supply and Facilities Master Plan. The WSFMP demand projection is higher than the average or medium projection but is virtually the same as Cal Water's high demand projection as developed in its 2007 UWMP.

Figure 1: Salinas District Historical & Projected Demand (including system losses)



Since the Water Supply and Facilities Master Plan includes an assessment of future water demand based on a detailed review of the City of Salinas General Plan and Monterey County's Rancho San Juan Specific Plan (now Butterfly Village II), Cal Water's high demand forecast is used in this WSA. (Note that Cal Water's high demand forecast used the five-year average growth rate in service connections and the highest demand per water use sector.)

Projected high Salinas District demands in 5-year increments, starting in 2010, are shown in Table 7.

Table 7: Salinas District Actual and High Projected Water Demand											
		Water Use Sectors	Single family	Multifamily	Commercial	Industrial	Institutional/Gov.	Landscape/ Agriculture	Recycled	Other	Total
2000	Metered	# Of accounts	22,558	324	2,253	36	192	-	-	41	25,404
		Deliveries AFY	8,976	1,687	4,690	1,012	787	-	-	120	17,272
	Unmetered	# Of accounts	207	-	-	-	-	-	-	-	207
		Deliveries AFY	95	-	-	-	-	-	-	-	95
2005	Metered	# Of accounts	23,984	324	2,639	33	196	-	-	31	27,207
		Deliveries AFY	9,396	1,456	4,914	1,322	719	-	-	48	17,855
	Unmetered	# Of accounts	-	-	-	-	-	-	-	-	-
		Deliveries AFY	-	-	-	-	-	-	-	-	-
2010	Metered	# Of accounts	26,888	323	2,661	33	192	-	-	39	30,136
		Deliveries AFY	11,800	1,715	5,539	1,709	1,104	-	-	133	22,000
	Unmetered	# Of accounts	-	-	-	-	-	-	-	-	-
		Deliveries AFY	-	-	-	-	-	-	-	-	-
2015	Metered	# Of accounts	29,175	323	2,792	31	192	-	-	43	32,556
		Deliveries AFY	12,804	1,712	5,813	1,642	1,102	-	-	146	23,218
	Unmetered	# Of accounts	-	-	-	-	-	-	-	-	-
		Deliveries AFY	-	-	-	-	-	-	-	-	-
2020	Metered	# Of accounts	31,657	322	2,879	30	191	-	-	47	35,126
		Deliveries AFY	13,893	1,709	5,993	1,577	1,099	-	-	160	24,432
	Unmetered	# Of accounts	-	-	-	-	-	-	-	-	-
		Deliveries AFY	-	-	-	-	-	-	-	-	-
2025	Metered	# Of accounts	34,349	322	3,022	29	191	-	-	51	37,963
		Deliveries AFY	15,075	1,707	6,290	1,515	1,097	-	-	175	25,858
	Unmetered	# Of accounts	-	-	-	-	-	-	-	-	-
		Deliveries AFY	-	-	-	-	-	-	-	-	-
2030	Metered	# Of accounts	37,271	321	3,116	28	190	-	-	56	40,982
		Deliveries AFY	16,357	1,704	6,486	1,455	1,094	-	-	192	27,288
	Unmetered	# Of accounts	-	-	-	-	-	-	-	-	-
		Deliveries AFY	-	-	-	-	-	-	-	-	-

Table 8 shows the estimated demand for the Salinas District for average day, maximum day, and peak hour through 2030 in five-year increments.

Table 8: Salinas District High Demand Forecast: Average Day, Maximum Day, and Peak Hour Demands			
Projected Year	Average Day	Maximum Day	Peak Hour
	(MGD)	(MGD)	(MGD)
2005	18.4	31.8	47.7
2010	22.7	37.0	55.5
2015	24.0	39.2	58.8
2020	25.4	41.4	62.1
2025	26.9	43.9	65.9
2030	28.5	46.5	69.8

Table 9 shows the estimated City of Salinas High Demand Forecast for average day, maximum day and peak hour.

Table 9: City of Salinas High Demand Forecast: Average Day, Maximum Day, and Peak Hour Demands			
Projected Year	Average Day	Maximum Day	Peak Hour
	(MGD)	(MGD)	(MGD)
2005	17.4	30.0	45.1
2010	21.5	35.0	53.5
2015	22.7	37.0	55.6
2020	24.0	39.1	58.6
2025	25.4	41.5	62.2
2030	27.0	43.9	65.9

For 2028 (a 20-year projection), the projected annual average day demand is 26.36 million gallons per day (mgd) or 29,550 acre-feet/year.

Table 10 below provides the Cal Water projected water demands in five-year increments for the next 20 years. This projection includes growth anticipated in all of the West Area Specific Plan, ½ of the Central Specific Plan, all other designated growth areas in the City of Salinas land use plan and an equivalent of about 1,093 additional dwelling units.

Table 10: City of Salinas 20 Year Demand Forecast: Average Day & Max Day			
Projected Year	Average Day	Maximum Day	Average Day
	(MGD)	(MGD)	(Acre-ft/Yr)
2008	19.74	32.2	22,130
2013	22.68	37.0	25,430
2018	23.78	38.7	26,660
2023	25.11	40.9	28,150
2028	26.90	43.8	30,160

Table 11 provides water demand estimates for ½ of the Central Area and all of the East Area Specific Plans projected demands, currently served by Alco Water.

Table 11
½ Central and All East Area Specific Plans

Year	Average Annual Daily Water Demand
2008	none
2013	573,700 gallons/day or 643 acre-ft/yr
2018	1,529,800 gallons/day or 1,715 acre-ft/yr
2023	2,485,980 gallons/day or 2,787 acre-ft/yr
2028	2,868,440 gallons/day or 3,216 acre-ft/yr

½ Central and All East Area Specific Plans

Year	Maximum Day Water Demand
2008	none
2013	935,130 gallons/day
2018	2,493,600 gallons/day
2023	4,052,150 gallons/day
2028	4,675,560 gallons/day

- The estimated increase in City of Salinas demand between 2008 and 2013 is 2,940,000 gallons per day. One half of the Central and all of the East Areas Specific Plans projected demand for 2013 is forecasted to be 573,700gallons/day. The 2013 Ag-Industrial Center projected demand is 624,910 gallons/day. The combined additional demand of both of these is 1,198,610 or 40.8% of the forecasted growth in demand.

- The 2018 increase in demand relative to 2008 is 4,040,000 gallons/day. One half of the Central and all of the East Specific Plans projected demand for 2018 is forecasted to be 1,529,800 gallons/day. The 2018 Ag-Industrial Center projected demand is 2,500,000 gallons/day. The combined additional demand of both of these is 4,029,800 gallons/day or 99.7% of the forecasted growth in demand.

- The 2023 increase in demand relative to 2008 is 5,370,000 gallons/day. One half of the Central and all of the East Specific Plans projected demand for 2023 is forecasted to be 2,261,140 gallons/day. The 2023 Ag-Industrial Center projected demand is 2,812,100 gallons/day. The combined additional demand of both of these is 5,073,240 gallons/day or 94.4% of the forecasted growth in demand.

- The 2028 increase in demand relative to 2008 is 7,160,000 gallons/day. One half of the Central and all of the East Specific Plans projected demand for 2027 is forecasted to be 2,826,720 gallons/day. The 2028 Ag-Industrial Center projected demand is 2,812,100 gallons/day. The combined additional demand of both of these is 5,638,820 gallons/day or 78.8% of the forecasted growth in demand.

Based on the preceding data and analysis, it is clear that the water demand forecast for the Ag-Industrial Center and ½ of the Central and all of the East Area Specific Plans is not covered in Cal Water's high water demand forecast for its service area in the City of Salinas. Therefore, the total demand forecast for Cal Water's service area in the City of Salinas needs to be increased by adding both the Ag-Industrial Center and ½ of the Central and all of the East Specific Plans forecasted demands.

Table 12 presents the revised Salinas demand forecast with all of the forecasted demands for Ag-Industrial Center and all of the West, Central and East Specific Plan Areas included.

Table 12
City of Salinas Water Demand Forecast for the Ag-Industrial Center and All of West, Central and East Area Specific Plans and All Other City Planned Developments

		Annual Average	Maximum Day	
Year	Acre-ft	Gallons per day	Gallons per day	GPM
2008	22,130	19,740,000	32,176,200	22,340
2013	26,770	23,878,610	39,323,900	27,308
2018	31,180	27,809,800	46,748,600	32,460
2023	34,090	30,408,080	51,201,600	35,556
2028	36,525	32,580,540	54,724,980	38,000

4. **Water Supply**

Supply Capacity

The Cal Water City of Salinas service area has 30 active water supply wells with a combined pumping capacity of approximately 23,022 gallons per minute (gpm) or 33,151,680 gallons/day or 37,165 acre-ft/yr.

Source capacity has been adequate to meet maximum day demand up to the present but

with anticipated growth in demand, Cal Water has been adding well capacity to meet future maximum day demands. For 2028, annual average day demand is estimated to be 32,580,540 gallons/day or 32.58 mgd or 36,525 acre-ft/yr for the combined demand forecast which includes the Ag-Industrial Business Park, all of the West, Central and East Specific Plan areas and all other growth. Maximum day demand for 2028 is estimated to be 54.72 mgd or 38,000 gpm.

Therefore, Cal Water needs to add about 15,000 gpm of well capacity plus the equivalent of two of its largest wells, which are about 1,500 gpm for a total additional capacity of 15,000 + 3,000 = 18,000 gpm or 25.92 mgd.

Source of Supply

All existing water supply for the City of Salinas is groundwater extracted from the Salinas Valley Ground Water Basin (SVGWB) from two hydraulically connected sub-basins or areas of the SVGWB known as the Eastside Area and the western fluvial or Pressure Zone.

Salinas Valley Groundwater Basin Geology and Hydrogeology

Geologic Setting

(The following is taken from the Salinas District WSFMP May 2005 prepared by Luhdorff and Scalmanini.)

The City of Salinas is situated at the northern end of the Salinas Valley, a relatively narrow, elongated, fault down-dropped, sedimentary basin in the California Central Coast Range. The uplifted mountainous boundary consists of older granitic, metamorphic and marine sedimentary rocks of the Salinian tectonic block. Beneath the valley, a thick sequence of Tertiary marine sedimentary rocks is overlain by late Tertiary to Recent non-marine sedimentary deposits of fluvial and alluvial fan origin. The uppermost 1,000 feet, or more, of this non-marine sequence contains the fresh ground-water basin that is utilized for various water supply purposes.

Early studies of the Salinas Valley ground-water basin extend back to Hamlin (1904). Concerns over possible saline water intrusion caused by pumping arose in the early 1930's and resulted in the first detailed evaluation of the northern ground-water area by the California Department of Public Works, Division of Water Resources (1946 and 1949). This report noted the presence of a '180 foot' aquifer and a '400 foot' aquifer. The '180 foot' aquifer is overlain by a clay confining bed of probable marine or estuarine origin, and separated from the '400 foot' aquifer by a similar clay sequence. This report also delineated sub-areas such as the 'blue clay pressure zone' where the '180 foot' and '400 foot' aquifers occur, and the adjacent 'eastern' alluvial fan zone. No detailed subsurface geologic cross-sections were presented in this report.

Numerous subsequent hydrogeologic studies of the Salinas Valley up to the present have been concerned with saline water intrusion, water quality, basin yields, and other aspects

of ground-water resources. Key reports include those by California State Water Resources Board (1956) and California Department of Water Resources (DWR, 1969, 1970, and 1973). A detailed geologic cross-section analysis was included in the 1969 and 1970 DWR reports showing the subsurface geologic configurations of the '180' foot' and '400 foot' aquifers in the northern Salinas Valley. Regional geologic relationships were developed by Jennings and Strand (1959), Hart (1966), and others, while more detailed surficial geologic maps covering the City of Salinas area were constructed by Dibblee, (1999); Dupre and Tinsley, (1980); and Tinsley (1975). Other references include Tinsley (1975) and Staal, Gardner & Dunne, Inc. (1993).

To go beyond a simple well data compilation and statistical analysis, L&S collected all available water well driller's reports and electric logs of Cal Water wells from internal files and from Monterey County Water Resources Agency. The initial review of the wells consisted of developing same-scale profiles for each well showing lithology, well construction, age, and other well data. Lithologic determinations were made for wells with electric logs using electric log interpretation integrated with driller's logs.

Preliminary evaluation of the well and subsurface data consisted of correlation of well profiles to one another to develop tentative geologic configurations. This evaluation, as in previous studies, indicated that two separate areas could be distinguished geologically. To the west, a sequence of thick, well-defined beds of sands and gravels, separated by blue to gray clay layers exist, and appear to be of fluvial (stream/river and floodplain or estuarine) depositional origin. To the east, a poorly bedded sequence of thin sand and gravel beds within a thick sequence of brown sandy clay appears to be of alluvial fan depositional origin. These two areas roughly coincide with the 'Blue Clay Pressure Zone', or Pressure Zone, and the 'Eastern Zone', or Eastside Area, as described in previous investigations. From the preliminary evaluation, it was noted that correlation between the two separate areas appeared to be poor to locally non-existent. However, the preliminary evaluation served to provide a basis to construct detailed geologic cross-sections to further examine subsurface conditions and assess the occurrence of nitrate in the subject municipal wells.

Eight detailed geologic cross-sections were constructed using information from Cal Water's municipal wells. Five cross-sections were created in the west to east direction. Two cross sections extend from south to north to examine the western fluvial area and the eastern alluvial fan areas respectively. A final cross extends to the northeast to examine the setting of the most distant wells in the municipal service area. A number of other cross-sections were also constructed to examine local correlations between wells. However, some of the correlations from these work cross-sections were used in the interpretations on the eight main cross-sections presented in the master plan report.

The following subsections describe the key subsurface relationships in the study area based on L&S's cross-section analysis and from information in DWR's Groundwater Bulletin 118, 2003, Central Coast Hydrologic Region, Salinas Valley Ground Water Subbasins 3-4.01 and 3-4.02.

The City of Salinas overlies both the 180/400 foot aquifer (Subbasin 3-4.01) (referred to as the Pressure zone or Westside aquifer by Monterey County Water Resources Agency (MCWRA) and the Eastside Aquifer (Subbasin 3-4.02). The 180/400 foot aquifer subbasin includes the lower reaches and mouth of the Salinas River. The Southwestern basin boundary is the Quaternary Alluvium or Terrace Deposits with the granitic basement of the Sierra de Salinas. Further north along the western Salinas Valley margin the basin boundary is the Quaternary Paso Robles Formation, or Aromas Red Sands of the Corral de Tierra Area Subbasin. The extreme northwest boundary of the sub basin is shared with the Salinas Valley-Seaside Area Subbasin along the seaward projection of the King City Fault. This subbasin is bounded by the Monterey Bay on the northwest. The northern subbasin boundary is shared with the Pajaro Valley Groundwater Basin and coincides with the inland projection of a 400-foot deep, buried clay-filled paleodrainage of the Salinas River. This acts as a barrier to groundwater flow between the Pressure Zone and Eastside subbasins. The northeastern boundary is shared throughout most of its length by the adjacent Salinas Valley-Eastside Subbasin, and to the north with a shorter length of the Langley area Subbasin. The northeastern boundary generally coincides with the northeastern limit of confining conditions in the Pressure Zone or180/400-Foot aquifer subbasin and the location of State Highway 101. The southeastern boundary is shared with the Lower Forebay sub basin and is the approximate limit of confining conditions in an up-valley direction. As mentioned, the 180/400-Foot aquifer subbasin boundaries coincide with those identified for the Pressure Zone area by MCWRA.

The Eastside Aquifer subbasin extends from approximately five miles north of the city of Salinas to twenty-five miles south of the town of Gonzales along the eastern side of the lower Salinas Valley. The subbasin is bounded to the north by the Pleistocene Aromas Red Sands of the Salinas Valley-Langley Area Subbasin. To the south, the sub basin shares a boundary with the Quaternary Alluvium deposits of the Salinas Valley-Lower Forebay Aquifer Subbasin. The western sub basin boundary generally coincides with the northeastern limit of confining conditions in the adjacent 180/400-Foot Aquifer Subbasin and with Sate Highway 101. The eastern boundary is the contact of the Quaternary Terrace deposits with granitic rocks of the Gabilan Range. DWR's Eastside Aquifer subbasin boundaries correlate with those of the Eastside Area of the MCWRA. Intermittent streams such as the Natividad, Alisal, Quail, Parsons, Muddy and Johnson Creeks drain the western slopes of the Gabilan Range and flow across the Subbasin toward the Salinas River on the west side of the Valley.

In the Salinas District L&S WSFMP May 2005, a lithographic description of both subbasins is provided and is summarized here.

Eastside Area: In general, this sub-basin is a region of unconfined, varied water bearing strata that is complex, varied and difficult to characterize without more borehole log data. In plan view, regions of sand and gravel beds can be outlined at roughly equivalent elevations of the aquifer units for the –500 foot, -400 foot and –300 foot sequences. In the –200 foot plan view, the first blue clays are encountered and clusters of sand and gravel are lacking. In the –100 foot plan view, there is an incised channel filled with sand and

gravel with continued clay deposition in the tributary valley. In the above 100-foot sequences, thin sand beds occur on a more widespread basis and two thick clay locations occur as well. The alluvial processes in the Eastside Area resulted in a somewhat discontinuous deposition of coarse-grained aquifer materials and the fine-grained aquitards. As a result, wells may be lower yielding than those to the west in the pressure zone.

Pressure Zone or Western Fluvial Area: This sub-basin consists of roughly 100-foot packets with a basal sequence of sand and gravel in one to several beds capped by a thin, generally blue to gray, clay bed. Each sequence is underlain by a subsequent 100-foot packet of similar nature for a total of four fairly well defined sequences or aquifers between about -100 feet to -500 feet elevation. Below about the -500 foot elevation, there is insufficient data for characterizing the stratigraphy. The 100-foot aquifers are believed to be the result of fluvial or stream/river deposition in channels as sand and gravel bars and layers as the stream migrated across the Salinas Valley floor. Locally, the sand and gravel beds may be thick (30 to 40 feet) to thinner (10 to 20 feet) with thin clay inter-beds.

Presently and for the near and mid-term future these two subbasins are the only source of supply for the Salinas District. Because of its characteristics, the Pressure Zone area has the greatest potential for high yielding wells. The presence of clay strata overlying the aquifer units provides protection of water quality in deeper wells from potential sources of surface contamination.

Salinas Valley Groundwater Basin Management

The SVGWB is an un-adjudicated ground water basin. Basin recharge programs are managed by the Monterey County Water Resources Agency (MCWRA). MCWRA has developed the Salinas Valley Integrated Regional Water Management Plan.

The following are elements of this plan. MCWRA:

1. Obtains annual groundwater extraction reports from all agricultural and municipal well operators;
2. Has researched, developed and/or constructed projects to reduce seawater intrusion,
3. Has researched, developed and/or constructed projects to reduce nitrate contamination of ground water,
4. Is developing plans to provide adequate water supplies to meet current and anticipated needs for all basin users and bring the ground water basin into hydrological balance.

To mitigate effects of over pumping of the SVGWB on a regional scale, MCWRA has and continues to support programs involving water exchange. Since April 1998, the Castroville Seawater Intrusion Project (CSIP) has been in operation. It supplies recycled water from the Monterey Regional Water Pollution Control Agency (MRWPCA)

wastewater treatment plant for agricultural irrigation on selected lands between Salinas and Monterey Bay to reduee ground water pumping and seawater intrusion.

MCWRA is in the advanced stages of planning and designing Phase 1 of the Salinas Valley Water Project (SVWP), a multi-component project that eonsists of:

1) Modification of the Nacimiento Dam Spillway,
2) Modified operation and maintenance of the San Antonio and Nacimiento reservoirs,
3) Construction of the Salinas River diversion facility for diverting river water to the CSIP and delivery of blended river and recycled water for irrigation of 12,000 acres of land near the coast.

An anticipated effect of the integrated CSIP - SVWP Phase 1 work is to further reduce groundwater pumping by agricultural users and as a consequence landward advancement of seawater intrusion due to historic over pumping of the basin. When Phase 1 is completed, Salinas River flows will generally be lower during winter/early spring months and higher during summer months than current flows for those periods. This will make more water available during the irrigation season from April through October.

Total SVWP diversions are estimated to be 12,000 acre-ft/year on average and a maximum of 25,000 acre-ft/year. Surface water diversions are to comply with requirements established by the National Marine Fisheries and California Department of Fish and Game with respect to protecting fishery resources in the Salinas River.

Phase 2 of the SVWP is currently being planned by MCWRA to increase the amount of diverted surface water for the benefit of municipal users. The SVWP diversion facility will be at Moro Cojo on the Salinas River, and the Phase 2 urban component is estimated to be 10,000 acre-feet per year. Since that amount will be allocated among various users, it is unlikely that Cal Water in serving its City of Salinas area would get more than 50% or 5,000 acre-ft/yr.

One option for Phase 2, is to divert 1,800 acre-ft/year of water from the Salinas River during winter months for groundwater recharge at a well field in the vicinity of the Salinas Hills/Spreckles area and recover it during the peak demand summer months. Diversions could be also be used for agricultural irrigation to further reduce agricultural ground water pumping, thus making increased municipal pumping possible. Input on approaches to Phase 2 of the SVWP is being solicited from municipal water purveyors including Cal Water in the northern part of the Valley. Increased municipal ground water use based on the amount of surface water supplied to agricultural users (taking into account losses) would be expected to have no negative impacts on the regional ground-water system.

Additional phases or options within the SVWP will be evaluated by MCWRA to further increase groundwater supply for municipal users.

To support development of these supply alternatives, Cal Water will coordinate closely with the City of Salinas, MCWRA, other municipal and agricultural users of the SVGWB and the appropriate state agencies (DHS, DWR). This includes obtaining concurrence on Cal Water's long-term water supply plans as they relate to City planning and land use development and MCWRA water supply planning. Coordination includes review and approval of new well sites, and treatment, storage and conveyance facilities as well as sharing technical information on supply options and on water quantity and quality conditions and trends in the SVGWB.

MCWRA estimates that annual non-drought overdraft of the SVGWB is approximately 45,300 AF per year. Because of the hydrologic continuity between the ocean and the aquifers of the SVGWB, seawater has been intruding into the aquifers near the coast at a rate of approximately 28,800 AF per year. It is believed that groundwater pumping throughout the entire valley has contributed to overdraft of the SVGWB. MCWRA data indicate that water levels have declined in all four of the SVGWB's sub-basins. However, minor declines in the lower two sub-basins (Upper Valley and Forebay) appear to be in response to extended drought conditions.

While the SVGWB is not an adjudicated basin, the State Water Resources Control Board (SWRCB) initiated adjudication proceedings in 1996. In response to concerns about overdrafting, the SWRCB assembled a SVGB adjudication team to "... protect the groundwater and surface water supplies in the Salinas Valley" (SWRCB, 1996). It is to accomplish this by: "working with local stakeholders and decision-makers to reach consensus on a solution to the seawater intrusion and nitrate contamination problems in the Salinas Valley; and by performing a Salinas Valley Ground Water Basin adjudication, if necessary, under §§2100 et seq., 275, and 100 of the Water Code and Article X, Section 2 of the California Constitution." Adjudication would result in loss of local control and state oversight of water resources in the basin. While the SWRCB initiated the first phase of this process (administrative proceedings), it has indicated that it will not proceed with adjudication if an effective solution to stop seawater intrusion is implemented.

It is noted here that the intrusion of seawater into the Salinas Valley Groundwater Basin has been a problem for many years. A solution was identified as early as 1946 when the State of California proposed a three-part plan:

- Construct several large reservoirs to capture excess storm flow on the upper reaches of the Salinas River and its tributaries.
- Recharge groundwater in the upper valley and fore bay sub-areas of the Salinas Valley with captured runoff.
- Extract portions of the augmented groundwater and transmit it via a conveyance system to the eastside and pressure sub-areas of the basin so that the water users in this northern most region of the valley can reduce their use of groundwater.

The first two elements of this plan have been constructed and are in operation. Nacimiento and San Antonio reservoirs were built and are operated by the MCWRA. Water from the reservoirs is released in a controlled manner to recharge aquifers in the upper and fore bay areas through the natural riverbed. The last element is being implemented in part through a municipal wastewater reuse program.

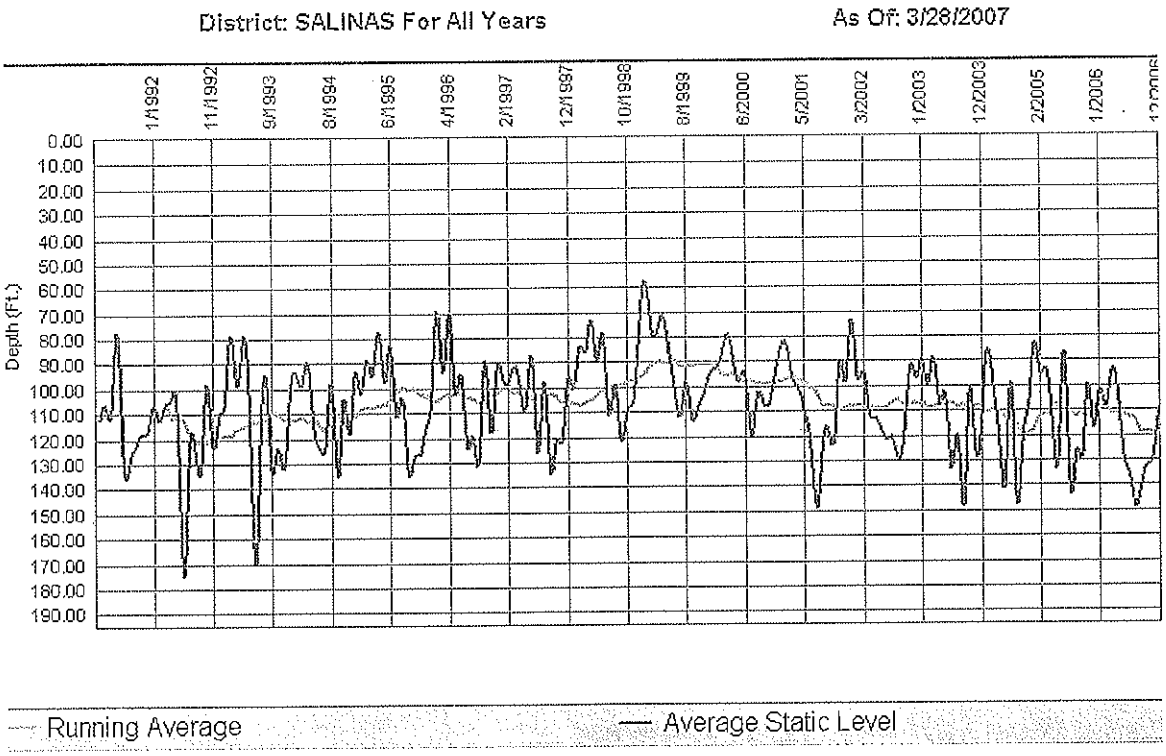
The Castroville Irrigation Project was constructed and put into operation to provide high quality treated wastewater from the Monterey Regional Water Pollution Control plant in Marina for agricultural for agricultural use. Use of this recycled water reduces agricultural groundwater pumping, which reduces seawater intrusion.

MCWRA has developed a groundwater model of the SVGWB (Mod Flow) and has used this ealibrated model as a regional planning tool to help assess how the SVWP Phase 1 and 2 and other programs being considered for reducing basin overdraft will affect groundwater basin eonditions. The model includes evaluation of sources of groundwater recharge including rainfall, runoff, infiltration, subsurface flow and irrigation return flow and major sources of discharge including groundwater pumping, evaporation, transpiration and surface and subsurface outflows. MCWRA has indicated to Cal Water that without further substantial work on the model, it ean not be used to assess localized effects of eonstructing new wells in specific areas within the City of Salinas or in nearby areas outside City boundaries.

Salinas Groundwater Levels

Except for an annual variation of approximately thirty-five feet, average static groundwater levels in most of Cal Water's Salinas District wells since 1961 have changed elevation only during drought years. Historical data collected continuously over the last 25 years indicates that the Salinas system has not experienced regular or frequent supply deficiencies during dry weather periods. Groundwater charts show that the majority of Cal Water's wells combined static levels have remained essentially unchanged during this period. From 1980 to1999 (20 year period), the Salinas District's annual demand increased from 10,562 acre-feet to 18,690 acre-feet or increase of 8,128 acre-feet (428 acre-feet/year), which on a percentage basis is approximately 77%. In 1976 and 1977, the average ground water elevation declined by 20 feet. Recovery occurred in 1982 and 1983 when increased rainfall and runoff refilled local reservoirs and increased groundwater recharge. With the extended drought that started in 1984, the average elevation began declining and by summer 1992 had dropped by 35 feet. Recovery of the groundwater level during the past few years has been occurring as a result of increased rainfall and runoff. Salinas District well levels for the past 15 years (1991 to 2006) show the average depth to groundwater is 120 feet below ground surface with minimal change. Figure 2 shows static groundwater levels from 1992 to 2006.

Figure 2: Salinas District Wells: Static Groundwater Levels



Ag-Industrial Center Groundwater Impaet Estimate

The proposed site encompasses 257 acres. Based on a drive by assessment of current land use, it appears that 90% of this area or about 231 acres are cultivated. The main crop in May 2008 was lettuce. Cauliflower and broccoli are also grown on this site. General cropping practice is to rotate crops. While as many as three crops can be produced in a year, normal practice is to grow two crops. Irrigation is mainly by sprinkler or drip systems, which are supplied by groundwater pumped from principally two wells in the area that have a measured pumping capacity of 1,100 gpm and 1,000 gpm, respectively. The balance of the plan area - 10% is farm buildings, roads and other non-irrigated uses.

Groundwater recharge from irrigated agricultural is a function of many variables including weather, hydrologic conditions, irrigation practices, crops, soil types, soil conditions, etc. One approach to determining recharge is to collect data and make estimates of monthly irrigation, monthly precipitation, runoff, plant evapo-transpiration, evaporation, initial soil moisture and soil's available water holding capacity. Recharge is the net of irrigation and precipitation minus water losses associated with other factors.

Since this data is not available and obtaining and analyzing it is beyond the scope of this assessment, a general estimate of recharge to the groundwater is provided here. It is assumed that average recharge from agricultural irrigation over wet- and dry-years is 30%. This is based on data taken from "Geologic, Hydrogeologic and Geotechnical

Report" by Kleinfelder, Inc, March 12, 2003, for Rancho San Juan Specific Plan). Kleinfelder estimated total irrigation water demand for the existing agricultural area at 2,770 acre-ft/year and total return flow or groundwater recharge at 846 acre-ft/year or 30.5%.)

According to the Kleinfelder report based on information from the Monterey County Agricultural Extension and University of Davis, irrigation rates for crops are as follows:

Lettuce: 2.1 ft/acre/crop
Alfalfa or cauliflower: 4.04 ft/acre/crop

As previously mentioned, general farming practice is to rotate crops. It is assumed that lettuce and cauliflower or broccoli are the crops being cultivated over the course of a year. So ½ of required irrigation water is for lettuce and the other ½ is for cauliflower or broccoli. Using the irrigation rates estimated by Kleinfelder, the overall average irrigation rate for existing irrigated acres in the Ag-Industrial Center is estimated at:

0.5 (2.1) + 0.5(4.04) = 3.0 acre-feet/acre/year or 3.0 ft/year

Estimated groundwater pumping for existing irrigated agricultural in the Ag-Industrial Center area is:

2 x 3.0 ft/year x 231 acres = 1,386 acre-ft/year

This compares to the total build out estimate for Ag-Industrial Center of 3,152 acre-ft/yr, which is 1,766 acre-ft/year more.

The estimated amount of recharge from existing irrigated agriculture is:

2 x 0.3 x 3.0 ft/yr x 231 acres = 416 acre-ft/year

Estimated net consumptive water from existing irrigated agriculture use is 970 acre-ft/year.

Another method for estimating the water used for agricultural irrigation is to convert the recorded annual power consumption of the irrigation wells to an annual quantity of water pumped. Power consumption records for 2007 were obtained from PG&E by the owner. Of the four wells identified, two wells provided practically all the water for irrigation. The annualized average pumping rate for the wells can be obtained from the following formula:

Q = P/1.65H/E where:
Q is in gpm, P is in KWH/year, H is total head in feet and E is the efficiency of the pumping system (well and electric motor).

The power used by the wells in 2007: P = 236,581 KWH

Assume that the water depth at pumping is 40 ft and that the average pumping pressure is 40 lbs/in^2 = 92 ft of head. Therefore, total pumping head, H = 40 + 92 = 132 feet

Assume well system efficiency is 75% or E = 0.75

Therefore:
Q = 236,581/1.65 x 132/0.75 = 814.7 gpm = 1,173,128 gallons/day = 1,315 acre-ft/yr which is quite close to the estimate of water use based on crop irrigation rates.

The Ag-Industrial Center estimated annual average day water demand at build-out is 3,152 acre-ft/yr for 257 acres.

It is estimated that 15% of total use is outdoors – for landscape irrigation and washing equipment, vehicles, containers, etc.

Therefore, total estimated outdoor annual average day water demand for the Ag-Industrial Center at build-out is: 0.15 x 3,152 = 473 acre-ft/yr

It is estimated that 20% of outdoor use will infiltrate below the plant root zone and recharge groundwater.

Therefore, 0.20 x 473 = 94.6 acre-ft/yr or 3% of estimated average annual day demand is estimated to be recharge to the groundwater system.

Ag-Industrial Center inside water use at build out is estimated to be 2,679 acre-ft/year (0.85 x 3,152). Depending on how the water is used, the resultant wastewater will either be discharged to the sanitary sewer or industrial sewer.

An estimate of the quantity of wastewater discharged to each sewer system is presented in Table 13. In developing the table, it was assumed that the following percentages of water uses would be discharged to the City's industrial sewer system: major agricultural processing - 95%; and minor agricultural processing – 25%.

Table 13: Salinas Ag-Industrial Center: Estimated Sewer Discharges at Build Out

Use	Industrial	Sanitary
	Acre-ft/year	Acre-ft/year
Major Ag Processing	2,360	125
Minor Ag Processing	49	146
Total	2,409	271

Industrial wastewaters are conveyed to the City of Salinas' Industrial Wastewater Treatment Facility (IWTF) located southwest of the city near the intersection of the Salinas River and Davis Road, which is approximately 4.5 miles from the Ag-Industrial Center.

The consulting engineering firm, CDM, prepared a Technical Memorandum (TM) dated January 2003 pertaining to improvements for the IWTF, which consists mainly of an aerated lagoon followed by percolation ponds and drying beds for solids dewatering. The drying beds can also be used for percolation of treated effluent if needed. The TM provided basic information on the plant and its flows and loads. Currently, the plant disposes of treated industrial wastewater primarily by infiltration into the groundwater.

CDM prepared a Final Draft Summary Report titled Industrial Wastewater System Conceptual Approach for System Expansion (June 25, 2008) with recommendations for improvements and possible replacement of the IWTF with other treatment processes and effluent disposal options. The report indicates that 2 mgd of treatment capacity should be added to the existing 4 mgd of capacity to meet near term needs (2015 – 2020) at either the existing site, a nearby site owned by the City (former sanitary wastewater treatment plant) or in the vicinity of existing industrial customers south of the Ag-Industrial Business Center. The CDM report suggests options of either a membrane treatment plant with effluent that could be reused, charged to groundwater or provided for agricultural or urban landscape irrigation (Option 1) or a conventional treatment plant with effluent being recharged to groundwater through infiltration basins (Option 2). The report also identifies improvements to be made to existing industrial wastewater facilities to address current needs and provide some additional treatment capacity.

Based on data in the CDM TM, it is estimated that on an annual average basis, approximately, 88% of existing treated industrial wastewater effluent is percolated into the groundwater and the remaining 12% is lost to evaporation. Option 1 would result in at least 95% of the effluent being reused and Option 2 would result in at least 88% of the effluent being percolated to groundwater.

Therefore, for the Ag-Industrial Center, the lowest quantity of industrial wastewater at build out that would be reused or recharged is that estimated by CDM for the existing plant which is:
0.88 x 2,409 acre-ft/yr = 2,120 acre-ft/yr (groundwater percolation)

As indicated in the section titled Salinas Valley Groundwater Basin Geology and Hydrogeology, the area in which the existing industrial wastewater plant and the other two sites recommended by CDM are in the Western Fluvial Area, which consists of roughly 100-foot packets of sand and gravel capped by thin clay lens. Each packet is underlain by a subsequent 100-foot packet of similar material for a total of four fairly well defined sequences or aquifers between -100 and -500 feet elevation.

If the geologic cross sections that characterize Cal Water's existing wells (Stations 17 and 21), which are in close vicinity to the Ag-Industrial Center, are representative of the geology at the City's existing industrial wastewater plant and the closer proposed new site (former City sanitary wastewater plant) or in the vicinity of the Ag-Industrial Center, then percolated effluent would likely recharge to aquifers between the -100 to -400 foot depths.

Sanitary wastes are conveyed to the Monterey County Regional Water Pollution Control Agency (MCRWPCA) for treatment and subsequent use of most of the effluent for irrigation of agricultural lands.

According to the Keith Israel, general manager of the MCRWPCA, (July 2007) 2007 annual average daily flow to the wastewater treatment is about 21 millions gallons per day (mgd) or 23,540 acre-ft/yr of which the City of Salinas contributes 60%. Average annual tertiary treated wastewater used for agricultural irrigation is 13,000 acre-ft/yr, or 55% of treated wastewater. Since Salinas supplies 60%, approximately 33% of Salinas' wastewater is delivered to agricultural users.

If in 2028, wastewater flows increase by 40%, then estimated annual average daily flow to the wastewater treatment will be about 29.4 millions gallons per day (mgd) or 32,960 acre-ft/yr of which the City of Salinas will likely contribute 2/3 or 67% because of higher growth than the surrounding communities.

Using 67%, and an estimated increase in the irrigation use of treated effluent to 18,000 acre-ft/yr, the estimated contribution of treated sanitary wastewaters from the Ag-Industrial Center that will be delivered to agricultural users for irrigation is 0.55 x 0.67 x 271 acre-ft/yr = 100 acre-ft/yr.

This can be reasonably credited as additional groundwater recharge since that amount of water would not be pumped by agricultural irrigators who use treated effluent for crop irrigation.

On the basis of the preceding analysis, the estimated total amount of Ag-Industrial Center indoor water use at build out that will be recharged to groundwater is: 2,120 + 100 = 2,220 acre-ft/year.

The estimated total amount of Ag-Industrial Center outdoor water use at build out that will be recharged to groundwater is: 94.6 or 95 acre-ft/year.

Therefore, the estimated total amount of Ag-Industrial Center indoor and outdoor water use at build out that will be recharged to groundwater is: 2,315 acre-ft/year.

The estimated net consumptive use of groundwater for the Ag-Industrial Center at build out is: 3,152 – 2,315 = 837 acre-ft/year.

The estimated net consumptive use of groundwater for existing crop irrigation on the site is 970 acre-ft/year. (Estimated recharge is 416 acre-ft/year.)

On the basis of the preceding assumptions and analysis, the net effect of conversion of use of the proposed Ag-Industrial Center site from growing crops to industrial and commercial uses would be an *increase in regional groundwater storage by 133 acre-ft/year* (970 – 837).

Groundwater Quality

Groundwater quality in the aquifers underlying the City of Salinas has been and for the most part continues to be generally suitable for drinking water supply based on California Department of Health and US Environmental Protection Agency drinking water standards. As required by regulation, Cal Water runs complete Title 22 water quality analyses on samples from all new prospective production wells to insure that water fully complies with federal and state drinking water standards.

The contaminant with the greatest impact on Salinas drinking water quality has been nitrates (NO_3). Table 14 provides some NO_3 concentration data obtained from Cal Water Salinas wells that illustrate the problem. Note the drinking water maximum contaminant limit (MCL) for NO_3 is 45 mg/l.

Table 14: Nitrate Concentrations in Selected Cal Water City of Salinas Wells

Well Station Number	Year 1980	1995	2005
6-01	12	32	42
10-01	22	40	Not available
21-01	27	55	Not available
105-1	15	65	Not available
108 –1	7	55	Not available

To deal with rising nitrate levels Cal Water has installed and put into operation five wellhead treatment systems that reduce nitrates to levels that comply with drinking water standards.

Nitrates are present in most Cal Water Salinas wells at varying concentrations. Its presence is generally attributed to vertical movement from the ground surface through geologic materials and unsealed or improperly abandoned wells in response to pumping in deeper strata.

The second major contaminant that has affected a number of wells in Salinas is volatile organic compounds (VOCs) including methyl-tert-butyl ether (MTBE).

In the eastside area aquifer, lack of effective confining zones can result in cross-flow from shallower aquifers and result in deterioration of water quality if there are surface sources of contaminants present.

Currently, a high percentage of City wells have water quality conditions that require ongoing monitoring because of sufficiently high levels of nitrates or VOCs. If contaminant concentrations of regulated constituents exceed DHS drinking water quality standards, Cal Water will either provide treatment facilities or replace wells where

location, age, condition and yield make treatment economically infeasible.

Within the last 5 years, a higher than anticipated number of wells in the City of Salinas service area had to be shut down. Four wells were inactivated due to excessive levels of nitrates, two wells due to excessive MTBE levels and three wells due to casing collapse or problems (old wells at the end of their useful life). This resulted in a loss of water supply capacity. To make up for lost supply capacity and meet future supply needs for growth, Cal Water during the past four (4) years has been designing and constructing new wells, system storage and related booster pumps and when necessary providing or improving on-site treatment for wells with non-complying water quality. To date, Cal Water has installed ion exchange treatment for removal of nitrates at five wells and for removal of uranium at one well. Granular activated carbon (GAC) treatment for removal of MTBE or VOCs has been provided at three well sites that have a useful remaining life, good yield and are in a critical pressure zone.

With respect to siting future water supply wells, test hole exploration will be conducted in some cases to a depth of 1,000 feet and dedicated monitoring wells will be constructed and sampled to characterize ground-water quality and levels at multiple selected depths.

According to L&S, the -400 and -300 foot aquifers appear to be the best stratigraphic target for wells in the western area of the City where a clay unit separates these units from the overlying aquifers. Deep annular seals to about -300 foot elevation will help isolate targeted aquifer units from potentially poorer water quality in overlying aquifers. However, where the -300 foot aquifer in overlain by the -200 foot aquifer channel, there is the potential for lack of similar geologic control so that the presence of intervening clay beds must be evaluated for new wells. In such locations where the clay layers are not present, annular sealing may not be effective in controlling water quality i.e., preventing contaminant mitigation.

In the eastern alluvial fan area, the implications of hydrogeologic factors are more difficult to predict because of the complexity of soils bedding and thinness of sandy beds. So even though there are general regions with sand bed clusters in the -300 foot and -400 levels, all potential sites require exploratory well evaluations to assess geologic, hydrogeological and water quality conditions.

Because there are hundreds of wells throughout the greater Salinas area that may be conduits for contamination of aquifers at well sites targeted for municipal supply, exploratory testing is now the standard approach used by Cal Water in developing new sources.

Cal Water recognizes that if certain well sources are needed in locations where nitrate levels or VOCs cannot be mitigated through well design, treatment will have to be provided. In those situations where treatment is required, Cal Water will also conduct technical and cost evaluations to determine whether individual well or centralized treatment is most feasible.

Following is the water supply plan that Cal Water developed prior to the proposed Ag-Industrial Center. This plan was formulated to address all other projected water demands associated with the West, Central and East Specific Plans and all other City planned development.

At build out, the maximum month daily water demand for the Ag-Industrial Center is estimated to be 4,266 gpm. This supply requirement is viewed as additional to Cal Water's existing and planned supplies and would be met by construction of three new wells on or near the project site.

It is assumed that the new wells would have an average design capacity of 1,430 gpm or a combined capacity of 4,290 gpm or 6,178,000 gallons per day and that their design and construction would be coordinated with the development schedule of the project. The first well would be ready for the first phase of development and would be on line at the beginning of 2011. The rate of development will determine when the second and third wells will be brought on line – which could be as soon as 2013.

The following does not include the three new wells to be located on or near the project site.

New Salinas Well Supply Projects: 2008 – 2009:

Within the City of Salinas, Cal Water anticipates completion of construction and commencement of operation on four (4) new wells (Stations 64, 67, 22 and 69) will occur by mid 2009. The estimated combined production rate of these wells is 5,000 gpm (average annual production ~ 8,070 acre-ft/yr). Cal Water has been working on these well projects for the last three years. Several of them are designed, production wells have been drilled and related facilities are being installed in 2008.

New and Replacement Salinas Well Supply Projects: 2009 – 2018:

The engineering firm CDM has developed a longer term supply plan for Cal Water for the Salinas District (Report November 16, 2006) that consists of a portfolio of new projects and water conservation for demand management.

Within the next 2 to 10 years, the top-ranked projects for implementation are:

1. Replacement wells without treatment: goal 5 new wells with a combined production rate of 5,000 gpm and average annual production of 6,800 acre-ft/yr
2. Replacement wells with treatment: goal 3 new wells with a combined production rate of 3,000 gpm and average annual production of 4,100 acre-ft/y.
3. Additional new well sites within the city with no treatment: goal 6 new wells with a combined production rate of 6,000 gpm and average annual production of 8,100 acre-ft/yr

4. Additional new well site within the city with treatment: goal 1 new well with a production rate of 1,000 gpm and average annual production of 1,360 acre-ft/y.
5. New wells and treatment at existing inactive site: goal 2 new wells with a production rate of 1,600 gpm and average annual production of 2,180 acre-ft/yr

In summary, within the next 2 - 10 years or by 2017, 10 new wells (items 3 – 5 above) with a total estimated capacity of 8,600 gpm or ~13,883 acre-ft/yr are to be constructed and put into operation. Note that wells in items 1 and 2 are not included in the new supply since they are replacing existing wells that have reached the end of their useful life.

New Salinas Well Supply Projects: 2018 – 2028:

Cal Water has longer-term plans (10 to 20 years) to develop additional new wells close to but outside the City of Salinas boundaries. One alternative being evaluated includes up to eight (8) wells feeding into new 16" transmission mains along River Road and Monterey Road and a connection with the existing distribution system at El Blanco Road. The nominal production of each well is estimated to be 1,000 gpm for a total of 8,000 gpm. A second alternative includes a shorter and mostly 16" transmission main on Harkins Road with a tie in to the existing Cal Water system at Nutting Street. A potential for six (6) new wells (1,000 gpm each or 6,000 gpm total) has been identified for this alternative. It is assumed here that the first alternative will be implemented progressively between 2017 and 2027 with total additional capacity of 7,000 gpm being added.

Table 15 presents the forecasted total water supply based on:

1) Four (4) new wells that will go on line during 2008 and 2009
2) Ten (10) new wells going on line at a rate of 2 per year between 2013 and 2018
3) Seven (7) new wells going on line at a rate of 1 per year between 2018 and 2028
4) Three (3) new Ag-Industrial Center wells going on line in 2011, 2013 and 2015.

Table 15
City of Salinas Forecasted Supply Versus Demand (Includes Ag-Industrial Center, All of West, Central and East Specific Plans and Other City Planned Developments)

Year	Supply Capacity GPM	Demand Annual Average GPM	Demand Maximum Day GPM	Difference Supply – Max Day
2008	25,500	13,708	22,340	+3,160
2013	31,860	16,580	27,308	+4,552
2018	39,390	19,312	32,460	+6,930
2023	45,890	21,120	35,556	+10,334
2028	47,890	22,625	38,000	+9,890

It is noted that the above cited plans to install new wells on the schedule presented and the resultant additional supply capacity is regarded as prudent since there are a number of

existing wells that are approaching the end of their useful life and increased groundwater quality problems in recent years have caused some Salinas wells to be taken out of operation. While the long-term supply plan includes replacement wells for those that need to be shut down, it is not assumed that there will be a one for one replacement. Also, 6 wells are receiving nitrate treatment and there may be a need to shut down one or more treatment plants at the end of their useful life if new wells not requiring treatment can be brought on line. Hence, there is a need for a safety factor in well capacity.

Cal Water is committed to a continuing program to develop new or replacement wells within the Salinas District to meet growth in demand and to replace wells that are at the end of their useful life or have water quality problems for which on-site treatment is not economically justified.

For wells at new sites rather than on existing sites, Cal Water assesses hydrogeologic conditions, water quality, and requirements for compliance with regulatory criteria. Selected sites that have a favorable assessment will have a test hole drilled to verify the presence and nature of aquifer materials and water quality. If geologic and water quality results indicate a site is suitable for a drinking water production well, the site is purchased and developed. Depending on land acquisition, permitting and approval issues and including design, construction and start up, it takes two to three years to bring a new well on line.

Reclaimed Water (Recycling)

The City of Salinas provides industrial wastewater treatment for industrial wastewaters generated within the City of Salinas. As described previously, the City currently percolates into the groundwater on an annual average basis an estimated 88% of the industrial wastewaters treated. The City is planning to make improvements to its existing treatment facilities, which are located approximately 4.5 miles from the Ag-Industrial Center site and assess other treatment process options for the longer term. All options being considered include a very high percentage of reuse of the treated effluent in order to reduce groundwater pumping.

The Monterey Regional Water Pollution Control Agency (MRWPCA) provides treatment for sanitary wastewaters for the Salinas urban area and after advanced treatment recycles 100% of treated effluent for agricultural irrigation during the summer months. Of the nearly 21 mgd of flow recycled by MRWPCA, 60% comes from the City of Salinas and 70% of that or 42% is water from Cal Water wells in Salinas.

Water Conservation or Demand Management

California Water Service Company is a California Urban Water Conservation Council (CUWCC) member. The CUWCC was created to increase efficient water use statewide through partnerships among urban water agencies, public interest organizations, and private entities. The Council's goal is to integrate urban water conservation Best

Management Practices (BMP) into the planning and management of California's water resources.

Implementation of water conservation BMPs will help limit water demand from customers within the District's service area, which in turn helps reduce water supply requirements for the Salinas District.

The Department of Water Resources (DWR), water utilities, environmental organizations, and other interested groups developed a list of urban BMPs for conserving water. A Memorandum of Understanding Regarding Urban Water Conservation in California (MOU), as amended March 9, 2005, formalizes an agreement to implement these BMPs. The MOU is administered by the CUWCC and is its primary tool for promoting efficient water use.
As a signatory of the MOU, Cal Water has agreed to implement the BMPs that are cost beneficial in accordance with a schedule assigned to each BMP. The BMPs as defined in the MOU are generally recognized as standard water conservation measures. Table 16 presents the BMPs agreed upon by Cal Water in the MOU.

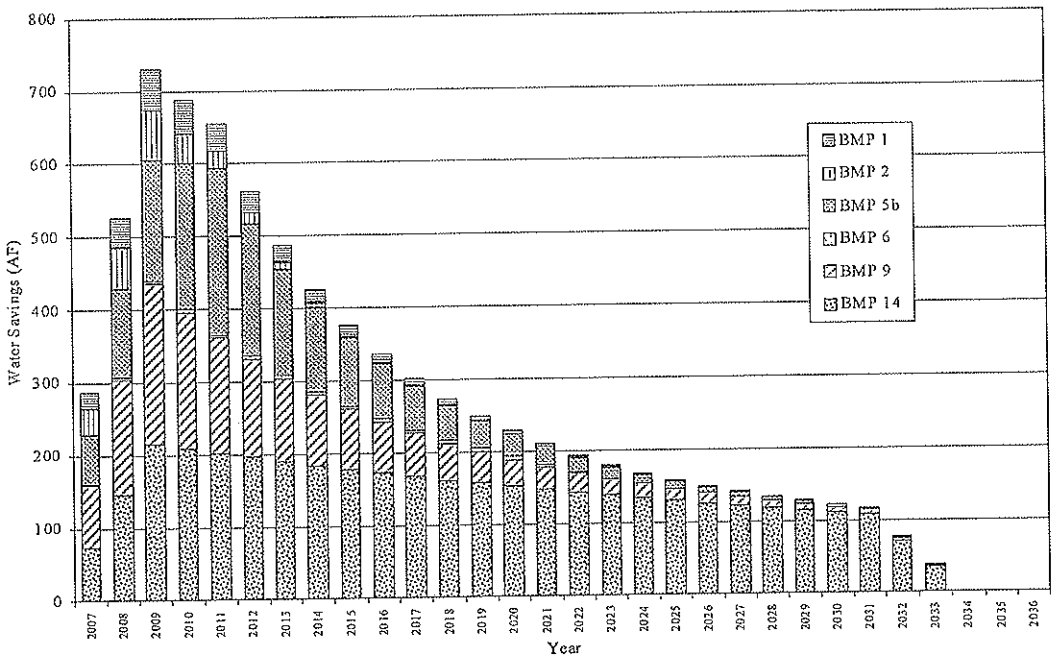
Table 16: Water Conservation Best Management Practices

Being Implemented by Cal Water
Water survey programs for single-family residential and multi-family residential connections
Residential plumbing retrofit
System water audits, leak detection and repair
Metering with commodity rates for all new connections and retrofit of existing connections
Large landscape conservation programs and incentives
High-efficiency washing machine rebate programs
Public information programs
School education programs
Conservation programs for commercial, industrial, and institutional accounts
Wholesale agency assistance programs
Conservation pricing
Conservation coordinator
Water waste prohibition
Residential ULFT replacement programs

Cal Water Salinas District Potential BMP Water Savings

Figure 3 illustrates anticipated Cal Water BMP water savings from 2007 - 2030 for Salinas. In summary, for 2008 – 2013 about 300+ acre-ft/yr of water savings, 2014 – 2020 about 300 – 200 acre-ft/yr of water savings and 2020 – 2030 about 150 – 100 acre-ft/yr.

Figure 3: Expected Water Savings with Best Management Practices



Cal Water also has its own programs to increase water use efficiency:

Distribution System Water Audit and Leak Detection Program
Cal Water conducts an in-house water audit and leak detection program for its distribution systems. The program is administered by a company employee equipped with state-of-the-art leak detection equipment. It is expected that each district will be audited once every three years.

Water Efficient Landscape Guidelines
These guidelines apply to all landscapes designed for Cal Water properties including renovations. For ease of adoption by districts with a multitude of climates and microclimates, the guidelines are generic. They do, however, adhere to water efficient landscape (Xeriscape) principles.

Implementation of Supply Plans and Conservation Programs

The Cal Water Salinas District, supported by its engineering, water quality and customer service staff in San Jose, is responsible for planning, designing, construction, operating, maintaining and managing all Salinas District water system facilities and programs

Cal Water schedules preparation of plans, designs and construction of new wells and related distribution and storage facilities so as to increase supply capacity ahead of projected demand growth thereby providing excess supply capacity to accommodate more rapid growth than anticipated and dry weather periods that might result in

temporary declines in the groundwater table level and possibly well yields. Typically, the goal for the supply capacity of the wells is to accommodate the maximum day demand (1.6 times the average day) with the largest source (greatest capacity well) being down or not operating.

Water Rights

Under state law, "the use of percolating groundwater in California is governed by the doctrine of correlative rights and reasonable use, which gives the overlying property owner a common right to reasonable, beneficial use of the basin supply on the overlying land." The exercise of Cal Water rights to percolating groundwater occurs after Cal Water acquires ownership of a property to be used as a production well site.

Water Supply Permits and Approvals

For prospective new well sites and other water facilities such as storage tanks and booster pump stations, Cal Water follows a standard procedure in which it establishes interest on the part of a property owner to sell all or a designated piece of his/her property to Cal Water for a water supply purpose. In the case of a well site, Cal Water first determines its suitability for a production well. This includes a conducting a sanitary survey, Phase 1 environmental assessment, a right of entry agreement, design and construction of a test well, testing of the yield and water quality of the test well and evaluation of findings. If a site is determined to be suitable, Cal Water generally purchases the property from the owner. In the case of public properties, it may enter into a long-term lease or obtain a permanent easement.

Cal Water is required to obtain the following permits including:

1. Water system amendment permit from California Department of Public Health (DPH)
2. A conditional use permit from the City of Salinas
3. Well construction/building permit from the City of Salinas
4. Well drilling permit from Monterey County Health Department
5. An air quality permit from the Air Quality Management District

After the well is constructed and before use, Cal Water is required to demonstrate to DPH that water from the well complies with all drinking water standards. Cal Water also is required to file the well logs obtained by the driller with the Department of Water Resources.

Design and Construction of Water Supply System

A complete water system includes wells and pumps, transmission lines, storage facilities and booster pumps, distribution system, meters, etc. As planning and design proceed further on the Ag-Industrial Center, Cal Water will work closely with the developer, its engineers and planners, the City of Salinas and it's consultants, the CA Dept of Public Health, the Monterey County Water Resources Agency, the local fire department and

others involved with the planning, design, construction and operation of the required water facilities.

Cal Water will prepare design drawings and specifications for required new water systems for compliance with state and Cal Water standards with respect to supply and storage capacities, pipe sizes, booster pumps, fire flows, equipment, materials, communication and control systems and integration with the rest of its distribution system.

Capital costs for design and construction of the project water piping system, storage and booster pump stations are the responsibility of the developer of the Ag-Industrial Center. Capital costs for the two new well stations will be partially recovered by Cal Water through its per lot assessment fee to the developer in accordance with California Public Utility Commission (CPUC) rules.

With respect to the Salinas District, Cal Water has an ongoing capital improvement program to upgrade and improve the distribution system, replace facilities that have reached the end of their useful life, provide treatment of groundwater due to excessive nitrates, MTBE or other contaminants and provide new facilities when required and justified. Cal Water's Salinas District capital improvement program is separate from and will not include costs associated with design and construction of distribution system improvements required for the Ag-Industrial Center. However, upon transfer of ownership of new water system facilities to Cal Water by the developer, the water system will be incorporated into Cal Water's capital improvement program.

SB 610 Section 10910 Paragraph (d)(2) requires identification of existing water supply entitlements, water rights, or water service contracts held by the public water system shall be demonstrated by providing information related to all of the following:

Written contracts or proof of entitlement to an identified water supply.

Proof of entitlement to use of existing and proposed new wells cited is based on ownership of the property and wells and Cal Water's legal right to use the underlying percolated waters. Aside from the correlative water rights, Cal Water does not have any other existing water supply entitlements, water rights or water service contracts.

Copies of a capital outlay program for financing the delivery of a water supply system that has been adopted by the public water system.

Capital costs for design and construction of water distribution systems are the responsibility of the developers. The developer will also be responsible for per lot assessment fees in accordance with California Public Utility Commission (CPUC) rules to cover the cost of the water supply.

Cal Water's Salinas District capital improvement program is separate from and does not include any of the fore-mentioned costs associated with the design and construction of

new water system facilities for the Ag-Industrial Center. However, upon legal transfer of new water system facilities to Cal Water by the developer, the water system will be incorporated into Cal Water's capital improvement program.

Federal, state, and local permits for construction of necessary infrastructure associated with delivering the water supply.

For distribution system improvements, the developer will be required to obtain the necessary building permits from the City of Salinas.

If storage facilities are required to adequately serve the proposed project, Cal Water will be responsible for their design and construction and for obtaining a conditional use permit and building permit from the City of Salinas. The developer will be responsible for direct reimbursement of those costs to Cal Water.

Cal Water is highly experienced in preparing applications and obtaining the necessary permits that are needed in order to proceed with design, construction, startup and operation of water supply transmission and distribution facilities. Cal Water is familiar with approvals it must obtain from the City of Salinas, Monterey County and the California Dept of Public Health.

5. Water Supply Assessment

As shown in Table 15, Cal Water plans to increase water supply to meet forecasted demands for anticipated growth including the Ag-Industrial Center, all of the West, Central and East Area Specific Plans and all other City planned development. It design and construct 21 new wells over the next 15 years. The actual number of new wells will depend on their reliable yields. For example, three new wells with an average yield of 1,300 gpm would eliminate the need for one new well where it has been assumed that the average yield of four wells 1,000 gpm. Conversely, lower yielding wells may require additional wells in order to provide the required capacity and a reasonable surplus capacity for reliability.

SB 610 requires an assessment as to whether the proposed water supply for the Ag-Industrial Center will meet projected water demand for the next 20 years out during:

1) Normal,
2) Single dry
3) Multiple dry water years.

Figure 4 compares annual rainfall since 1980 to the average annual rainfall is shown in below. Average annual rainfall for the Salinas District is 14.6 inches. The most recent driest year occurred in 1999 when the rainfall was 79.5% of average (11.6 inches). This is taken as the single dry year. The three multiple dry-water years are based on the most recent and consecutive lowest annual rainfall totals which occurred in 2002, 2003, 2004.

Reduced rainfall in Salinas during this period coincides with similar reductions experienced in California.

Figure 4: Salinas Comparison of Annual Rainfall to Historical Average

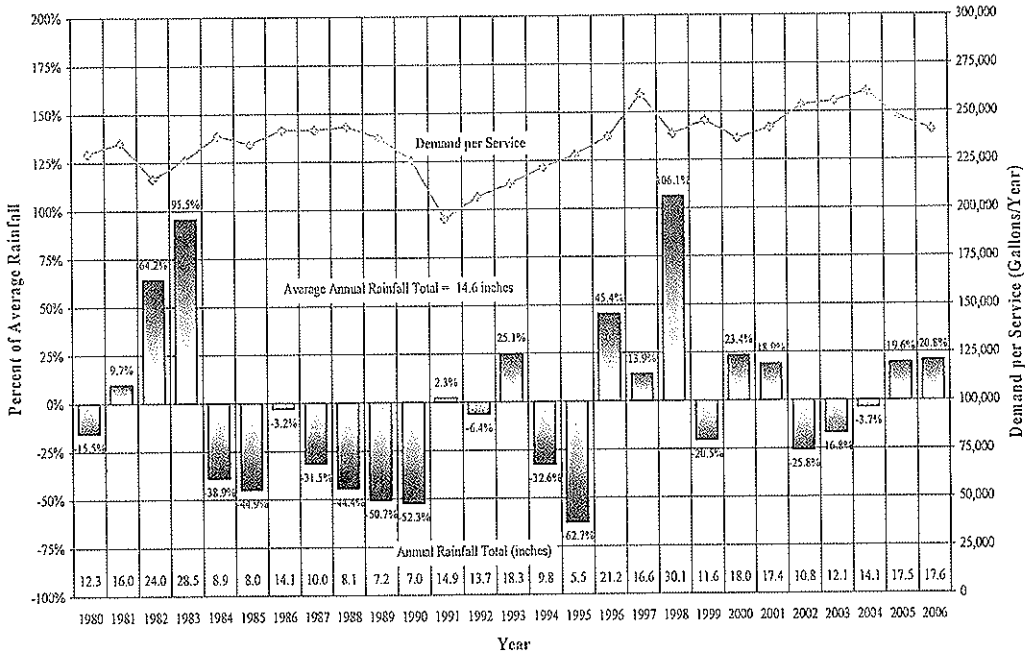


Table 17 provides a comparison of rainfall and water usage records for industrial, commercial and all customer classes combined (total) for the Salinas District:

Table 17

Salinas Rainfall Vs Industrial, Commercial and Total Usage

Year	Rainfall (Inches)	Rainfall % Of Ave*	Usage/Service: gal/day Industrial	Commercial	All Services	Classification of Year By Amount of Precipitation
1991	14.9	2.1	17,473	1,230	535	Normal
1992	13.7	-6.2	14,842	1,281	566	Slightly below Normal
1993	18.3	25.3	16,384	1,357	584	Above Normal
1994	9.8	-32.9	25,646	1,431	607	Dry
1995	5.5	-62.3	28,760	1,471	625	Very Dry
1996	21.2	45.2	24,919	1,630	651	Well Above Normal
1997	16.6	13.7	24,253	1,778	711	Slightly below Normal
1998	30.1	106.2	29,848	1,770	654	Excessively Above Normal
1999	11.6	-20.5	26,519	1,828	673	Dry
2000	18	23.3	25,102	1,858	647	Above Normal
2001	17.4	19.2	22,095	1,717	662	Above Normal
2002	10.8	-26.0	28,775	1,670	694	Dry
2003	12.1	-17.1	38,296	1,704	700	Dry
2004	14.1	-3.4	40,627	1,748	713	Normal
2005	17.5	19.9	35,773	1,662	677	Above Normal
2006	17.6	20.5	36,392	1,589	664	Above Normal

*Average Annual Rainfall: 14.6 inches

As Table 17 shows there is no apparent correlation between amount of annual rainfall and water usage for industrial, commercial and all services combined. For the period from 1999 to 2004 even though annual rainfall varied considerably:

- In 1999, with rainfall 20.5% below normal, average industrial consumption was 26,519 gallons/day/service;
- In 2000, with rainfall 23.3 % above normal, average industrial consumption was 25,102 gallons/day/service;
- In 2001, with rainfall 19.2 % above normal, average industrial consumption was 22,095 gallons/day/service;
- In 2002, with rainfall 26 % below normal, average industrial consumption was 28,775 gallons/day/service;
- In 2003, with rainfall 17.1 % below normal, average industrial consumption was 38,296 gallons/day/service;
- In 2004, with rainfall only 3.4 % below normal, average industrial consumption was 40,627 gallons/day/service.

For single dry years (1999) and multiple dry years (2002, 2003, 2004) there does not appear to be any significant changes in water usage levels with respect to what might be considered a "normal" hydrologic year.

While multiple dry years would result in a decline in ground water levels, the effect historically has not reduced the capacity of Cal Water's wells to meet service area

demands. Ground water, as previously shown, has recovered in wet years resulting in a relatively stable groundwater over decades.

Normal Hydrologic Year

In the next 10 years, wells developed by Cal Water are expected to provide an adequate reliable supply of water that meets drinking water standards. With existing wells, replacement wells, new wells, and additional pumping and storage facilities, Cal Water has a distribution system that permits water to be moved between pressure zones with excess supply capable of being moved to zones that may be at times be short of supply. In the 10 to 20 year time frame, Cal Water plans to add additional wells as previously discussed thereby providing a reliable supply to meet the projected annual average daily demand of 35,550 acre-ft/year in 2028

Table 18 presents the supply versus demand for a normal hydrologic year.

Table 18
Normal Hydrologic Year: Forecasted Supply Versus Demand (Includes Ag-Industrial Center, All of West, Central and East Specific Plans and Other City Planned Developments)

Year	Supply Capacity Acre-ft/yr	Demand Annual Average Acre-ft/yr	Difference Acre-ft/yr
2008	41,165	22,130	19,035
2013	51,430	26,770	24,660
2018	63,590	31,180	32,410
2023	74,100	34,090	40,010
2028	77,310	36,525	40,785

Single Dry Year

Based on preceding data and analysis, Cal Water estimates that the availability of Salinas area groundwater supplies will not be affected by a single dry year. As the data also shows, single dry year demand will very likely be the same as a normal hydrologic year demand. While some customers may increase landscape irrigation due to reduced precipitation, others based on water use advice and information from Cal Water may reduce consumption. Therefore, Table 19 is the same as Table 18.

Table 19
Single Dry Year: Forecasted Supply Versus Demand (Includes Ag-Industrial Center, All of West, Central and East Specific Plans and Other City Planned Developments)

Year	Supply Capacity Acre-ft/yr	Demand Annual Average Acre-ft/yr	Difference Acre-ft/yr
2008	41,165	22,130	19,035
2013	51,430	26,770	24,660
2018	63,590	31,180	32,410
2023	74,100	34,090	40,010
2028	77,310	36,525	40,785

Multiple Dry Years

Based on preceding data and analysis, Cal Water estimates that the availability of Salinas area groundwater supplies will not be significantly affected by a multiple dry year drought. The effect of pumping groundwater supplies that underlie the City of Salinas at "normal" demand levels during multiple dry years is very likely some localized area decline in groundwater levels. As groundwater level data presented in this WSA have shown, during ensuing wet periods, groundwater levels are very likely to recover to "normal" levels providing overall Salinas area pumping rates remain the same or do not significantly increase.

Nonetheless, it is conservatively assumed here that in the 3rd or 4th year of a multiple dry year period that a temporary decline in groundwater levels will reduce the overall yield of Cal Water's wells by 15%. Table 20 compares supply versus normal demand with this assumption.

Table 20
Multiple Dry Years (3rd and 4th Year): Forecasted Supply Versus Demand (Includes Ag-Industrial Center, All of West, Central and East Specific Plans and Other City Planned Developments)

Year	Supply Capacity Acre-ft/yr	Demand Annual Average Acre-ft/yr	Difference Acre-ft/yr
2008	34,990	22,130	12,860
2013	43,720	26,770	16,950
2018	54,050	31,180	22,870
2023	63,000	34,090	28,910
2028	65,710	36,525	28,185

In the event, there is a more significant decline in basin groundwater storage and hence groundwater levels in the Salinas area, Cal Water is prepared to implement its four-stage rationing plan, which is described below. The plan has both voluntary and mandatory stages. Approval from the CPUC must be obtained prior to implementation of mandatory restrictions. Table 21 is a summary of that program.

Table 21: Cal Water Demand Reduction Methods

Shortage	Stage	Demand Reduction Goal	Type Of Program
Minimum 5 - 10%	Stage 1	10% reduction	Voluntary
Moderate 10 - 20%	Stage 2	20% reduction	Voluntary or Mandatory*
Severe 20 - 35%	Stage 3	35% reduction	Mandatory*
Critical 35 - 50%	Stage 4	50% reduction	Mandatory*

* Mandatory = Allocations

The following outline lists the actions to be taken during periods when a reduction in consumption is required:

Stage 1

- California Water Service Company maintains an ongoing public information campaign consisting of distribution of literature, speaking engagements, monthly bill inserts, and conservation messages printed in local newspapers.
- Educational programs in area schools are also ongoing.

Stage 2

- California Water Service Company will aggressively continue its public information and education programs.
- Ask consumers for 10 to 20 percent voluntary or mandatory water use reductions.
- Prior to implementation of mandatory reductions, obtain approval from CPUC.
- Lobby for passage of drought ordinances by appropriate governmental agencies.

Stage 3

- Implement mandatory reductions after receiving approval from CPUC.
- Maintain rigorous public information campaign explaining water shortage conditions.
- Water use restrictions go into effect; prohibited uses can include watering resulting in gutter flooding, using a hose without shutoff device, filling of pools or fountains, etc.

- Limiting landscape irrigation by restricting the hours of the day and or days of the week during which water for irrigation can be used.
- Monitor production weekly for compliance with necessary reductions.
- Installation of a flow restrictor on the service line of customers who consistently violate water use restrictions.

Stage 4

- All of steps taken in prior stages intensified.
- Discontinuance of water service for customers consistently violating water use restrictions.
- Monitor production daily for compliance with necessary reductions.
- More restrictive conditions for, or a prohibition, of landscape irrigation

With respect to demand and supply for multiple dry years, if groundwater level declines were impacting the yield of wells, users could be required to reduce consumption. Cal Water believes that it could achieve a 10% to 20% reduction based on a voluntary reduction program (Stage 2) and 20% to 35% reduction (Stage 3) if a mandatory program is required.

For example, a 15% reduction in demand for Salinas in 2028 would amount to a decrease of 5,480 acre-ft/year or a net forecasted demand of 31,045 acre-ft/year. Even with the assumption of a loss of 30% of well output capacity, i.e., only 70% of well capacity available in 2028, so that projected well capacity was 54,120 acre-ft/yr under a multiple year drought, projected well supply capacity would still be 1.74 times greater than reduced demand or 1.48 times greater than projected 2028 "normal" demand.

6. Conclusion

Based on:

- Cal Water's plan to construct 21 new wells with approximately 21,600 gpm capacity in the next 15 years
- Cal Water's ability to supply water to the Ag-Industrial Center, the City's proposed growth areas for the West, Central and East Specific Plans and other City planned developments with water from wells within its Salinas service area,
- Cal Water's plans for supply and distributions system improvements (new and replacement wells, treatment and related transmission, storage and distribution system improvements),
- Historical Salinas area data demonstrating no diminishment in Cal Water's groundwater supply during single dry and multiple dry years,
- In-place, proven, ongoing conservation programs and best management practices for reducing demand during single and multiple dry years,

Cal Water represents that it will have adequate water supplies to meet the projected demands of the Ag-Industrial Center in addition to those of its existing customers and

other anticipated future water users as identified by the City of Salinas for the 20 year period from 2008 to 2028 under normal, single dry year and multiple dry year conditions.

7. Approval Authority

California Water Service Company's Board of Directors, by resolution, has delegated approval authority for Water Supply Assessments to two officers or Vice Presidents of the company. This WSA is approved by Michael Rossi, Vice President, Engineering and Water Quality and Paul G. Ekstrom, Vice President, Customer Service and Information Technology.

Approved:

Michael Rossi — Date: 3/11/09
Vice President, Engineering and Water Quality

Paul G. Ekstrom — Date: 3/11/09
Vice President, Customer Service and Information Technology

ED MERCURIO, BIOLOGICAL CONSULTANT
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February 29, 2008

City of Salinas
Planning and Zoning Department
200 Lincoln Avenue
Salinas, CA 93901

RE: Biolgical survey report for the Salinas Agricultural-Industrial Business Park, Abbott Street and Harris Road, Salinas, CA. APNs 177-133-004, 177-133-005, 177-133-007.

Dear Planners of the City of Salinas:

I surveyed the Salinas Agricultural-Industrial Business Park Property on February 23, 2008.

METHOD OF SURVEY

I surveyed the entire property on foot. Binoculars were used for observation of birds and other wildlife and to insure that all areas were thoroughly covered visually. The data obtained was used for this report and for the attached species list. Observations took place from afternoon through early evening.

I also quickly looked over the surrounding area adjacent to the project site to check for the presence of sensitive habitat and rare, endangered or threatened species (sensitive species) that could be indirectly impacted by this development.

THE PROPERTY AND PROJECT

The entire property is 257.7 acres in size. It is roughly rectangular in shape with its long axis oriented in a northwest to southeast direction. It has frontage on Abbott Street on its northeastern side and frontage on Harris Road on its southeastern side.

The property is currently entirely in agricultural usage for row crops. The property is proposed for development of agriculturally related industries.

ENVIRONMENTAL OVERVIEW

The geography of the property is relatively flat, valley floor. All portions of the property were plowed into rows, but were not planted, at the time of my survey with dirt roads bisecting the property along boundaries of separate fields.

I found the natural values of the property to be very low, with naturalized, non-native annual weeds dominating. Unplanted vegetation is sparse on the property and the habitat is best classified as

ruderal with some elements of the non-native grassland plant community present. Over 95 percent of the plant species present are naturalized, non-native annuals.

No plant or animal species classified as a sensitive species, or sensitive habitat, such as wetland habitats, were found on or within 100 feet of any portion of the Salinas Agricultural-Industrial Business Park Property on my survey.

SENSITIVE HABITAT

No sensitive habitat was found on or within 100 feet of the Salinas Agricultural-Industrial Business Park Property on my survey.

The closest areas of sensitive habitat to the property are wetland habitats such as the riparian habitat bordering the Salinas River, which reaches its closest approach to the property approximately 1.75 miles to the south. There are also some drainage ditches and agricultural reservoirs to the north and east of the property that could potentially contain some wetland habitat. The most likely possibilities for this are close to or over two miles to the east.

There used to be some riparian habitat along the course of the nearby Alisal Slough, which is actually an alternate channel of the Salinas River to the north and east of its primary channel. A bend of the Alisal Slough used to border the southwestern corner of the property, but all that is now left of it are some low areas that are in the process of being filled. I did not observe any wetland habitat in these low areas, although they contained water, due to recent heavy rains, at the time of my survey. Since the course of most of the Alisal Slough is through what is now prime agricultural land and the City of Salinas, it has largely been filled and most of its original path is difficult to locate.

SENSITIVE PLANT SPECIES

No sensitive plant species were observed on or within 100 feet of the Salinas Agricultural-Industrial Business Park Property on my survey.

California Department of Fish and Game Natural Diversity Data Base records for the Salinas Quadrangle and Natividad Quadrangle and surrounding areas do not show any records for sensitive plant species on the property.

The following are records for sensitive plant species from the current California Department of Fish and Game Natural Diversity Data Base for the Salinas Quadrangle and Natividad Quadrangle and surrounding areas that could possibly exist in the habitats present on the Salinas Agricultural-Industrial Business Park Property.

1. Congdon's tarplant *(Centromadia parryi* ssp*. congdonii).* The closest records for this plant are present at approximately 3.9 miles to the southeast, approximately 4.6 miles to the southeast, approximately 3.8 miles to the east-northeast and approximately .9 miles to the north-northwest of the property. Congdon's tarplant is only found in relatively level grassland areas in the central coast area. It is threatened by continuing development. It is

a federal species of special concern and is on the California Native Plant Society's list 1B, which includes plants rare, threatened and endangered in California and elsewhere.

2. Alkali milk vetch (*Astragulus tener* var. *tener*). A record for this plant is present at approximately 2.5 miles to the north-northwest. This record is from 1889 and this population is likely to be extinct since the natural habitat that once supported this occurrence has been almost entirely replaced by urban and agricultural environments. This plant is also threatened by continuing development and is also on the California Native Plant Society's list 1B.

These plants were specifically searched for on the property and none were found.

Most of the other sensitive plant species found on the Salinas Quadrangle and Natividad Quadrangle and surrounding areas have records that are farther away from the property and are less likely to be present in the habitats present on it. Many of them are found in the central maritime chaparral plant community which is most commonly found on the sandy soils of the Fort Ord area and north Monterey County and are not likely to be present in valley floor habitats like that of the project site.

All sensitive plant species that have been found on the Salinas Quadrangle and surrounding area were thoroughly searched for in my survey as were other sensitive plant species known to occur in the greater local area from California Department of Fish and Game Natural Diversity Data Base records and from occurrences known to myself and other botanists familiar with the local area.

SENSITIVE ANIMAL SPECIES

No sensitive animal species were observed on or within 100 feet of the Salinas Agricultural-Industrial Business Park Property on my survey.

California Department of Fish and Game Natural Diversity Data Base records for the Salinas Quadrangle and Natividad Quadrangle and surrounding areas do not show any records for sensitive animal species on the property.

The only sensitive animal species with California Department of Fish and Game Natural Diversity Data Base records for the Salinas Quadrangle and Natividad Quadrangle and surrounding areas within a three-mile radius of the property is the burrowing owl *(Athene cunicularia)*. The closest records for this species to the Salinas Agricultural-Industrial Business Park Property are approximately .7 mile to the northeast around the Salinas Municipal Airport, 2.5 miles to the northeast and 3 miles to the northwest.

Burrowing owls are found in and around the Salinas Valley, usually in association with California ground squirrel colonies since they use their abandoned burrows for nesting sites. None were observed on my survey. It is not likely that they would be nesting on the on the property since no California ground squirrel colonies or other suitable nesting areas were found on the property. The property does not contain optimum habitat for foraging by burrowing owls, but numerous burrows of valley pocket gophers and other rodents were observed on some of the berms between fields and these could potentially serve as food for burrowing owls and other predatory birds.

Burrowing owls are not a state or federally listed species. They are, however, classified as a Species of Special Concern by the California Department of Fish and Game, a Bird of Conservation Concern by the United Stated Fish and Wildlife Service, a Sensitive Species by the Bureau of Land Management and a Threatened Species by the International Union for Conservation of Nature and Natural Resources. Burrowing owls are declining in numbers in Monterey County due to such impacts as development of their nesting and foraging areas and predation by the introduced red fox, cats and dogs and other predators. They are now quite rare in northern Monterey County but are still locally abundant in some areas of south Monterey County.

There are three listed species of amphibians that have been found in and near wetland habitats in Monterey County. These species are the California red-legged frog *(Rana aurora draytonii),* which is federally listed as threatened and is a state species of special concern, the California tiger salamander *(Ambystoma tigrinum californiense*), which is federally listed as threatened and the Santa Cruz long-toed salamander *(Ambystoma macrodactylum croceum),* which is listed as endangered by both the state and federal governments.

It is unlikely that they could be present on the Salinas Agricultural-Industrial Business Park Property since wetland habitat is not present on the property, but wetland habitat is present along the Salinas River approximately 1.75 miles to the south and others may be present within a two-mile radius. Dispersal of these amphibians to the project property from any suitable habitat would be highly unlikely due to the inhospitable terrain of intensively farmed agricultural land, roads, businesses and Highway 101 that would have to be crossed to get to it.

The California red-legged frog and the California tiger salamander are much more likely to be present in suitable habitats in this area than the Santa Cruz long-toed salamander. Temporary as well as permanent water sources can serve as breeding areas for these amphibians. No evidence of these amphibians was observed on my visual search of the terrestrial habitats on the property for adults.

There are several other significant animal species with ranges that include the local area that are not state or federally listed, but are classified by various agencies as species of special concern, protected or sensitive species. Some of these are candidates for listing and many are simply uncommon and/or restricted in distribution. These species are the western pond turtle *(Clemmys marmorata),* California legless lizard *(Anniella pulchra pulchra),* California horned lizard *(Phrynosoma coronatum frontale)*, two-striped garter snake *(Thamnophis hammondii),* white-tailed kite *(Elanus leucurus),* tricolored blackbird *(Agelaius tricolor),* ornate shrew *(Sorex ornatus)*, pallid bat *(Antrozous pallidus)*, Monterey dusky-footed woodrat *(neotoma fuscipes luciana)*, and badger *(Taxidea taxus)*.

California legless lizards and more rarely, California horned lizards, are occasionally found in Monterey County. California legless lizards burrow in loose, sandy soils. They are highly secretive and difficult to find but appear to be widespread in sandy soils, such as those of active and prehistoric sand dunes, which are widespread in north Monterey County. Neither of these reptiles was found on my survey and they are unlikely to be present in the heavy, fine-grained, adobe type soil that I observed on the Salinas Agricultural-Industrial Business Park Property.

No evidence of two-striped garter snakes or of other sensitive species of reptiles was found on my survey. Dead vegetation and other refuse was turned over in my search for these and other animals.

No Monterey dusky-footed woodrat nests were found on my field survey. They are most likely to be present in coast live oak forest habitat, which is not present on the Salinas Agricultural-Industrial Business Park Property.

No evidence for the presence of badgers was observed on the property. They are occasionally reported in the more rural areas of Monterey County.

IMPACTS AND MITIGATION MEASURES

Impacts to biological values on the property from this project will be minimal. All development and construction related disturbance will be on areas with very low biological values that are highly disturbed from ongoing, intensive row-crop agriculture. No sensitive habitat or sensitive plant or animal species were observed on my survey on or within 100 feet of the Salinas Agricultural-Industrial Business Park Property.

MONITORING AND ADDITIONAL WORK

Monitoring inspections will not be necessary on this property due to the low level of impacts to biological values present on the property produced by the proposed development.

A spring survey of biological resources will not be necessary since the survey for preparation of the species list was done in late February of a wet year and the significant elements of the local annual flora were identifiable.

RECOMMENDATIONS ON THE PROJECT

The project proposed for the Salinas Agricultural-Industrial Business Park Property is consistent with the biological values present. Impacts of the proposed development will be a level of insignificance and the proposed project is in compliance with the regulations and standards of the City of Salinas concerning biological values and county, state and federal agencies concerned with the maintenance of habitat quality and protection of biological resources.

Please call me if you have any questions.

Ed Mercurio
Biological Consultant