



County of Santa Cruz

PLANNING DEPARTMENT

701 OCEAN STREET, 4TH FLOOR, SANTA CRUZ, CA 95060
(831) 454-2580 FAX: (831) 454-2131

KATHLEEN MOLLOY, PLANNING DIRECTOR

www.sccoplanning.com

NOTICE OF INTENT TO ADOPT A NEGATIVE DECLARATION

NOTICE OF PUBLIC REVIEW AND COMMENT PERIOD

Pursuant to the California Environmental Quality Act, the following project has been reviewed by the County Environmental Coordinator to determine if it has a potential to create significant impacts to the environment and, if so, how such impacts could be solved. A Negative Declaration is prepared in cases where the project is determined not to have any significant environmental impacts. Either a Mitigated Negative Declaration or Environmental Impact Report (EIR) is prepared for projects that may result in a significant impact to the environment.

Public review periods are provided for these Environmental Determinations according to the requirements of the County Environmental Review Guidelines. The environmental document is available for review at the County Planning Department located at 701 Ocean Street, in Santa Cruz. You may also view the environmental document on the web at www.sccoplanning.com under the Planning Department menu. If you have questions or comments about this Notice of Intent, please contact Matt Johnston of the Environmental Review staff at (831) 454-5357.

The County of Santa Cruz does not discriminate on the basis of disability, and no person shall, by reason of a disability, be denied the benefits of its services, programs or activities. If you require special assistance in order to review this information, please contact Bernice Shawver at (831) 454-3137 to make arrangements.

PROJECT: Sunland Garden Products

APP #: 181155

APN: 109-231-09

PROJECT DESCRIPTION: The project is a proposal to construct a 9,900 square foot non-habitable enclosure over an existing soil mixing operation (Sunland Garden Products). The project intends to address issues pertaining to noise and dust by way of enclosing portions of an existing soil mixing line and address stormwater quality issues by way of installing comprehensive stormwater management plan for the project site.

PROJECT LOCATION: The project is located on the north west corner of intersection of Green Valley Road and Pioneer Road at the southern border of the Eureka Canyon Planning area in unincorporated Santa Cruz County. Santa Cruz County is bounded on the north by San Mateo County, on the south by Monterey and San Benito Counties, on the east by Santa Clara County, and on the south and west by the Monterey Bay and the Pacific Ocean.

APPLICANT/OWNER: Grace Gurreri, Design Evolution for Melissa Berger

PROJECT PLANNER: Nathan MacBeth, (831) 454-3118

EMAIL: Nathan.MacBeth@santacruzcounty.us

ACTION: Negative Declaration

REVIEW PERIOD: July 15, 2020 through August 14, 2020

This project will be considered at a public hearing before the Zoning Administrator. The time, date and location have not been set. When scheduling does occur, these items will be included in all public hearing notices for the project.



COUNTY OF SANTA CRUZ

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KATHLEEN MOLLOY, PLANNING DIRECTOR

<http://www.sccoplanning.com/>

NEGATIVE DECLARATION

Project: Sunland Garden Products

APPLICATION #: 181155

APN: 109-231-09

Project Description: The project is a proposal to construct a 9,900 square foot non-habitable enclosure over an existing soil mixing operation (Sunland Garden Products). The project intends to address issues pertaining to noise and dust by way of enclosing portions of an existing soil mixing line and address stormwater quality issues by way of installing comprehensive stormwater management plan for the project site.

Project Location: The project is located on the north west corner of intersection of Green Valley Road and Pioneer Road at the southern border of the Eureka Canyon Planning area in unincorporated Santa Cruz County. Santa Cruz County is bounded on the north by San Mateo County, on the south by Monterey and San Benito Counties, on the east by Santa Clara County, and on the south and west by the Monterey Bay and the Pacific Ocean.

Owner: Melissa Berger

Applicant: Grace Gurreri, Design Evolution

Staff Planner: Nathan MacBeth, (831) 454-3118

Email: Nathan.MacBeth@santacruzcounty.us

This project will be considered at a public hearing before the Zoning Administrator. The time, date and location have not been set. When scheduling does occur, these items will be included in all public hearing notices for the project

California Environmental Quality Act Negative Declaration Findings:

Find, that this Negative Declaration reflects the decision-making body's independent judgment and analysis, and; that the decision-making body has reviewed and considered the information contained in this Negative Declaration and the comments received during the public review period, and; on the basis of the whole record before the decision-making body (including this Negative Declaration) that there is no substantial evidence that the project will have a significant effect on the environment. The expected environmental impacts of the project are documented in the attached Initial Study on file with the County of Santa Cruz Clerk of the Board located at 701 Ocean Street, 5th Floor, Santa Cruz, California.

Review Period Ends: August 14, 2020

Date: _____

MATT JOHNSTON, Environmental Coordinator
(831) 454-5357



County of Santa Cruz

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KATHLEEN MOLLOY, PLANNING DIRECTOR

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CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) INITIAL STUDY/ENVIRONMENTAL CHECKLIST

Date: June 3, 2020 **Application Number:** 181155
Project Name: Sunland Garden Products **Staff Planner:** Nathan MacBeth

I. OVERVIEW AND ENVIRONMENTAL DETERMINATION

APPLICANT: Grace Gurreri, Design Evolution **APN(s):** 109-231-09

OWNER: Melissa Berger **SUPERVISORAL DISTRICT:** Second District

PROJECT LOCATION: The project is located on the north west corner of intersection of Green Valley Road and Pioneer Road at the southern border of the Eureka Canyon Planning are in unincorporated Santa Cruz County. Santa Cruz County is bounded on the north by San Mateo County, on the south by Monterey and San Benito counties, on the east by Santa Clara County, and on the south and west by the Monterey Bay and the Pacific Ocean.

SUMMARY PROJECT DESCRIPTION:

This is a proposal to construct a 9,900 square foot non-habitable enclosure over an existing soil mixing operation (Sunland Garden Products). The project intends to address issues pertaining to noise and dust by way of enclosing portions of an existing soil mixing line and address stormwater quality issues by way of installing comprehensive stormwater management plan for the project site.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: *All of the following potential environmental impacts are evaluated in this Initial Study. Categories that are marked have been analyzed in greater detail based on project specific information.*

- | | |
|--|--|
| <input type="checkbox"/> Aesthetics and Visual Resources | <input type="checkbox"/> Mineral Resources |
| <input checked="" type="checkbox"/> Agriculture and Forestry Resources | <input checked="" type="checkbox"/> Noise |
| <input checked="" type="checkbox"/> Air Quality | <input type="checkbox"/> Population and Housing |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Public Services |
| <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Transportation |
| <input checked="" type="checkbox"/> Geology and Soils | <input type="checkbox"/> Tribal Cultural Resources |

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: *All of the following potential environmental impacts are evaluated in this Initial Study. Categories that are marked have been analyzed in greater detail based on project specific information.*

- | | |
|--|---|
| <input type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Utilities and Service Systems |
| <input checked="" type="checkbox"/> Hazards and Hazardous Materials | <input type="checkbox"/> Wildfire |
| <input checked="" type="checkbox"/> Hydrology/Water Supply/Water Quality | <input type="checkbox"/> Mandatory Findings of Significance |
| <input type="checkbox"/> Land Use and Planning | |

DISCRETIONARY APPROVAL(S) BEING CONSIDERED:

- | | |
|--|---|
| <input type="checkbox"/> General Plan Amendment | <input type="checkbox"/> Coastal Development Permit |
| <input type="checkbox"/> Land Division | <input checked="" type="checkbox"/> Grading Permit |
| <input type="checkbox"/> Rezoning | <input type="checkbox"/> Riparian Exception |
| <input checked="" type="checkbox"/> Development Permit | <input type="checkbox"/> LAFCO Annexation |
| <input type="checkbox"/> Sewer Connection Permit | <input type="checkbox"/> Other: |

OTHER PUBLIC AGENCIES WHOSE APPROVAL IS REQUIRED (e.g., permits, financing approval, or participation agreement):

<u>Permit Type/Action</u>	<u>Agency</u>
Permit to Operate – Soil Blending Facility	Monterey Bay Air Resources District (MBARD)
Aboveground Petroleum Storage & Generator	County of Santa Cruz, Environmental Health Services
Industrial Stormwater Permit	State Water Resources Control Board (SWRCB)

CONSULTATION WITH NATIVE AMERICAN TRIBES: *Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?*

No California Native American tribes traditionally and culturally affiliated with the area of Santa Cruz County have requested consultation pursuant to Public Resources Code section 21080.3.1.

DETERMINATION:

On the basis of this initial evaluation:

- 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 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 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. 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.



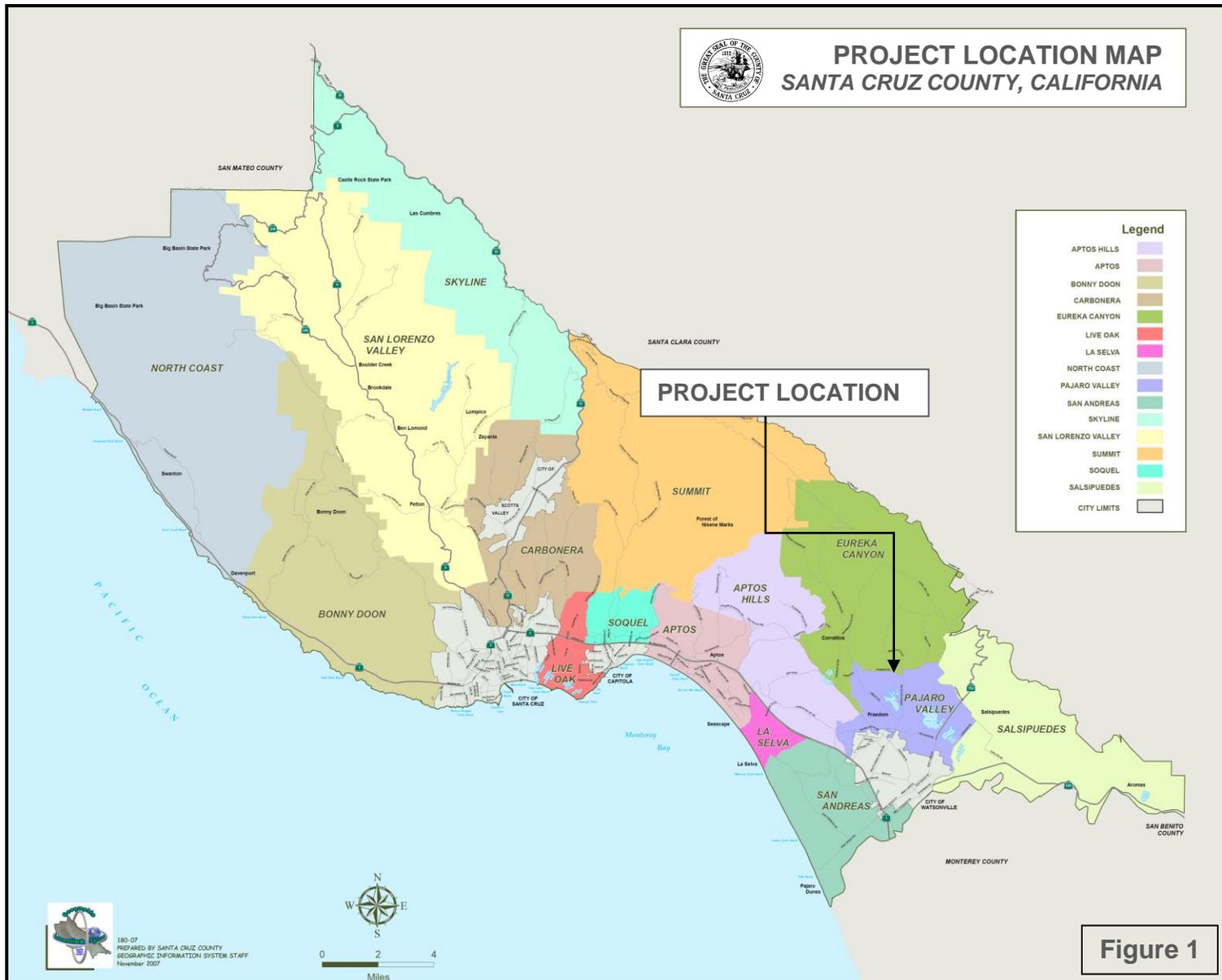
MATT JOHNSTON, Environmental Coordinator

7/1/2020

Date

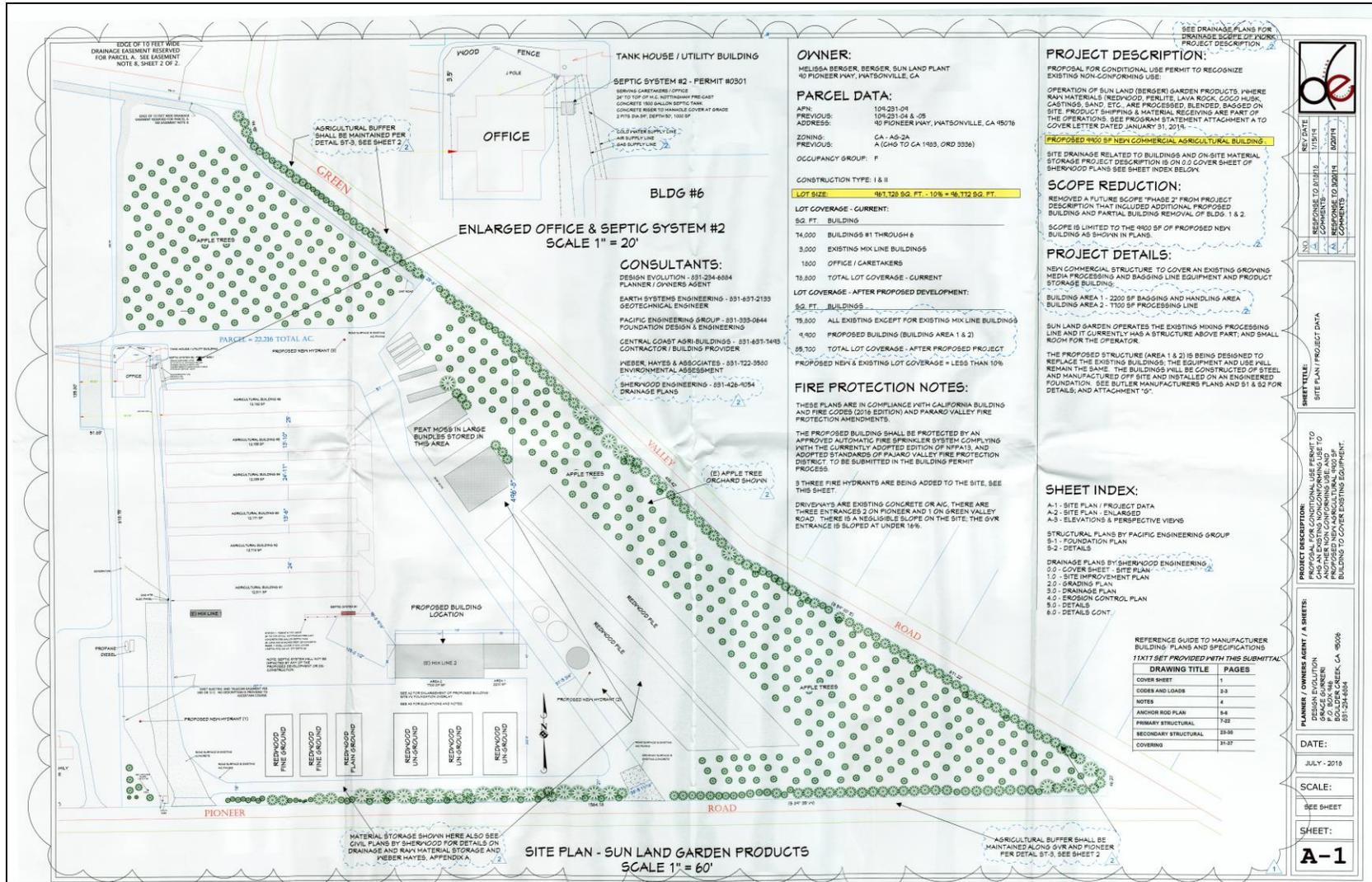


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Project Site Plan

Figure 2



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II. BACKGROUND INFORMATION

EXISTING SITE CONDITIONS:

Parcel Size (acres): Approximately 22 acres
 Existing Land Use: Agricultural Support
 Vegetation: Agricultural Buffer
 Slope in area affected by project: 0 - 30% 31 – 100% N/A
 Nearby Watercourse: Green Valley Creek
 Distance To: 965 Feet north of project site

ENVIRONMENTAL RESOURCES AND CONSTRAINTS:

Water Supply Watershed:	N/A	Fault Zone:	N/A
Groundwater Recharge:	N/A	Scenic Corridor:	N/A
Timber or Mineral:	N/A	Historic:	N/A
Agricultural Resource:	AG-2A	Archaeology:	Mapped Resource
Biologically Sensitive Habitat:	N/A	Noise Constraint:	N/A
Fire Hazard:	N/A	Electric Power Lines:	N/A
Floodplain:	N/A	Solar Access:	Available
Erosion:	N/A	Solar Orientation:	Southern exposure
Landslide:	N/A	Hazardous Materials:	N/A
Liquefaction:	Low	Other:	N/A

SERVICES:

Fire Protection:	Pajaro Valley	Drainage District:	Outside
School District:	Pajaro Valley	Project Access:	Pioneer Road and Green Valley Road
Sewage Disposal:	Septic	Water Supply:	Private well

PLANNING POLICIES:

Zone District: Commercial Ag
 General Plan: Agriculture
 Urban Services Line: Inside Outside
 Coastal Zone: Inside Outside
 Special Designation: N/A

ENVIRONMENTAL SETTING AND SURROUNDING LAND USES:

Natural Environment

Santa Cruz County is uniquely situated along the northern end of Monterey Bay approximately 55 miles south of the City of San Francisco along the Central Coast. The Pacific Ocean and Monterey Bay to the west and south, the mountains inland, and the prime agricultural lands along both the northern and southern coast of the county create limitations on the style and amount of building that can take place. Simultaneously, these natural features create an environment that attracts both visitors and new residents every year. The natural landscape provides the basic features that set Santa Cruz apart from the surrounding counties and require specific accommodations to ensure building is done in a safe, responsible and environmentally respectful manner.

The California Coastal Zone affects nearly one third of the land in the urbanized area of the unincorporated County with special restrictions, regulations, and processing procedures required for development within that area. Steep hillsides require extensive review and engineering to ensure that slopes remain stable, buildings are safe, and water quality is not impacted by increased erosion. The farmland in Santa Cruz County is among the best in the world, and the agriculture industry is a primary economic generator for the County. Preserving this industry in the face of population growth requires that soils best suited to commercial agriculture remain active in crop production rather than converting to other land uses.

The project site is relatively flat in topography and located in an area containing a mix of Commercial Agricultural operations and residential uses. Though Commercial Agriculture tends to be the primary use of the surrounding area, several residentially zoned properties existing in the near vicinity of the project, approximately 500 feet to the east along Green Valley Road.

The project site is primarily devoid of vegetation with the exception of an agricultural setback reduction buffer along the south and east property lines and approximately 6.5 acres of apple orchard along the east and north property lines.

PROJECT BACKGROUND:

The subject property is developed with an existing soil mixing operation dating back to the 1970s. The existing use of the site is considered an Agricultural Service Establishment, a use that is not allowed in the Commercial Agricultural (CA) zone district however, the use of the site was legally established prior to current code requirements and is considered non-conforming use pursuant to County Code. The project site contains a number of structures including, office, storage structures (formerly chicken coops) stockpile areas for various soil amendments, and two soil mixing lines.

Several permits have been issued over the years for maintenance of an existing caretakers quarters/office. A Permit to Operate a Soil blending facility has been issued by the Monterey Bay Air Resources District and permits to maintain an aboveground petroleum storage tank and operation of a generator have been issued by County of Santa Cruz Department of Environmental Health Services.

Existing activity on the project site consists of the receipt of raw materials consisting of soil mixes in the form of dry fertilizers, peat moss, perlite, lava rock, redwood chips, dolomite, coco husk, worm castings and sand. The materials are stockpiled onsite in a combination of outdoor storage areas and within the existing storage buildings dependent on the type and quantity of material. Front loaders and forklifts are used to move the bulk materials around the project site. The raw materials are mixed using one of two mixing lines consisting of a peat moss grinder, chopping mixer and bagging line. The finished soil products are bagged for local and regional distribution to a number of large and small-scale agricultural farming operations using semi-trucks.

No valid complaints or code violations have been recorded on the project site however, the facility operator has indicated receipt of noise and air quality complaints associated with the mixing of soil and operation of the facility. Additional air quality concerns have been raised by adjoining residents during the preparation of this analysis.

An Agricultural Buffer Setback Reduction was approved in 1974 (74-1040-U) and subsequently renewed under 82-41-U, 91-0007, and 94-0579 requiring permanent maintenance of dense vegetation along the south and east side of the subject property to minimize Agricultural and Residential use conflicts. Currently, the required vegetative buffer is in relatively good condition and in conformance with the approved buffer. Additionally, a portion of the subject parcel continues to be designated to the use as an apple orchard which is consistent with the historic use of the site. The portions of the parcel that remain designated to growing apples are located along the north and east property lines.

DETAILED PROJECT DESCRIPTION:

The project proposes to construct a 9,900 square foot detached non-habitable enclosure over an existing outdoor soil mixing line containing a peat moss grinder located at the southern portion of the parcel. As indicated in Figure 2 (Above) the location of the proposed structure would be in the same location as the existing mixing line and situated between the two access drives to the subject parcel from Pioneer Road. The existing mixing line is situated on top of an existing concrete slab and surrounding be a combination of concrete and asphalt pavement. No new utilities are required to serve the proposed structure. The project would include approximately 1000 cubic yards of grading for site preparation and installation of proposed drainage improvements. The project will include implementation of a comprehensive stormwater management plan during construction of the proposed structure and long-term operation of the facility.

As proposed, the structure would comply with the site standards for the CA zone district including the minimum 20-foot setback and maximum allowed height of 40 feet for structures. The project would be conditioned to meet all requirements of the Pajaro Valley Fire Protection District including installation of three fire hydrants at the access points to the project site and all structures would be required to comply with Fire district standards as appropriate. The project has been reviewed by Environmental Health Services and the Department of Public Works Stormwater Management to ensure compliance with district standards.

As proposed, the non-habitable structure would not result in increased vehicle trips associated with the existing operation of the facility. No changes to the programmatic operation are proposed which would expand existing hours of operation, Monday – Friday 7:30am to 3:30pm and closed on weekends and holidays or result in an increase to the current 22 Office and Site Operation employees.

The existing Agricultural Support Facility – Soil Blending Operation on the project site has been in operation for over 30 years. The proposal intends to bring the existing operation into greater conformance with current requirements and alleviate potential for future noise, air quality and stormwater management complaints associated with the existing use.

III. ENVIRONMENTAL REVIEW CHECKLIST

A. AESTHETICS AND VISUAL RESOURCES

Except as provided in Public Resources Code section 21099, would the project:

1. Have a substantial adverse effect on a scenic vista?

Discussion: The project is located in the Eureka Canyon Planning Area at the border with the Pajaro Valley Planning. The project area consists of large agricultural parcels and low to very low residential densities. The project site is relatively flat in topography and several streams and drainage ways existing in the vicinity of the project. Large trees and dense vegetation limit views of the project site to the main entrances located off Green Valley Road and Pioneer Road, neither of which are County designated scenic roads. The project would not directly impact any public scenic vistas in the area.

2. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Discussion: The project site is not located along a designated state scenic highway, a County-designated scenic road, public viewshed area, scenic corridor, or scenic resource area. Therefore, no impact is anticipated.

3. Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Discussion: The existing visual setting consists of large agricultural parcels and low to very low residential densities. The project site is relatively flat in topography and several streams and drainage ways exist in the vicinity of the project. Large trees and dense vegetation limit views of the project site to the main entrances located off Green Valley Road and Pioneer Road, neither of which are County designated scenic roads. The proposed agricultural support structure (soil mixing enclosure) would comply with all site standards for the zone district. The project site is currently developed with several other agricultural structures of similar size. The proposed design is consistent with the design and style of the other structures on site. Though no scenic vistas exist in the vicinity of the project, the site is currently and would remain be visible from Green Valley Road and Pioneer Road.

Impacts to visual resources would be less than significant.

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 4. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: The project does not include a source of light and would not affect either day or nighttime views in the area.

B. AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 1. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: The project site contains AG-2A soils, 0-30% slopes, designated as Prime Farmland (California Department of Conservation, 1980). The project site is developed for an existing agricultural soil mixing operation, an agricultural use, which prepares soil mixtures for bulk regional distribution to nearby farming operations. The development includes an existing modular building used as an office/caretaker quarters and conference room situated at the north west corner of the property, seven existing outbuildings buildings which contain a combination of soil amendments, storage, employee breakroom and packaging area cover the middle of the project site. A soil mixing system and associated mechanical equipment is located at the southern portion of the site. Several stockpile areas for outdoor storage of various soil amendments exist at the south and east side of the property as depicted on the Site Plan (Figure 2). Though the project site is shown on maps as an agricultural resource, very little of the project site (approximately 6.3 acres) located at the north and east sides, is actively being farmed. The proposed non-habitable enclosure would accommodate the existing agricultural use. Though the project intends to construct a permanent structure, development would occur in an area that was previously disturbed

and contains the existing soil mixing equipment. The project does not propose removal of any existing vegetation or disturbance of areas that are currently being farmed. The project would be consistent with an approved agricultural buffer setback reduction, Application 90-0617, on file with the Planning Department, to ensure the project would not result in adverse impacts to properties in the vicinity. Therefore, no Prime Farmland, Unique Farmland, Farmland of Statewide or Farmland of Local Importance would be converted to a non-agricultural use and no impact would occur from project implementation.

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 2. <i>Conflict with existing zoning for agricultural use, or a Williamson Act contract?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: See Discussion under B-1 above. The project site is zoned Commercial Agriculture (CA), contains an existing agricultural use, and the project site's land is not under a Williamson Act contract. Therefore, the project does not conflict with existing zoning for agricultural use, or a Williamson Act contract. No impact is anticipated.

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 3. <i>Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: The project is not located near land designated as Timber Resource. Therefore, the project would not affect the resource or access to harvest the resource in the future. The timber resource may only be harvested in accordance with California Department of Forestry timber harvest rules and regulations.

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 4. <i>Result in the loss of forest land or conversion of forest land to non-forest use?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: No forest land occurs on the project site or in the immediate vicinity. See discussion under B-3 above. No impact is anticipated.

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 5. <i>Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: See discussion under B-1 above. No impact would occur.

C. AIR QUALITY

The significance criteria established by the Monterey Bay Air Resources District (MBARD)¹ has been relied upon to make the following determinations. Would the project:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 1. Conflict with or obstruct implementation of the applicable air quality plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion: The project would not conflict with or obstruct any long-range air quality plans of the MBARD. General construction activity related emissions (i.e., temporary sources) are accounted for in the emission inventories included in the air quality plans. Further, the proposed grading for site preparation and installation of the drainage improvements would be below the standards set by MBARD. Therefore, impacts to air quality plan objectives are less than significant.

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 2. Result in a 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion: The primary pollutants of concern for the NCCAB are ozone and PM₁₀, as those are the pollutants for which the district is in nonattainment. Project construction would have a limited and temporary potential to contribute to existing violations of California air quality standards for ozone and PM₁₀ primarily through diesel engine exhaust and fugitive dust. The criteria for assessing cumulative impacts on localized air quality are the same as those for assessing individual project impacts. Projects that do not exceed MBARD’s construction or operational thresholds and are consistent with the AQMP would not have cumulatively considerable impacts on regional air quality (MBARD, 2008). Because the project would not exceed MBARD’s thresholds and is consistent with the AQMP, there would not be cumulative impacts on regional air quality.

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 3. Expose sensitive receptors to substantial pollutant concentrations? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion: The project is located in an area containing both Commercial Agriculture and residential uses. The nearest residential use is approximately 500 feet to the east of the location of the proposed structure. The proposed non-habitable structure would not generate substantial pollutant concentrations. Emissions from construction activities

¹ Formerly known as the Monterey Bay Unified Air Pollution Control District (MBUAPCD).

represent temporary impacts that are typically short in duration. Further, no grading is required for installation of the proposed structure however, approximately 1,000 cubic yards of grading would be required for site preparation and installation of the stormwater improvements. Impacts to sensitive receptors would be less than significant.

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 4. <i>Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion: Land uses typically producing objectionable odors include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project does not propose and increase in any uses that would be associated with objectionable odors. Odor emissions from the proposed project would be limited to odors the construction phase and associated with vehicle and engine exhaust and idling from cars entering, parking, and exiting the facility. The proposed non-habitable enclosure does not include any known sources of objectionable odors associated with the long-term operations phase.

During construction activities, only short-term, temporary odors from vehicle exhaust and construction equipment engines would occur. California ultralow sulfur diesel fuel with a maximum sulfur content of 15 ppm by weight would be used in all diesel-powered equipment, which minimizes emissions of sulfurous gases (sulfur dioxide, hydrogen sulfide, carbon disulfide, and carbonyl sulfide). As the project site is in a coastal area that contains coastal breezes off of the Monterey Bay, construction-related odors would disperse and dissipate and would not cause substantial odors at the closest sensitive receptors (located approximately 500 feet to the east of the project site). Construction-related odors would be short-term and would cease upon completion. Therefore, no objectionable odors are anticipated from construction activities associated with the project.

The project would not create objectionable odors affecting a substantial number of people; therefore, the project is not expected to result in significant impacts related to objectionable odors during construction or operation.

D. BIOLOGICAL RESOURCES

Would the project:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 1. <i>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 Wildlife, or U.S. Fish and Wildlife</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Service?

Discussion: Habitat for Special Status Species does not occur on the project site. A query was conducted of the California Natural Diversity Database (CNDDDB), maintained by the California Department of Fish and Wildlife, and there are no records of special status plant or animal species within the project site or in the vicinity of the project parcel. No special status species have been observed in the project area.

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 2. <i>Have a substantial adverse effect on any riparian habitat or sensitive natural community identified in local or regional plans, policies, regulations (e.g., wetland, native grassland, special forests, intertidal zone, etc.) or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: There is no mapped or designated riparian habitat or other sensitive natural community on or adjacent to the project site.

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 3. <i>Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: There are no mapped or designated federally protected wetlands on or adjacent to the project site. Therefore, no impacts would occur from project implementation.

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 4. <i>Interfere substantially with the movement of any native resident or migratory fish or wildlife species or migratory wildlife corridors, or impede the use of native wildlife nursery sites?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: The project does not involve any activities that would interfere with the movements or migrations of fish or wildlife or impede use of a known wildlife nursery site.

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|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 5. <i>Conflict with any local policies or ordinances protecting biological resources (such as the Sensitive Habitat Ordinance, Riparian and Wetland Protection Ordinance, and the Significant Tree Protection Ordinance)?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: The project would not conflict with any local policies or ordinances.

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|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 6. <i>Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: The project would not conflict with the provisions of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, no impact would occur.

E. CULTURAL RESOURCES

Would the project:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 1. <i>Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: The existing structure(s) on the property is/are not designated as a historic resource on any federal, state or local inventory. As a result, no impacts to historical resources would occur from project implementation.

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 2. <i>Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion: According to the Archaeological Survey Report prepared by Albion, dated June 2019 (Attachment 1), there is no evidence of pre-historic cultural resources. However, pursuant to section 16.40.040 of the SCCC, if archeological resources are uncovered during construction, the responsible persons shall immediately cease and desist from all further site excavation and comply with the notification procedures given in SCCC Chapter 16.40.040.

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 3. <i>Disturb any human remains, including those interred outside of dedicated cemeteries?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion: Impacts are expected to be less than significant. However, pursuant to section 16.40.040 of the SCCC, and California Health and Safety Code sections 7050.5-7054, if at any time during site preparation, excavation, or other ground disturbance associated with this project, human remains are discovered, the responsible persons shall immediately cease and desist from all further site excavation and notify the Sheriff-Coroner and the

Planning Director. If the coroner determines that the remains are not of recent origin, a full archaeological report shall be prepared, and representatives of local Native American Indian groups shall be contacted. If it is determined that the remains are Native American, the Native American Heritage Commission will be notified as required by law. The Commission will designate a Most Likely Descendant who will be authorized to provide recommendations for management of the Native American human remains. Pursuant to Public Resources Code section 5097, the descendants shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. Disturbance shall not resume until the significance of the resource is determined and appropriate mitigations to preserve the resource on the site are established.

F. ENERGY

Would the project:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 1. <i>Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: The project, like all development, would be responsible for an incremental increase in the consumption of energy resources during site grading and construction due to onsite construction equipment, material processing during the construction phase. All project construction equipment would be required to comply with the California Air Resources Board (CARB) emissions requirements for construction equipment, which includes measures to reduce fuel-consumption, such as imposing limits on idling and requiring older engines and equipment to be retired, replaced, or repowered. In addition, the project would comply with General Plan policy 8.2.2, which requires all new development to be sited and designed to minimize site disturbance and grading. As a result, impacts associated with the small temporary increase in consumption of fuel during construction are expected to be less than significant.

The project involves the construction of a 9,900 square foot non-habitable accessory structure to cover existing soil mixing equipment. Approximately 1,000 cubic yards of grading is necessary for site preparation and the installation of the proposed stormwater improvements. No other utilities are required for the long term operation of the project. Therefore, the project will not result in wasteful, inefficient, or unnecessary consumption of energy resources.

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 2. <i>Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion: AMBAG’s 2040 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) recommends policies that achieve statewide goals established by CARB, the California Transportation Plan 2040, and other transportation-related policies and state senate bills. The SCS element of the MTP targets transportation-related greenhouse gas (GHG) emissions in particular, which can also serve to address energy use by coordinating land use and transportation planning decisions to create a more energy efficient transportation system.

The Santa Cruz County Regional Transportation Commission (SCCRTC) prepares a County-specific regional transportation plan (RTP) in conformance with the latest AMBAG MTP/SCS. The 2040 RTP establishes targets to implement statewide policies at the local level, such as reducing vehicle miles traveled and improving speed consistency to reduce fuel consumption.

In 2013, Santa Cruz County adopted a Climate Action Strategy (CAS) focused on reducing the emission of greenhouse gases, which is dependent on increasing energy efficiency and the use of renewable energy. The strategy intends to reduce energy consumption and greenhouse gas emissions by implementing a number of measures such as reducing vehicle miles traveled through County and regional long-range planning efforts, increasing energy efficiency in new and existing buildings and facilities, increasing local renewable energy generation, improving the Green Building Program by exceeding minimum state standards, reducing energy use for water supply through water conservation strategies, and providing infrastructure to support zero and low emission vehicles that reduce gasoline and diesel consumption, such as plug in electric and hybrid plug in vehicles.

In addition, the Santa Cruz County General Plan has historically placed a priority on “smart growth” by focusing growth in the urban areas through the creation and maintenance of an urban services line. Objective 2.1 (Urban/Rural Distinction) directs most residential development to the urban areas, limits growth, supports compact development, and helps reduce sprawl. The Circulation Element of the General Plan further establishes a more efficient transportation system through goals that promote the wise use of energy resources, reducing vehicle miles traveled, and transit and active transportation options.

Energy efficiency is a major priority throughout the County’s General Plan. Measure C was adopted by the voters of Santa Cruz County in 1990 and explicitly established energy conservation as one of the County’s objectives. The initiative was implemented by Objective 5.17 (Energy Conservation) and includes policies that support energy efficiency, conservation, and encourage the development of renewable energy resources. Goal 6 of the Housing Element also promotes energy efficient building code standards for residential structures constructed in the County.

The project will be consistent with the AMBAG 2040 MTP/SCS and the SCCRTC 2040 RTP. The project would also be required to comply with the Santa Cruz County General Plan and any implemented policies and programs established through the CAS. In addition, the project design would be required to comply with CALGreen, the state of California’s green building code, to meet all mandatory energy efficiency standards. Therefore, the project would not conflict with or obstruct any state or local plan for renewable energy or energy efficiency.

G. GEOLOGY AND SOILS

Would the project:

1. *Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:*

<p>A. <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.</i></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>B. <i>Strong seismic ground shaking?</i></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>C. <i>Seismic-related ground failure, including liquefaction?</i></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>D. <i>Landslides?</i></p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion (A through D): All of Santa Cruz County is subject to some hazard from earthquakes, and there are several faults within the County. While the San Andreas fault is larger and considered more active, each fault is capable of generating moderate to severe ground shaking from a major earthquake. Consequently, large earthquakes can be expected in the future. The October 17, 1989 Loma Prieta earthquake (magnitude 7.1) was the second largest earthquake in central California history.

The project site is located within of the limits of the Zayante Fault and State Alquist-Priolo Special Studies Zone and County-mapped fault zone indicate several unnamed faults are also located in the near vicinity of the subject property (County of Santa Cruz GIS Mapping,

California Division of Mines and Geology, 2001). A geologic assessment has not been required for the project in that the project proposes to construct a non-habitable structure. Pursuant to County Code Section 16.10.070(B)(2) non-habitable structures are not required to maintain a minimum setback from the edge of a fault. A geotechnical investigation for the project was performed by Earth Systems Pacific, dated September 28, 2018 (Attachment 2). The report has been reviewed and accepted by the Environmental Planning Section of the Planning Department (Attachment 3). The report concluded that the project site is geotechnically feasible for the proposed machinery canopy and the primary concerns from a geotechnical standpoint are the presence of highly expansive soils. Implementation of the proposed recommendation of the project geotechnical engineer would ensure that impacts associated with expansive soils are minimized. Implementation of the additional requirements included in the review letter prepared by Environmental Planning staff (Attachment 3) will serve to further reduce the potential risks. Therefore, impacts will be less than significant.

2. *Result in substantial soil erosion or the loss of topsoil?*

Discussion: Some potential for erosion exists during the construction phase of the project, however, this potential is minimal because the project site is relatively flat in topography and standard erosion controls are a required condition of the project. Prior to approval of a grading or building permit, the project must have an approved stormwater pollution control plan (SCCC Section 7.79.100), which would specify detailed erosion and sedimentation control measures. The plan would include provisions for disturbed areas to be planted with ground cover and to be maintained to minimize surface erosion. Impacts from soil erosion or loss of topsoil would be considered less than significant.

3. *Be located on a geologic unit or soil that is unstable, 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?*

Discussion: The report cited above (see discussion under G-1) concluded that there is a potential risk from expansive soils. The recommendations contained in the geotechnical report, will be implemented along with the recommendations of the County Civil Engineer to reduce this potential hazard to a less than significant level.

4. *Be located on expansive soil, as defined in section 1803.5.3 of the California Building Code (2016), creating substantial direct or indirect risks to life or property?*

Discussion: See discussion under G-1 and G-3. There is a potential risk from expansive soils however, the recommendations contained in the geotechnical report will be implemented along with the recommendations of the County Civil Engineer to reduce this potential hazard to a less than significant level.

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|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 5. <i>Have soils incapable of adequately supporting the use of septic tanks, leach fields, or alternative waste water disposal systems where sewers are not available for the disposal of waste water?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion: The project would use an existing onsite sewage disposal system, and County Environmental Health Services has reviewed the proposed development and determined the project feasible in that two septic systems exist on the project site and site conditions are appropriate to support the proposed development. The project will be conditioned to ensure the systems are adequately sized at the building permit stage.

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|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 6. <i>Directly or indirectly destroy a unique paleontological resource or site of unique geologic feature?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: No unique paleontological resources or sites or unique geologic features are known to occur in the vicinity of the project. A query was conducted of the mapping of identified geologic/paleontological resources maintained by the County of Santa Cruz Planning Department, and there are no records of paleontological or geological resources in the vicinity of the project parcel. No direct or indirect impacts are anticipated.

H. GREENHOUSE GAS EMISSIONS

Would the project:

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|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 1. <i>Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion: The project, like all development, would be responsible for an incremental increase in greenhouse gas (GHG) emissions by usage of fossil fuels during the site preparation and construction. The project does not propose any long-term or operational changes to the existing use including increased employment, vehicle trips, or expansion to existing hours of operation. 2013, Santa Cruz County adopted a Climate Action Strategy (CAS) intended to establish specific emission reduction goals and necessary actions to reduce greenhouse gas levels to pre-1990 levels as required under Assembly Bill (AB) 32 legislation. The strategy intends to reduce GHG emissions and energy consumption by implementing measures such as reducing vehicle miles traveled through the County and

regional long-range planning efforts and increasing energy efficiency in new and existing buildings and facilities. Implementing the CAS, the MBCP was formed in 2017 to provide carbon-free electricity. All PG&E customers in unincorporated Santa Cruz County were automatically enrolled in the MBCP in 2018. All project construction equipment would be required to comply with the CARB emissions requirements for construction equipment. Further, all new buildings are required to meet the State's CalGreen building code. As a result, impacts associated with the temporary increase in GHG emissions are expected to be less than significant.

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|---|--------------------------|--------------------------|--------------------------|--------------------------|
| 2. <i>Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|--------------------------|

Discussion: See the discussion under H-1 above. No significant impacts are anticipated.

I. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

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|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 1. <i>Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion: The project would not create a significant hazard to the public or the environment. No routine transport or disposal of hazardous materials is proposed as part of the project. However, the storage of fuel currently exists on the project site. As part of the ongoing operation of the existing use, best management practices would continue to be used to ensure that no impacts would occur. A Phase 1 Site Assessment prepared by Weber, Hayes & Associates, dated November 12, 2018 (Attachment 4) provides an extensive analysis of the existing site conditions. Impacts are expected to be less than significant.

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|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 2. <i>Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion: See discussion under I-1 above. Project impacts would be considered less than significant.

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|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 3. <i>Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

proposed school?

Discussion: The Monte Vista Christian School is located at 2 School Way, Watsonville, CA 95076, approximately ¾ of a mile to the north east of the project site. Although fueling of equipment is likely to occur onsite, BMPs to contain spills would be implemented. No impacts are anticipated.

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|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 4. <i>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?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: The project site is not included on the December 3, 2018 list of hazardous sites in Santa Cruz County compiled pursuant to Government Code section 65962.5. No impacts are anticipated from project implementation.

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|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 5. <i>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 result in a safety hazard or excessive noise for people residing or working in the project area?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: The project is not located within two miles of a public airport or public use airport. No impact is anticipated.

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|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 6. <i>Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: The project would not conflict with implementation of the County of Santa Cruz Local Hazard Mitigation Plan 2015-2020 (County of Santa Cruz, 2020). Therefore, no impacts to an adopted emergency response plan or evacuation plan would occur from project implementation.

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|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 7. <i>Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion: See discussion under Wildfire Question T-2. The project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death

involving wildland fires. Impacts would be less than significant.

J. HYDROLOGY, WATER SUPPLY, AND WATER QUALITY

Would the project:

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 1. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion: Sunland Garden Products (the facility) currently operates under the provisions of a General Permit from National Pollutant Discharge Elimination Systems (NPDES) for stormwater discharges associated with industrial activities. The Department of Public Works Stormwater Division has reviewed the proposed development and stormwater improvements (Attachment 5) but defers to the Regional and State Board's for compliance under the facility's Industrial Stormwater Permit.

As state in Sunland Garden Products Exceedance Response Action (ESA) Evaluation, Level 2 Technical Report (Attachment 6), the primary materials handled at the facility are conifer-species lumber mill waste products including coastal redwood and Douglas fir wood/bark chips. Other bulk materials stored at the facility include Canadian sphagnum peat moss and coir. The majority of the stormwater discharge from the facility is conveyed to two detention basins via unpaved storm water channels. The original storm water channels and basins were constructed prior to the implementation of the design standards in the current NPDES Storm Water Permit. The old channels and basins were not properly designed which resulted in large amounts of soil eroding from the steep side slopes of the unpaved conveyance system. Stormwater samples are collected annually at the discharge location which occurs when the detention basins fill up. The west driveway to Pioneers Road was identified as an additional potential discharge location during the Level 1 Evaluation. Discharge at the driveway is primarily from paved driveways where bulk materials are not exposed to storm water.

During the 2015/2016 reporting year there was an exceedance of the Annual Average Numeric Action Levels (NALs) for Total Suspended Solids (TSS), Nitrate and Nitrite Nitrogen (N+N), Total Phosphorous (P), Iron (Fe), and Zinc (Zn). The extremely high levels of Total Suspended Solids (TSS) and Iron (Fe) in storm water samples collected during the 2015/2016 reporting year was found to be a direct result of improper sampling methods in conjunction with a lack of exposure minimization BMPs, and an eroding storm water conveyance system. These samples were not representative of industrial storm water discharges from the facility.

BMP and sampling deficiencies were addressed with additional training of the facility's Pollution Prevention Team, some additional areas were paved to prevent erosion from

heavy equipment, large tarps were purchased and installed over the large redwood bark piles, and overhead coverage was installed over a metal bin of concern. A new storm water conveyance system including new vegetated swales and detention basins that are appropriately sized for the drainage area have been designed to reduce mobilized pollutants and potentially prevent storm water discharges from the facility.

The vegetated swales were installed in the summer of 2018 and 2019. The majority of the new vegetated channels have already been installed. The bioretention basins are scheduled for construction during the 2019/2020 reporting year. Due to the high cost of design and construction, a three-year plan has been developed to complete the new storm water conveyance system and detention basins. In addition, SLG is in the permitting process to install additional overhead coverage in the form of a permanent canopy over the mixing lines and is also considering overhead coverage for additional materials storage areas.

The facility is expecting to meet all NALs once the new bioretention basins are completed. If the new bioretention basins do not bring Fe below the Annual NAL, SLG will have the option to implement additional control measures and submit an update to the Technical Report that includes the BMP Demonstration under Option 1, or submit an additional Level 2 ERA Action Plan and Technical Report including the BMP Demonstration utilizing Option 2 of the general permit form the State Water Resource Control Board.

Improvements to the existing stormwater management are ongoing, the proposed project would not result in increases in pollutants entering the stormwater system. Rather, the proposed canopy over the mixing line has been considered as part of the overall recommendations for reducing contaminants. Impacts would be less than significant.

It should be noted that the Sunland Garden Products facility drains into Pinto Lake, which has been designated as impaired due to harmful algal blooms that are triggered by excessive amounts of nitrogen and phosphorus. On July 16, 2020, the Central Coast Regional Water Quality Control Board will be considering adoption of an Amendment to the Water Quality Control Plan for the Central Coastal Basin to Include a Total Maximum Daily Load (TMDL) for Total Phosphorus to Address Cyanobacterial Blooms in Pinto Lake and a TMDL Implementation Plan for the Pinto Lake Catchment, that establishes numeric targets for dischargers in the watershed. The proposed numeric target for phosphorus concentration is 0.17 mg/L, which is considerably less than the NAL for phosphorus of 2.0 mg/L in the Industrial General Permit (IGP). The general Provisions of the IGP, Section E.37 state in part: "If any Discharger's storm water discharge causes or contributes to an exceedance of a water quality standard, that Discharger must implement additional BMPs or other control measures in order to attain compliance with the receiving water limitation. Compliance with water quality standards may, in some cases, require Dischargers to implement controls that are more protective than controls implemented solely to comply with the technology-

based requirements in this General Permit.”

Sunland should continue to make every effort to reduce discharge of phosphorus and other constituents to levels well below the NAL’s in order to reduce the adverse impacts on the receiving waters of Pinto Lake. Depending on the effectiveness of the proposed stormwater control measures, additional measures may be required in the future.

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|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 2. <i>Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion: The project would continue to obtain water from private well water. Although the project would incrementally increase water demand during construction the proposed non-habitable structure would not generate the need for additional water demand. The project is not located in a mapped groundwater recharge area or water supply watershed and will not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. Impacts would be less than significant.

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|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 3. <i>Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| A. <i>result in substantial erosion or siltation on- or off-site;</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| B. <i>substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| C. <i>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; or;</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

D. *impede or redirect flood flows?*

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Discussion: The project will not alter the course of any stream or river and does not include the addition of impervious surfaces.

The County Department of Public Works Stormwater Management Section staff has reviewed the proposed drainage plan prepared for the project but defers to the Regional and State water Boards for compliance with the facility’s Industrial Stormwater Discharge Permit. As proposed, the project is consistent with SCCC section 7.79.070, which states, “No person shall make any unpermitted alterations to drainage patterns or modifications to the storm drain system or any channel that is part of receiving waters of the county. No person shall deposit fill, debris, or other material in the storm drain system, a drainage channel, or on the banks of a drainage channel where it might enter the storm drain system or receiving waters and divert or impede flow.” The Project will not substantially alter the existing drainage pattern of the site in a manner that would result in erosion or siltation, or an increase in runoff from the site. See Discussion under J-1. Impacts would be less than significant.

4. *In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?*

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Discussion:

Flood Hazards:

According to the Federal Emergency Management Agency (FEMA) National Flood Insurance Rate Map, dated May 16, 2012, no portion of the project site lies within a flood hazard zone, and there would be no impact.

Tsunami and Seiche Zones:

There are two primary types of tsunami vulnerability in Santa Cruz County. The first is a teletsunami or distant source tsunami from elsewhere in the Pacific Ocean. This type of tsunami is capable of causing significant destruction in Santa Cruz County. However, this type of tsunami would usually allow time for the Tsunami Warning System for the Pacific Ocean to warn threatened coastal areas in time for evacuation (County of Santa Cruz 2010).

A greater risk to the County of Santa Cruz is a tsunami generated as the result of an earthquake along one of the many earthquake faults in the region. Even a moderate earthquake could cause a local source tsunami from submarine landsliding in Monterey Bay. A local source tsunami generated by an earthquake on any of the faults affecting Santa Cruz County would arrive just minutes after the initial shock. The lack of warning time from such a nearby event would result in higher casualties than if it were a distant tsunami

(County of Santa Cruz 2010).

Seiches are recurrent waves oscillating back and forth in an enclosed or semi-enclosed body of water. They are typically caused by strong winds, storm fronts, or earthquakes.

The project site is located approximately 5.5 miles inland, approximately 5.5 to five miles beyond the effects of a tsunami. The project site is located approximately 1/2 mile from Pinto Lake and would not be affected by a seiche. Therefore, there would be no impact.

5. *Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

Discussion: All County water agencies are experiencing a lack of sustainable water supply due to groundwater overdraft and diminished availability of streamflow. Because of this, coordinated water resource management has been of primary concern to the County and to the various water agencies. As required by state law, each of the County’s water agencies serving more than 3,000 connections must update their Urban Water Management Plans (UWMPs) every five years, with the most recent updates completed in 2016.

County staff are working with the water agencies on various integrated regional water management programs to provide for sustainable water supply and protection of the environment. Effective water conservation programs have reduced overall water demand in the past 15 years, despite continuing growth. In August 2014, the Board of Supervisors and other agencies adopted the Santa Cruz Integrated Regional Water Management (IRWM) Plan Update 2014, which identifies various strategies and projects to address the current water resource challenges of the region. Other efforts underway or under consideration are stormwater management, groundwater recharge enhancement, increased wastewater reuse, and transfer of water among agencies to provide for more efficient and reliable use.

The County is also working closely with water agencies to implement the Sustainable Groundwater Management Act (SGMA) of 2014. By January 2020, Groundwater Sustainability Plans will be developed for two basins in Santa Cruz County that are designated as critically overdrafted, Santa Cruz Mid-County and Corralitos - Pajaro Valley. These plans will require management actions by all users of each basin to reduce pumping, develop supplemental supplies, and take management actions to achieve groundwater sustainability by 2040. A management plan for the Santa Margarita Basin will be completed by 2022, with sustainability to be achieved by 2042.

The project is located in the Pajaro basin. The Pajaro Valley Water Management Agency (PVWMA) completed its Basin Management Plan update in 2014 and is bringing its plan into full compliance with SGMA.

Since the sustainable groundwater management plan is still being developed, the project will comply with SCCC Chapters 13.13 (Water Conservation – Water Efficient Landscaping), 7.69 (Water Conservation) and 7.70 (Water Wells), as well as Chapter 7.71 (Water Systems) section 7.71.130 (Water use measurement and reporting), to ensure that it will not conflict with or obstruct implementation of current water quality control plans or sustainable groundwater management plans such as the Santa Cruz IRWMP and UWMP for Watsonville City Water.

K. LAND USE AND PLANNING

Would the project:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 1. <i>Physically divide an established community?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: The project does not include any element that would physically divide an established community. No impact would occur.

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| 2. <i>Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|

Discussion: The project would not cause a significant environmental impact due to a conflict with any land use plan, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. The existing use of the project site is considered a non-conforming use pursuant to County Code Section 13.10.260 (non-conforming uses). Impacts associated with the proposed project are anticipated to be less than significant.

L. MINERAL RESOURCES

Would the project:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 1. <i>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?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: The site does not contain any known mineral resources that would be of value to the region and the residents of the state. Therefore, no impact is anticipated from project implementation.

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 2. <i>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?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: The project site is zoned Commercial Agriculture (CA), which is not

considered to be an Extractive Use Zone (M-3) nor does it have a land use designation with a Quarry Designation Overlay (Q) (County of Santa Cruz 1994). Therefore, no potentially significant loss of availability of a known mineral resource of locally important mineral resource recovery (extraction) site delineated on a local general plan, specific plan or other land use plan would occur as a result of this project.

M. NOISE

Would the project result in:

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 1. <i>Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion:

County of Santa Cruz General Plan

The County of Santa Cruz has not adopted noise thresholds for construction noise. The following applicable noise related policy is found in the Public Safety and Noise Element of the Santa Cruz County General Plan (Santa Cruz County 1994).

- Policy 6.9.7 Construction Noise. Require mitigation of construction noise as a condition of future project approvals.

The General Plan also contains the following table, which specifies the maximum allowable noise exposure for stationary noise sources (operational or permanent noise sources) (Table 2).

	Daytime ⁵ (7:00 am to 10:00 pm)	Nighttime ^{2, 5} (10:00 pm to 7:00 am)
Hourly Leq average hourly noise level, dB ³	50	45
Maximum Level, dB ³	70	65
Maximum Level, dB – Impulsive Noise ⁴	65	60

Notes:
 1 As determined at the property line of the receiving land use. When determining the effectiveness of noise mitigation measures, the standards may be applied to the receptor side of noise barriers or other property line noise mitigation measures.
 2 Applies only where the receiving land use operates or is occupied during nighttime hours
 3 Sound level measurements shall be made with “slow” meter response.
 4 Sound level measurements shall be made with “fast” meter response
 5 Allowable levels shall be raised to the ambient noise levels where the ambient levels exceed the allowable levels. Allowable levels shall be reduced to 5 dB if the ambient hourly Leq is at least 10 dB lower than the allowable level.
 Source: County of Santa Cruz 1994

County of Santa Cruz Code

There are no County of Santa Cruz ordinances that specifically regulate construction or

operational noise levels. However, Section 8.30.010 (Curfew—Offensive noise) of the SCCC contains the following language regarding noise impacts:

(A) No person shall make, cause, suffer, or permit to be made any offensive noise.

(B) “Offensive noise” means any noise which is loud, boisterous, irritating, penetrating, or unusual, or that is unreasonably distracting in any other manner such that it is likely to disturb people of ordinary sensitivities in the vicinity of such noise, and includes, but is not limited to, noise made by an individual alone or by a group of people engaged in any business, activity, meeting, gathering, game, dance, or amusement, or by any appliance, contrivance, device, tool, structure, construction, vehicle, ride, machine, implement, or instrument.

(C) The following factors shall be considered when determining whether a violation of the provisions of this section exists:

(1) Loudness (Intensity) of the Sound.

(a) Day and Evening Hours. For purposes of this factor, a noise shall be automatically considered offensive if it occurs between the hours of 8:00 a.m. and 10:00 p.m. and it is:

(i) Clearly discernible at a distance of 150 feet from the property line of the property from which it is broadcast; or

(ii) In excess of 75 decibels at the edge of the property line of the property from which the sound is broadcast, as registered on a sound measuring instrument meeting the American National Standard Institute’s Standard S1.4-1971 (or more recent revision thereof) for Type 1 or Type 2 sound level meters, or an instrument which provides equivalent data.

A noise not reaching this intensity of volume may still be found to be offensive depending on consideration of the other factors outlined below.

(b) Night Hours. For purposes of this factor, a noise shall be automatically considered offensive if it occurs between the hours of 10:00 p.m. and 8:00 a.m. and it is:

(i) Clearly discernible at a distance of 100 feet from the property line of the property from which it is broadcast; or

(ii) In excess of 60 decibels at the edge of the property line of the property from which the sound is broadcast, as registered on a sound measuring instrument meeting the American National Standard Institute’s Standard S1.4-1971 (or more recent revision thereof) for Type 1 or Type 2 sound level meters, or an instrument which provides equivalent data.

A noise not reaching this intensity of volume may still be found to be offensive depending on consideration of the other factors outlined below.

- (2) Pitch (frequency) of the sound, e.g., very low bass or high screech;
- (3) Duration of the sound;
- (4) Time of day or night;
- (5) Necessity of the noise, e.g., garbage collecting, street repair, permitted construction activities;
- (6) The level of customary background noise, e.g., residential neighborhood, commercial zoning district, etc.; and
- (7) The proximity to any building regularly used for sleeping purposes. [Ord. 5205 § 1, 2015; Ord. 4001 § 1, 1989]

Sensitive Receptors

Some land uses are generally regarded as being more sensitive to noise than others due to the type of population groups or activities involved. Sensitive population groups generally include children and the elderly. Noise sensitive land uses typically include all residential uses (single- and multi-family, mobile homes, dormitories, and similar uses), hospitals, nursing homes, schools, and parks.

The nearest sensitive receptors are occupants of residential homes, located approximately 500 feet to the east of the project area.

Impacts

Potential Temporary Construction Noise Impacts

The use of construction equipment to accomplish the project would result in noise in the project area, i.e., construction zone. Table 3 shows typical noise levels for common construction equipment. The sources of noise that are normally measured at 50 feet, are used to determine the noise levels at nearby sensitive receptors by attenuating 6 dB for each doubling of distance for point sources of noise such as operating construction equipment. Noise levels at the nearest sensitive receptors for each site were analyzed on a worst-case basis, using the equipment with the highest noise level

Equipment	L _{max} (dBA)
Air Compressor	80
Backhoe	80
Chain Saw	85
Compactor	82
Concrete Mixer	85
Concrete Pump	82
Concrete Saw	90
Crane	83
Dozer	85
Dump Truck	84
Excavator	85
Flat Bed Truck	84
Fork Lift	75
Generator	82
Grader	85
Hoe-ram	90
Jack Hammer	88
Loader	80
Paver	85
Pick-up Truck	55
Pneumatic Tool	85
Roller	85
Tree Chipper	87
Truck	84

Source: Federal Transit Authority, 2006, 2018.

expected to be used.

Although construction activities would likely occur during daytime hours, noise may be audible to nearby residents. However, periods of noise exposure would be temporary. Noise from construction activity may vary substantially on a day-to-day basis.

Construction activity would be expected to use equipment listed in Table 3. Based on the activities proposed for the project, the equipment with the loudest operating noise level that would be used often during activity would be a Concrete mixer or dump truck, which would produce noise levels of 85 dBA at a distance of 50 feet. The nearest sensitive receptor is located approximately 500 feet from the construction site. At that distance, the decibel level is reduced by approximately 54 decibels to 31 decibels. However, these impacts would also be temporary.

Noise generated during project construction would increase the ambient noise levels in adjacent areas. Construction would be temporary, and construction hours would be limited as a condition of approval. Given the limited duration of construction and the limited hours of construction activity, this impact is considered to be less than significant.

Potential Permanent Impacts

The project would not result in a permanent increase in the ambient noise level. The main source of ambient noise in the project area is a combination of traffic noise along Green Valley Road and Pioneer Road and noise associated with the operation of the existing use. However, no substantial increase in traffic trips is anticipated and the project does not propose and intensification of the existing activities on site as a result of the project. Further, the existing use of the site would continue to operate between 7:30am and 3:30pm on weekdays and remain closed on weekends and Holidays. Impacts are expected to be less than significant.

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 2. <i>Generation of excessive groundborne vibration or groundborne noise levels?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion: The use of construction and equipment would potentially generate periodic vibration in the project area. This impact would be temporary and periodic and is not expected to cause damage; therefore, impacts are not expected to be significant.

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 3. <i>For a project located within the vicinity of a private airstrip or 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?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: The project is not in the vicinity of a private airstrip or within two miles of a public airport. Therefore, the project would not expose people residing or working in the project area. No impact is anticipated.

N. POPULATION AND HOUSING

Would the project:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 1. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: The project would not induce substantial population growth in an area because the project does not propose any physical or regulatory change that would remove a restriction to or encourage population growth in an area including, but limited to the following: new or extended infrastructure or public facilities; new commercial or industrial facilities; large-scale residential development; accelerated conversion of homes to commercial or multi-family use; or regulatory changes including General Plan amendments, specific plan amendments, zone reclassifications, sewer or water annexations; or LAFCO annexation actions. No impact would occur.

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 2. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: The project would not displace any existing housing. No impact would occur.

O. PUBLIC SERVICES

Would the project:

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 1. 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Police protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. Schools? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Other public facilities; including the maintenance of roads?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion (a through e): The project is located in the Eureka Canyon Planning area and served by Pajaro Valley Fire, the County of Santa Cruz Sheriff Department and located within the Pajaro Valley Unified school District. The nearest public park is approximately 1/2 mile to the south of the project (Pinto Lake County Park). While the project represents an incremental contribution to the need for services as it relates to the construction of a new building, the increase would be minimal in that the project does not propose an increase in vehicle trips or number of employees, outside of the construction phase. Moreover, the project meets all of the standards and requirements identified by the local fire agency or California Department of Forestry, as applicable, and school, park, and transportation fees to be paid by the applicant would be used to offset the incremental increase in demand for school and recreational facilities and public roads. Impacts would be considered less than significant.

A. RECREATION

Would the project:

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 1. Would the project 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion: The project would not substantially increase the use of existing neighborhood and regional parks or other recreational facilities in that the project does not propose and increase in number of employees or hours of operation. The nearest public park Impacts would be considered less than significant.

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 2. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: The project does not propose the expansion or require the construction of additional recreational facilities. No impact would occur.

P. TRANSPORTATION

Would the project:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 1. Conflict with a program, plan, ordinance | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Discussion: There would be no impact to the circulation system because no additional traffic would be generated, and the project would be consistent with applicable Santa Cruz County plans, policies, and ordinances.

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 2. <i>Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)(1) (Vehicle Miles Traveled)?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: In response to the passage of Senate Bill 743 in 2013 and other climate change strategies, the Governor’s Office of Planning and Research (OPR) amended the CEQA Guidelines to replace LOS with vehicle miles traveled (VMT) as the measurement for traffic impacts. The “Technical Advisory on Evaluating Transportation Impacts in CEQA,” prepared by OPR (2018) provides recommended thresholds and methodologies for assessing impacts of new developments on VMT. Tying significance thresholds to the State’s GHG reduction goals, the guidance recommends a threshold reduction of 15% under current average VMT levels for residential projects (per capita) and office projects (per employee), and a tour-based reduction from current trips for retail projects. Based on the latest estimates compiled from the Highway Performance Monitoring System, the average daily VMT in Santa Cruz County is 18.3 miles per capita (Department of Finance [DOF] 2018; Caltrans 2018). The guidelines also recommend a screening threshold for residential and office projects—trip generation under 110 trips per day is generally considered a less-than-significant impact.

The project consists of construction of a non-habitable accessory structure to cover existing agricultural support facility. The project would not result in an increase in traffic trips or number of employees outside of the temporary construction phase therefore would not cause or attract VMT. No impact from project implementation would occur.

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 3. <i>Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: The project consists of construction of an enclosure for an existing soil mixing operation. No increase in hazards would occur from project design or from incompatible uses. No impact would occur from project implementation.

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 4. <i>Result in inadequate emergency access?</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion: The project’s road access meets County standards and has been approved by the local fire agency or California Department of Forestry, as appropriate. No impact is anticipated.

Q. TRIBAL CULTURAL RESOURCES

1. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:*

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| A. <i>Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources Code section 5020.1(k), or</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| B. <i>A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion: The project proposes to construct an accessory structure to cover and enclose portions of an existing soil mixing operation. Section 21080.3.1(b) of the California Public Resources Code (AB 52) requires a lead agency formally notify a California Native American tribe that is traditionally and culturally affiliated within the geographic area of the discretionary project when formally requested. As of this writing, no California Native American tribes traditionally and culturally affiliated with the Santa Cruz County region have formally requested a consultation with the County of Santa Cruz (as Lead Agency under CEQA) regarding Tribal Cultural Resources. However, no Tribal Cultural Resources are known to occur in or near the project area. Therefore, no impact to the significance of a Tribal Cultural Resource is anticipated from project implementation.

R. UTILITIES AND SERVICE SYSTEMS

Would the project:

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 1. <i>Require or result in the relocation or</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Discussion:

Water

The project is already connected to an existing municipal water supply and has access to a private well. No new facilities are required to serve the project and though the project would result in a slight increase in water demand during construction, no impact would occur from project implementation.

Wastewater

The project site is already served by a private on-site sewage disposal system. Environmental Health Services has reviewed the proposed development and determined the existing facilities to be adequate to accommodate the project. Impacts would be less than significant.

Stormwater

See discussion under J-1. Impacts would be less than significant.

Electric Power

Pacific Gas and Electric Company (PG&E) provides power to existing and new developments in the Santa Cruz County area. As of 2018, residents and businesses in the County were automatically enrolled in MBCP's community choice energy program, which provides locally controlled, carbon-free electricity delivered on PGE's existing lines.

The proposed site is already served by electric power, and no further improvements to serve the site are necessary; therefore, there will be no impact.

Natural Gas

PG&E serves the urbanized portions of Santa Cruz County with natural gas.

The proposed site is not served with natural gas, and no further improvements to serve the site are necessary; therefore, there will be no impact.

Telecommunications

Telecommunications, including telephone, wireless telephone, internet, and cable, are provided by a variety of organizations. AT&T is the major telephone provider, and its subsidiary, DirectTV provides television and internet services. Cable television services in Santa Cruz County are provided by Charter Communications in Watsonville and Comcast

in other areas of the county. Wireless services are also provided by AT&T, as well as other service providers, such as Verizon.

No improvements related to telecommunications are required, and there will be no impact.

2. *Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

Discussion: All the main aquifers in this County, the primary sources of the County’s potable water, are in some degree of overdraft. Overdraft is manifested in several ways including 1) declining groundwater levels, 2) degradation of water quality, 3) diminished stream base flow, and/or 4) seawater intrusion. Surface water supplies, which are the primary source of supply for the northern third of the County, are inadequate during drought periods and will be further diminished as a result of the need to increase stream baseflows to restore habitat for endangered salmonid populations. In addition to overdraft, the use of water resources is further constrained by various water quality issues.

The project site is served by a private agricultural well. The project would only use small amounts of water during construction for dust control and concrete work. No additional water use would be required during the operational phase of the project. No impacts are expected to occur from project implementation.

3. *Result in determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?*

Discussion: No wastewater would be connected to the municipal sewer collection system during construction of the project. No wastewater would be generated during the operational phase of the project. Therefore, no impacts would to occur from project implementation.

4. *Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

Discussion: Due to the small incremental increase in solid waste generation by the project during construction and operations, the impact would not be significant.

5. *Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Discussion: The project would comply with all federal, state, and local statutes and regulations related to solid waste disposal. No impact would occur.

S. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

1. *Substantially impair an adopted emergency response plan or emergency evacuation plan?*

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Discussion: The project is not located in a State Responsibility Area, a Very High Fire Hazard Severity Zone, or a County-mapped Critical Fire Hazard Area and will not conflict with emergency response or evacuation plans. Therefore, no impact would occur.

2. *Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Discussion: The project is not located in a State Responsibility Areas, a Very High Fire Hazard Severity Zone, or a County-mapped Critical Fire Hazard Area. However, the project design incorporates all applicable fire safety code requirements and includes fire protection devices as required by the local fire agency and is unlikely to exacerbate wildfire risks. Impacts would be less than significant.

3. *Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Discussion: The project is not located in a State Responsibility Areas, a Very High Fire Hazard Severity Zone, or a County-mapped Critical Fire Hazard Area. Improvements associated with the project are unlikely to exacerbate wildfire risks. Impacts would be less than significant.

4. *Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of*

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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runoff, post-fire slope instability, or drainage changes?

Discussion: The project is not located within a State Responsibility Areas, a Very High Fire Hazard Severity Zone, or a County-mapped Critical Fire Hazard Area. Downslope and downstream impacts associated with wildfires are unlikely to result from the project. Regardless, the project design incorporates all applicable fire safety code requirements and includes fire protection devices as required by the local fire agency. Impacts would be less than significant.

T. MANDATORY FINDINGS OF SIGNIFICANCE

1. *Does the project have the potential to substantially 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, substantially reduce the number or restrict the range of a rare or endangered plant or animal community or eliminate important examples of the major periods of California history or prehistory?*

Discussion: The potential to substantially 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, substantially 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 were considered in the response to each question in Section III (A through T) of this Initial Study. As a result of this evaluation, there is no substantial evidence that significant effects associated with this project would result. Therefore, this project has been determined not to meet this Mandatory Finding of Significance.

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)?*

Discussion: In addition to project specific impacts, this evaluation considered the project’s

potential for incremental effects that are cumulatively considerable. As a result of this evaluation, there were determined to be no potentially significant cumulative effects associated with this project. Therefore, this project has been determined not to meet this Mandatory Finding of Significance.

3. *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*
- | | | | |
|--------------------------|--------------------------|-------------------------------------|--------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--------------------------|--------------------------|-------------------------------------|--------------------------|

Discussion: In the evaluation of environmental impacts in this Initial Study, the potential for adverse direct or indirect impacts to human beings were considered in the response to specific questions in Section III (A through T). As a result of this evaluation, no potentially adverse effects to human beings associated with this project were identified. Therefore, this project has been determined not to meet this Mandatory Finding of Significance.

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Archaeological Report

Application Number 181155

Attachment 1

Phase I Archaeological Assessment of a Portion of 90 Pioneer Road (APN: 109-23-109), Watsonville, Santa Cruz County, California

Prepared for Sun Land Garden Products



Phase I Archaeological Assessment of a Portion of 90 Pioneer Road (APN: 109-23-109), Watsonville, Santa Cruz County, California

JUNE 2019 FINAL
J2019-001.17
Photo Credit: Danielle Dadiago

Prepared for

Sun Land Garden Products
90 Pioneer Road
Watsonville, California 95076

Prepared by

Stella D'Oro, MA. RPA
Albion Environmental, Inc.
1414 Soquel Avenue, Suite 205
Santa Cruz, California 95062

Executive Summary

In June 2019, Sun Land Garden Products (SLGP) contracted with Albion Environmental, Inc., to conduct a cultural resources assessment of a 13-acre portion of an approximately 22-acre parcel located at 90 Pioneer Road (APN: 109-23-109), Watsonville, California. The property owner plans to replace the replacement of existing non-conforming structures and the installation of new stormwater management infrastructure. Albion's investigation included a background records search at the California Historical Resources Information System Northwest Information Center at Sonoma State University (NWIC) and a field investigation entailing pedestrian survey. The assessment was designed to adequately address treatment of cultural resources under current guidelines outlined by the Santa Cruz County Code (Title 16.40 and 16.42), General Plan and Local Coastal Program for the County of Santa Cruz (1994; Object 5.19), and California Environmental Quality Act (CEQA) guidelines.

A search of records at NWIC indicates that no archaeological studies have been conducted within the Project Area and no studies have been conducted within a 1/8-mile radius of the Project Area. According to the record search, no archaeological resources have been identified within the Project Area and no resources have been recorded within a 1/4-mile radius of the Project Area.

After reviewing the record search results, Albion conducted an intensive pedestrian survey of the Project Area. No cultural material was noted during the surface investigation of the subject parcel. Given these findings, it is Albion's judgement that the subject parcel does not likely contain intact cultural resources and Albion therefore recommends that no further action regarding cultural resources at this parcel is warranted under CEQA.

Since many important cultural resources, such as Tribal Cultural Resources, do not necessarily leave an archaeological footprint or have physically identifiable manifestations, it is vital to seek out the possibility of these important resources and their locations through consultation with local tribal members. Under the authority of recently-passed Assembly Bill 52, the County of Santa Cruz (County) may have received information from interested Native American tribes or representatives concerning Tribal Cultural Resources at the project site. The County is responsible for collecting and incorporating tribal information into the environmental review process. At this time, we do not know if the County has received any such information.

It is CEQA policy should prehistoric or historic-era deposits or features be discovered at any time during construction, activities in the area should cease and a qualified archaeologist should inspect and evaluate the discovery and prepare a recommendation for a further course of action.

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Appendices

A Record Search Results

Introduction



This report documents the results of a cultural resource assessment of a 13-acre portion of an approximately 22-acre parcel located at 90 Pioneer Road (APN: 109-23-109), Watsonville, California (Figure 1). The property owner plans the replacement of existing non-conforming structures and the installation of new stormwater management infrastructure.

Because the property is in an area designated as “archaeologically sensitive” by the County of Santa Cruz (County), Albion was contracted to conduct a cultural resource assessment. The investigation comprised two tasks: 1) a review of records from the Northwest Information Center of the Historical Resources Information System at Sonoma State University (NWIC); 2) and a surface survey of the parcel.

Albion designed the investigation to address treatment of cultural resources under current guidelines outlined by the Santa Cruz County Code (Title 16.40 and 16.42), General Plan and Local Coastal Program for the County of Santa Cruz (1994; Object 5.19), and CEQA guidelines. This included: 1) identification of significant resources; 2) determination of significant impacts to resources; and 3) development of any necessary mitigation measures. All work was conducted in accordance with guidelines and regulations set forth in the CEQA.

The records search was requested by Albion Senior Archaeologist Stella D’Oro in June 2019 (NWIC File No.: 18-2101). The subsequent pedestrian survey was conducted on June 11, 2019 by Danielle Dadiego who earned an MA in Anthropology (2014) and Anthropological Archaeology (2017) and has been working in California archaeology for four years. Ms. Dadiego conducted the fieldwork under the supervision of Ms. D’Oro who holds an MA in Applied Anthropology and has been working in California archaeology for fifteen years.

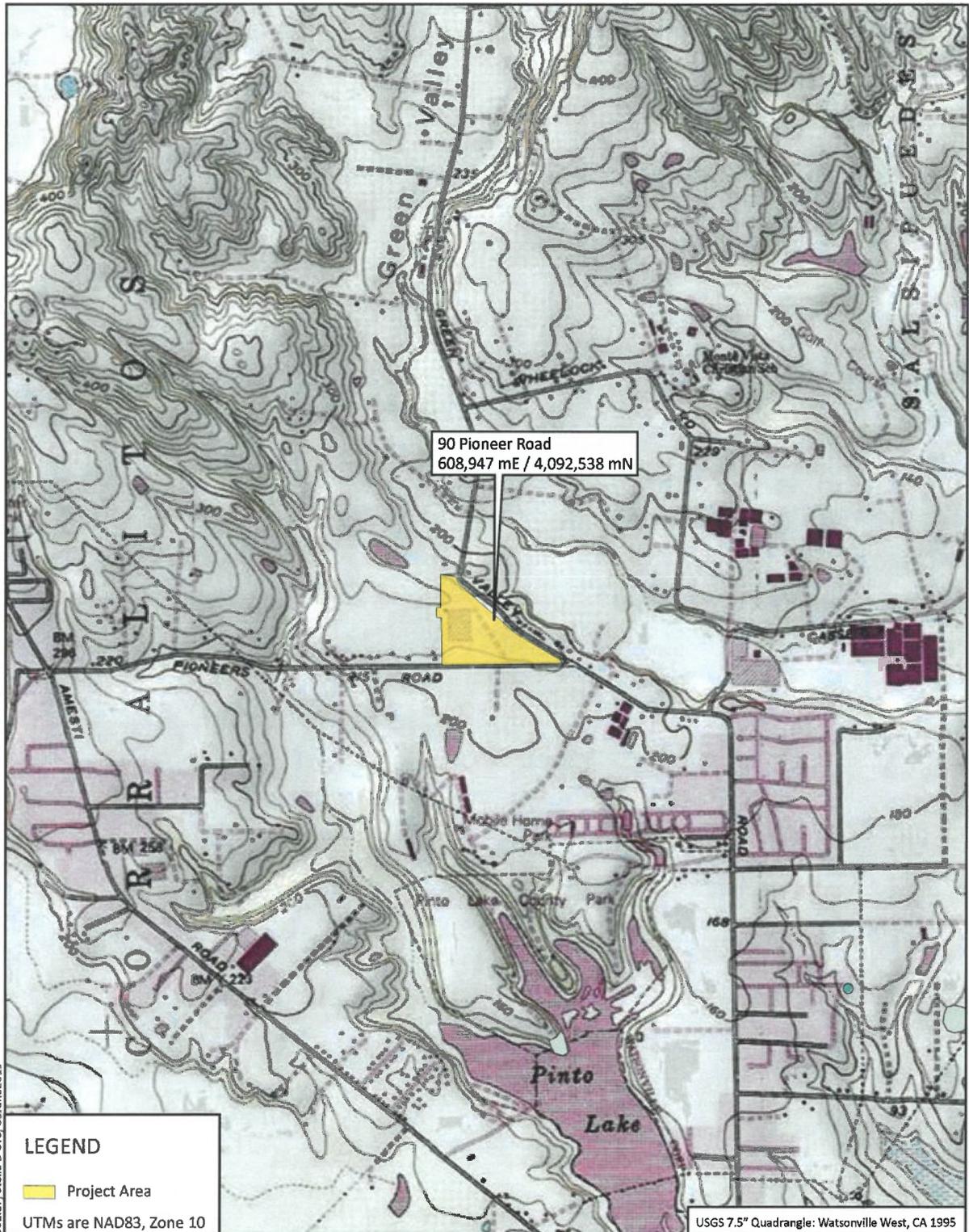
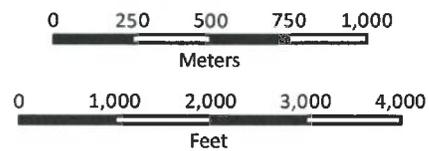


Figure 1. Project location, 90 Pioneer Road, Watsonville, California.



File name: Figure 1.ai, J2019-001.17, Stella D'Oro, 03 June 2019

Project Location and Description

2

The subject parcel is located on the north side of Pioneer Road. It is bounded on its eastern side by Green Valley Road and is approximately 1,800 feet (550 m) east of the intersection at Pioneer Road and Meadow Ridge Road in Watsonville, California (Figure 1). The study parcel is approximately 220 feet above sea level and is relatively flat. An unnamed drainage is approximately 1,643 feet (501 m) west of the Project Area; Green Valley Creek is approximately 930 feet (283 m) northeast of the Project Area.

The property owner plans the replacement of existing non-conforming structures and the installation of new stormwater management infrastructure. Most of the survey area is paved and contains storage structures for soils and mulch, paved roads and parking lots, gravel roads, and an office building. The depths of impacts are as follows: foundation piers will be 24" to 36" deep, trenches for the fire hydrants will be 36" deep, and a septic tank will be 50" deep.

Sources Consulted

3

In order to determine if cultural resources are recorded within or near the Project Area, Albion consulted the following sources as part of the NWIC records search:

- California Inventory of Historic Resources managed by the State of California Department of Parks and Recreation lists no historic resources within a 1/4-mile of the Project Area.
- Historic Property Data File for Santa Cruz County managed by the State Office of Historic Preservation (including the California Register of Historical Resources (CRHR) and the National Register of Historical Places (NRHP), California Historical Landmarks, and California Points of Historical Interest) indicates no historic properties are located within a 1/8-mile radius of the Project Area.

A search of records at NWIC indicated no archaeological studies have been conducted within the Project Area and no studies have been conducted within a 1/8-mile radius of the Project Area (Appendix A).

NWIC reports no archaeological resources within the Project Area and no resources within a 1/4-mile radius of the Project (Appendix A):

Albion also conducted an online search of historic maps and aerials and found information pertinent to the Project Area from the following:

- 1850s Tierra de Don Jose Amesti (Rancho Los Corralitos)
- 1881 plat map of Santa Cruz County
- 1906 plat map of Santa Cruz County
- 1934 aerial photograph
- 1964 aerial photograph

Background

4

NATURAL ENVIRONMENT

The study parcel is approximately 220 feet above sea level and is relatively flat. An unnamed drainage is approximately 1,643 feet (501 m) west of the Project Area; Green Valley Creek is approximately 930 feet (283 m) northeast of the Project Area. The soils in the area are characterized as Watsonville loam (United States Department of Agriculture 2018). The Watsonville loam series consists of poorly-drained soils on coastal terraces formed in alluvium. The A horizon for this series extends to 50 centimeters below surface (cmbs) and is characterized by dark grayish-brown acidic loam. Horizon B for the Watsonville series is a mixture of light gray and pale brown, very hard soil and extends from 50 to about 75 cmbs. Horizon C consists of pale grayish-brown and yellowish-brown sandy clay, extending from 75 to about 135 cmbs.

CULTURAL ENVIRONMENT

Prehistory of the southern San Francisco Bay area is complex due to the dramatic increase in human populations from middle to late Holocene times (Milliken et al. 2007). Cultural chronology is quite variable spatially but is generally framed within a tripartite sequence that is commonly used in central California— Early, Middle, and Late (Hylkema 2002; Milliken et al. 2007). These temporal periods are preceded by early to middle Holocene occupation, often characterized as the Millingstone era (Hylkema 2002; Milliken et al. 2007).

The Millingstone Period (9000–5500 years Before Present (Ingram et al.)) is characterized by small groups who travelled widely and practiced broad spectrum foraging of easily acquired plant and animal resources. Artifacts common to this time period are handstones and millingstones. Flaked stone implements, such as projectile points, are much less common than grinding and battering tools (Fitzgerald 2000). Common foods are thought to have included a variety of small seeds, shellfish, and small mammals.

The Early Period ranges from approximately 5500 to 2500 B.P. and encompasses an era where people are thought to still have practiced wide ranging residential mobility but placed a greater emphasis on hunting larger game. Large pinnipeds, such as northern fur seal, are common to coastal archaeological sites during this time. Several styles of large projectile points correspond to this general time frame, which also marks the initial use of mortar and pestle technology.

The Middle Period dates from 2500–1000 B.P. and appears to represent a time when people were somewhat more residentially stable and practiced more logistical (short term) mobility (Milliken et al. 2007:106). By this time, people apparently went on extended resource acquisition forays for the purpose of bringing subsistence or trade items back to residential base camps. Large, terrestrial

mammals were hunted more often during this time and grinding implements become more common (Milliken et al. 2007:107).

The Late Period begins at 1000 B.P. and extends to ca. 1550 B.P. (Hylkema 2002:33), or perhaps more recently. The Late Period is characterized by increased sociopolitical complexity and settlement centralization. Large village sites in the northern Santa Clara Valley are often found in the valley center along perennial streams (Bergthold 1982; Milliken et al. 2007). There is continued prevalence of mortar and pestle technology, thought to signify a greater reliance on acorn than in earlier times. Other labor-intensive foods were also used with greater frequency during this latest time period (Hylkema 2002). For example, sea otter and harbor seal were exploited more heavily. These animals are thought to be more labor-intensive to capture compared to other pinnipeds and large mammals, which were more commonly hunted in earlier time. Bow and arrow technology is also believed to have been adopted by aboriginal hunters during this latest prehistoric interval (Milliken et al. 2007:117).

ETHNOGRAPHIC BACKGROUND

The Project Area was inhabited by Ohlone, or Costanoan populations (Levy 1978; Milliken et al. 2007). When first encountered by Spanish explorers, aboriginal inhabitants of the Bay Area and vicinity were referred to as *Costaños* (Levy 1978). The people came to be known as Costanoans (cf. Levy 1978), although now, the descendants of those earlier inhabitants prefer to be referred to as Ohlone (Bean 1994). Both terms refer to the language group spoken by the people, rather than any sort of political group. The Ohlone inhabited the San Francisco Peninsula, the East Bay to the Delta, and south past Santa Clara Valley to the coast of the Monterey Bay.

At Spanish contact, aboriginal groups residing in the southern Bay Area were organized under a tribelet system where villages, thought to number around 50, were autonomous political units (Levy 1978). The Ohlone exploited all of the regional habitats including bay marshes, valley grasslands, mountainous uplands and open coastal environs. Resources exploited included elk, pronghorn, deer, sea mammals, salmon, trout, shellfish, ducks, geese, acorns, seeds, grasses, and roots (Baumhoff 1963).

HISTORIC CONTEXT

Sebastian Vizcaino's landing at present day Monterey in 1602 is one of the earliest documented contact with Native Americans in the area. Following Vizcaino's landing, other Spanish ships may have stopped at Monterey, but contact was minimal until the initial overland exploration of the area by Gaspar de Portolá in 1769 (Hoover et al. 1990). Subsequent exploration of the region included Pedro Fages in 1770 and 1772, Fernando Javier de Rivera in 1774, and Juan Bautista de Anza in 1776 (Beck and Haase 1974).

In late September of 1769, Portolá's expedition encountered a small band of Indians engaged in collecting pine nuts. Miguel Costansó, one of the expedition's main chroniclers, called the natives "wandering people without either house or home." A few days later, they came upon a village, which Costansó described as "very poor" and its inhabitants as "friendly and obsequious." Finally, on the 26th of September, they encountered another, larger band of Indians who were also engaged in pine nut collecting. Costansó wrote:

At the foot of the slope was a band of wandering Indians, which must have numbered more than two hundred souls. They had no houses, and lived in the open near a fallen oak tree. For this reason the place was named *Ranchería del Palo Caído*. These natives offered

us a quantity of pine nuts and seeds. We remained a short time among them, and then passed on in order to make camp on the bank of a river... (Costansó 1992:81).

Portolá's expedition, though at the time producing little lasting and substantive contact, was a harbinger of later developments. As a direct result of the expedition, the Spanish established a system of fully functioning Franciscan missions over the length of Alta California, from San Diego to the northern San Francisco Bay. Missions in the area included Mission San Antonio de Padua (1771), Mission Soledad (1791), Mission Santa Cruz (1791), Mission San Juan Bautista (1797), and Mission San Miguel (1797).

In 1821, Mexico achieved her independence from Spain, and word of this event reached Alta California the following year. In California history, this era is known as the Mexican Period (ca. 1821-1848). The colonial policies of the republic were to be quite different from those of the Spanish monarchy. Not only were Californians allowed to trade with foreigners, but foreigners could also now hold land in the province once they had been naturalized and converted to Catholicism. Under Spain, land grants to individuals were few in number, and title to these lands remained in the hands of the crown. Under Mexican rule, however, governors were encouraged to make more grants for individual ranchos, and these grants were to be outright. Most importantly, the new Mexican republic was determined to move to "secularize" the missions, to remove the natives and the mission property from the control of the Franciscan missionaries.

Secularization was set in motion by the Mexican Governor Echeandia in 1826 but was not carried out in earnest until 1834 when Governor José Figueroa issued an official proclamation ordering the secularization of the California missions. His proclamation turned the mission properties over to Mexican civil authorities, allowed for the dispersment of mission property, opened mission land for settlement by petitioners, and created a series of pueblos. Indian neophytes were freed from their role as personal servants to the padres; however, in reality, the effects of secularization throughout California were to deprive a large percentage of the remaining mission Indians of their property. This resulted in the creation of a relatively large population of landless Indian tenants, many of whom sought work in the newly created *rancherías*.

The new ranchos that sprang up as a result of secularization created a wholly new culture in California, one that was centered on the raising and maintaining of vast herds of cattle. These ranchos were usually owned by individual families who supervised a veritable army of Indian laborers and vaqueros. The ranch owners owed their livelihood to the sale and trade of the products, primarily hide and tallow, derived from their cattle. A flourishing trade with foreign merchants, mostly Americans, kept the Mexican ranchos afloat; hides and tallow were traded to American merchants for everything from food staples and clothing to furniture and luxury goods.

The end of the Mexican-American War and the signing of the Treaty of Guadalupe Hidalgo in 1848 marked the beginning of the American Period (ca. 1848–Present) in California history. The onset of this period, however, did nothing to change the economic condition of the Native American populations working on the ranchos.

The town of Watsonville was first established in 1852 on a small portion of the rancho obtained from the Rodriguez family. Watsonville became an incorporated municipality in 1868, with a population of almost 2000 people (Archives and Architecture, LLC. 2013). Residential and commercial development increased over the next three decades, including annexation of nearby residential lots between 1907 and 1925. Between 1940 and 1960, the city nearly doubled in size. In the immediate project area, development patterns generally mirrored those of the city (Archives and Architecture, LLC. 2013):

“The area developed in the 1890s with scattered homes and commercial establishments such as the Martinelli Cider Works at 227 East Beach St., religious facilities, and Watsonville High. In 1901, Watsonville High burned down and architect William H. Weeks designed a new building that was constructed in 1902. By 1902, the neighborhood was completely built out with residences as well as All Saints Church. In 1917, Weeks designed another building on the Watsonville High campus attesting to growth of the city. In 1934 the Veteran’s Memorial Building was constructed across from the subject property. In 1937, the Martinelli Cider Works also expanded at their facility site.”

After 1940, the population of Watsonville changed significantly, with arrival of people from other parts of the United States and foreign immigrants (Archives and Architecture, LLC. 2013).

The influx Americans from the Midwest continued to populate Watsonville Interwar period, and foreign immigrants including Chinese, Japanese, and Filipinos already in the Pajaro Valley were experiencing increased resentment from local whites. Hostilities because of union formation and increased demands by workers for better working conditions, combined with a general anti-immigrant (especially anti-Asian) sentiment were further strained by the plunge in economic vitality. By the time the United States entered into World War II against Germany and Japan, overt racism and discrimination was common in a location that had always been ethnically mixed and relatively tolerant compared to the rest of the country. The signing of Executive Order 9066 by President Roosevelt, which called for the systematic removal the Japanese population from all coastal areas, including those who resided in parts of Watsonville was the culmination of this period.

A shift in local population began after the war. Many Japanese who were interned during World War II returned to the area and faced new competition from the large numbers of Mexican workers brought in through the Bracero Program. Some Japanese families stayed and rebuilt their lives, others left. As a whole, they did not return to agriculture in the same numbers as before the war. Their places, at least in the fields, were now filled by Mexicans, starting the trend that continues today. Growth in the community during the 1950s also marked the growth of Watsonville High across from the subject properties, with school expansion necessitating the construction of classrooms, music halls and shop buildings between 1956 and 1958).

HISTORY OF THE PROJECT AREA

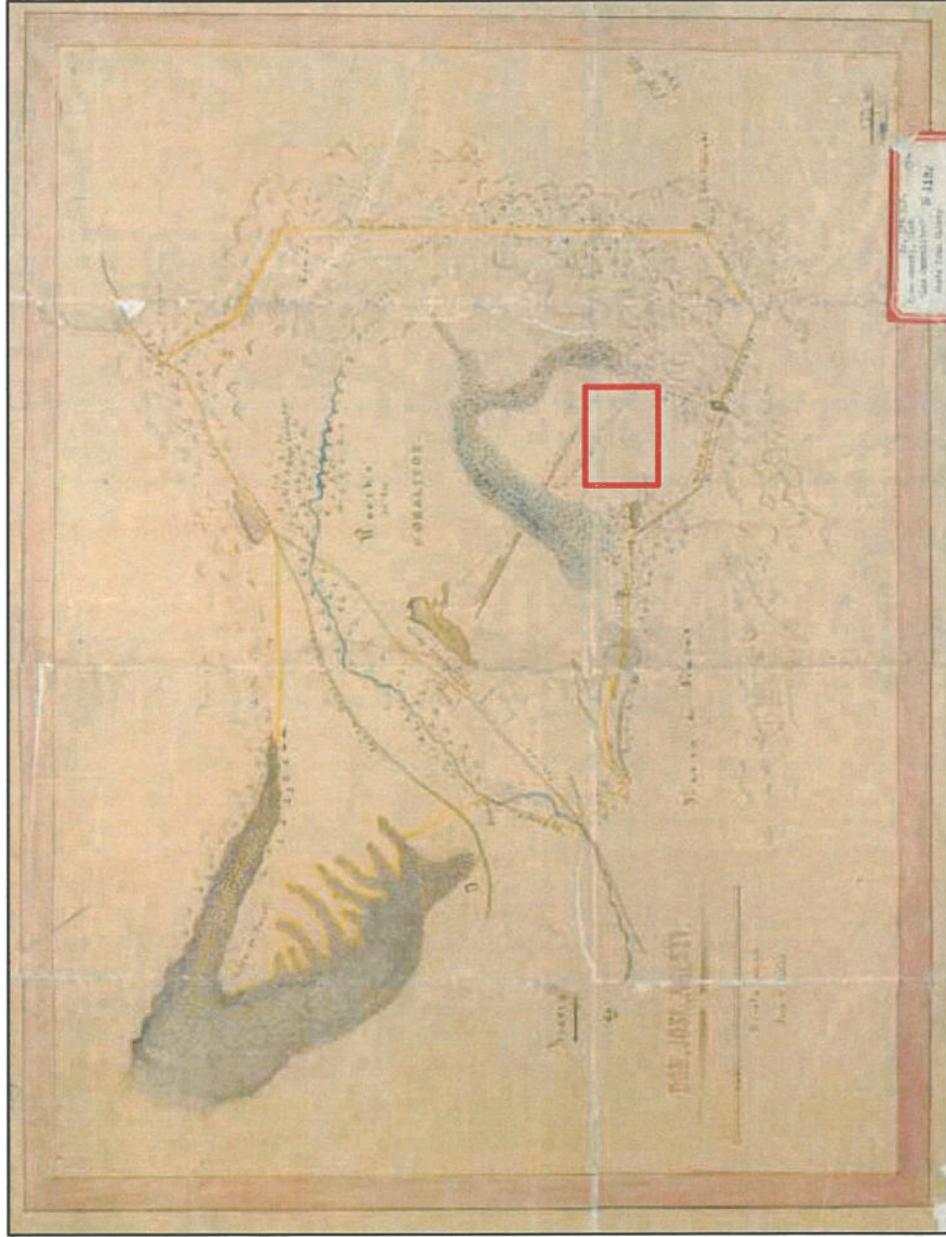
The Project Area is located between Browns Creek and Green Valley Creek approximately 5 miles northwest of downtown Watsonville. During the Mexican Period, this area was part of the Rancho Los Corralitos (Ranch of the little corrals) land grant that was comprised of 15,440-acres. The Rancho may have derived its name from a campsite in the area named *La Laguna del Coral* or Lagunita del Corral, which was recorded by members of the Portola expedition in 1769 (Clark 1986). The Rancho was granted to Joe Amnesti in 1843 (Figure 2).

An 1889 plat map shows that the Project Area was within an approximately 99-acre parcel owned by J. Folly (Figure 3). Notably, Pioneer Road and Green Valley Road had already been laid out by this time. A 1906 plate map shows the same property owner, J. Foley, suggesting the owners are the same individual, but the name is spelled differently on the maps (Figure 4).

An aerial photograph from 1934 indicates the Project Area was used for agricultural purposes with approximately half of the lot under cultivation (Figure 5). By 1964, an aerial photograph shows the

three long warehouses that still exist today, however they are the only structures on the parcel. The same half of the lot continues to be cultivated (Figure 6).

File name: Figure_2_RanchoLosCorralitos.ai, /2019-001.17, Stella D'Oro, 24/June2019



Courtesy of UC Berkeley, Bancroft Library

LEGEND

 Vicinity of Project Area

Figure 2. 1850s map of Tierra de Don Jose Amesti (Rancho Los Corralitos) with the vicinity of the Project Area.





File name: Figure_3_1889.plt, Stella D'Oro, 24 June 2019

LEGEND
 Project parcel

Official map of Santa Cruz County (1889): Tiles 22 and 23, Hatch, A. J. (Andrew Jackson). UCSC Digital Collections

Figure 3. Detail of an 1889 plat map with the Project Area.

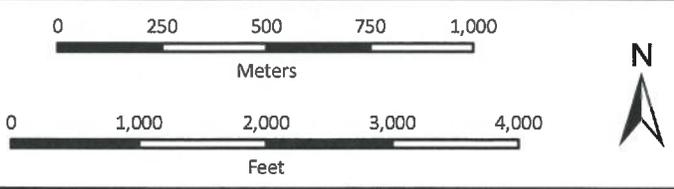
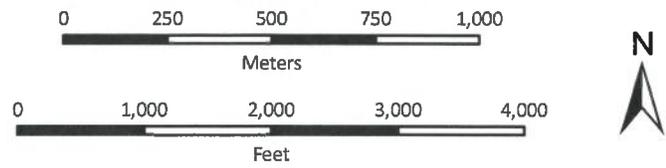




Figure 4. Detail of a 1906 plat map with the Project Area.



File name: Figure_4_1906.plt, J2019-001.17, Stella D'Oro, 26 June 2019

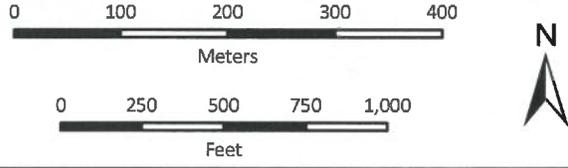


File name: Figure_5_1934Aerial.tif_2019-001.17_Stella D'Oro_26June2019

LEGEND
 Project parcel

ha-yb_60.tif. Courtesy of UC Santa Barbara Aerial Photographs Collection.

Figure 5. Detail of a 1934 aerial photograph with the Project Area.





File name: Figure_6_1964Aerial.ai_j2019-001.17_Stella D'Oro_26June2019

LEGEND

Project parcel

Figure 6. Detail of a 1964 aerial photograph with the Project Area.

0 100 200 300 400
Meters

0 250 500 750 1,000
Feet



ha-yb_60.tif. Courtesy of UC Santa Barbara Aerial Photographs Collection.

Field Methods and Results

5

On June 11, 2019, Albion archaeologist, Danielle Dadiago, conducted an archaeological pedestrian survey at 90 Pioneer Road. Ms. Dadiago walked over the entire Project Area in 2 to 5-meter transects, which consisted of storage buildings, an office building, paved roads, gravel roads, and parking lot (Figure 7). The Project Area had been graded during historic times.

Visibility of the ground surface throughout the Project Area was poor due to most of the soils being covered with built environment.

Cultural materials were not observed during the surface investigation of the subject parcel (Figure 8).

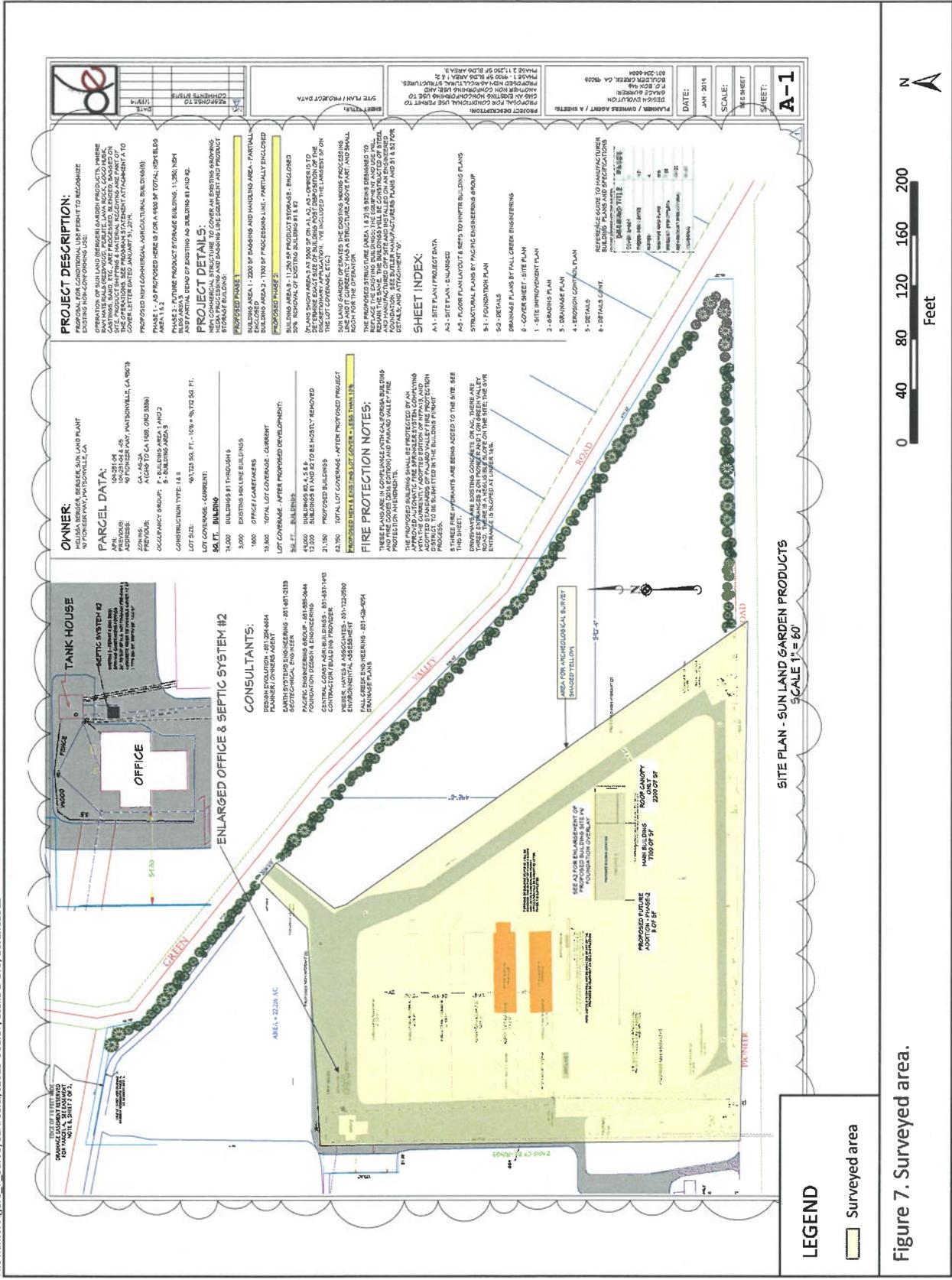
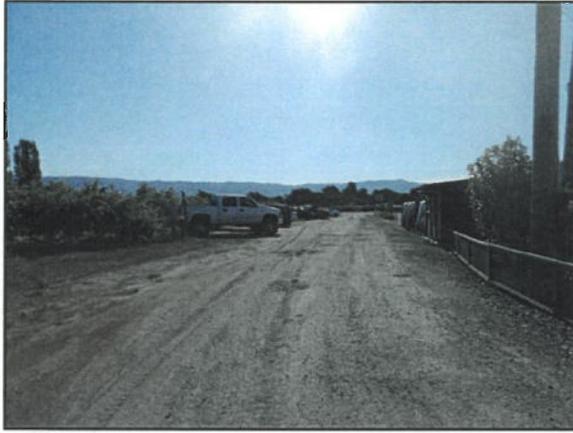
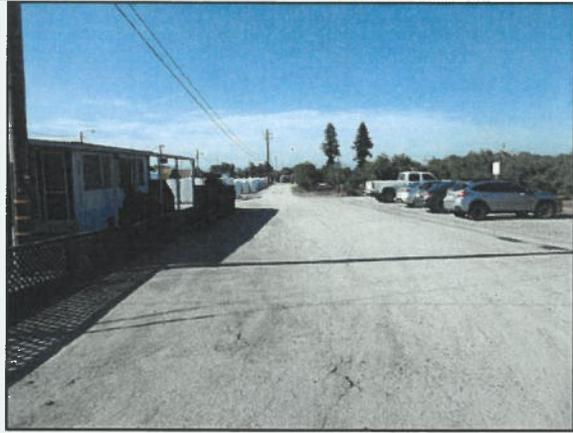


Figure 7. Surveyed area.



Photograph 1. Gravel road in Project Area (facing east).



Photograph 2. Gravel road in Project Area (facing south.)



Photograph 3. Access road (facing east).



Photograph 4. Storage area with cement blocks and a pile of mulch (facing north).



Photograph 5. Overview of the entrance (facing northwest).



Photograph 6. Visitor entrance area (facing north).

Figure 8. Photographs from the field.

File name: Figure 8_Photos.a | 2019-001.17, Stella D'Oro, 26 June 2019

Conclusions and Recommendations

6

Visual inspection of the Project Area surface revealed no evidence of intact prehistoric or historic-era archaeological deposits. The Project Area includes storage buildings, an office building, paved roads, gravel roads, and parking lot. The depths of impacts are as follows: foundation piers will be 24" to 36" deep, trenches for the fire hydrants will be 36" deep, and a septic tank will be 50" deep.

Soils encountered are consistent with what is mapped in the area with no evidence of culturally-produced stratigraphy. No cultural materials were noted during a surface investigation of the subject parcel.

Albion's investigation at 90 Pioneer Road in Watsonville indicates that potentially significant cultural materials are not located in the Project Area, and it is Albion's judgment that no further archaeological investigation is warranted under CEQA.

Since many important cultural resources, such as Tribal Cultural Resources, do not necessarily leave an archaeological footprint or have physically identifiable manifestations, it is vital to seek out the possibility of these important resources and their locations through consultation with local tribal members. Under the authority of recently-passed Assembly Bill 52, the County may have received information from interested Native American tribes or representatives concerning Tribal Cultural Resources at the project site. The County is responsible for collecting and incorporating tribal information into the environmental review process. At this time, we do not know if the County has received any such information.

It is CEQA policy should prehistoric or historic-era deposits or features are discovered at any time during construction, activities in the area should cease and a qualified archaeologist should inspect and evaluate the discovery and prepare a recommendation for a further course of action.

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Appendix A

Records Search Results

*Notes:

** Current versions of these resources are available on-line:

Caltrans Bridge Survey: <http://www.dot.ca.gov/hq/structur/strmaint/historic.htm>

Soil Survey: <http://www.nrcs.usda.gov/wps/portal/nrcs/surveylist/soils/survey/state/?stateId=CA>

Shipwreck Inventory: <http://www.slc.ca.gov/Info/Shipwrecks.html>

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the California Historical Resources Information System (CHRIS).

Sincerely,

Lisa C. Hagel
Researcher

Geotechnical Report

Application Number 181155

Attachment 2

**GEOTECHNICAL ENGINEERING STUDY
SUN-LAND GARDEN PRODUCTS MACHINERY CANOPY
90 PIONEER ROAD
WATSONVILLE, CALIFORNIA**

September 28, 2018

Prepared for

Mr. Jack Bowlus
Central Coast Agri-Buildings
3891 Cienega Road
Hollister, CA 95023

Prepared by

Earth Systems Pacific
500 Park Center Drive, Suite 1
Hollister, CA 95023

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Earth Systems

500 Park Center Drive, Suite 1 | Hollister, CA 95023 | Ph: 831.637.2133 | www.earthsystems.com

September 28, 2018

File No.: 302452-001

Mr. Jack Bowlus
Central Coast Agri-Buildings
3891 Cienega Road
Hollister, CA 95023

PROJECT: SUN-LAND GARDEN PRODUCTS MACHINERY CANOPY
90 PIONEER ROAD
WATSONVILLE, SANTA CRUZ COUNTY, CALIFORNIA

SUBJECT: Geotechnical Engineering Study

REF.: Proposal for Geotechnical Engineering Study, Sun-Land Garden Products Machinery Canopy, 90 Pioneer Road, Watsonville, Santa Cruz County, California, by Earth Systems Pacific, September 28, 2018.

Dear Mr. Jack Bowlus:

In accordance with your authorization of the above referenced proposal, this geotechnical engineering study has been prepared by Earth Systems Pacific (Earth Systems) for use in the development of plans and specifications for the proposed machinery canopy in Watsonville, California. The conclusions and recommendations presented herein are based on our understanding of the currently proposed development, a review of the subsurface conditions revealed by the soil borings advanced as a part of this investigation, the results of laboratory tests and our engineering analysis.

We appreciate the opportunity to assist you on this project. Should you have any questions regarding the contents of this report, please contact the undersigned.

Sincerely,

Earth Systems Pacific


Kira Ortiz PE 88089
Project Engineer




Ajay Singh, GE 3057
Principal Engineer



Doc. No.: 1809-126.SER/ev



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FIGURES

Figure 1 – Vicinity Map

Figure 2 – Site Plan

APPENDIX A

Boring Logs

APPENDIX B

Laboratory Test Results



1.0 INTRODUCTION

This report presents the results of the geotechnical engineering study performed by Earth Systems Pacific (Earth System), for the planned new machinery canopy at the Sun-Land Garden Products facility in Watsonville, California. The attached Vicinity Map Figure 1, shows the general location of the site and the attached Site Plan, Figure 2, shows the location of the borings advanced at the site as part of this investigation.

Site Setting

The subject property is trapezoidal-shaped and located at 90 Pioneer Road in Watsonville, California. The middle portion of the site has a latitude of 36.9720°N and a longitude of 121.7765°W (See Figure 1).

Site Description

The site is located on the north side of Pioneer Road, approximately 850 feet west of the intersection of Green Valley Road and Pioneer Road in Watsonville, California. The project site is currently occupied by several existing buildings and stockpiles of landscaping material as shown on the attached Site Plan (Figure 2).

Project Description

Based on a preliminary Foundation Plan prepared by Pacific Engineering Group, the canopy will be a pre-engineered open metal structure about 200 feet by 55 feet, and we understand that it will be up to about 35 feet in height. The machinery is currently situated atop a concrete slab and is surrounded by a combination of concrete and asphalt pavement. No new grading, new concrete slabs or underground utilities are planned.

Scope of Services

The scope of work for the geotechnical engineering study included general site reconnaissance, subsurface exploration, laboratory testing, engineering evaluation and analysis of the data collected by Earth Systems, and preparation of this report. The analysis and engineering recommendations presented in the following sections of this report are based on our understanding of the proposed development at the subject site and our experience with projects of a similar nature.



The report and recommendations are intended to comply with the considerations of Section 1803 of the California Building Code (CBC), 2016 Edition, and common geotechnical engineering practice in this area at this time under similar conditions.

Preliminary geotechnical recommendations for site preparation and grading, foundations, and geotechnical observation and testing are presented to guide the development of project plans and specifications. It is our intent that this report be used by the client to form the geotechnical basis of the design of the project as described herein, and in the preparation of plans and specifications.

Detailed evaluation of the site geology and potential geologic hazards, and analyses of the soil for infiltration rates, mold or other microbial content, asbestos, radioisotopes, hydrocarbons, or other chemical properties are beyond the scope of this report. This report also does not address issues in the domain of contractors such as, but not limited to, site safety, loss of volume due to stripping of the site, shrinkage of soils during compaction, excavatability, shoring, temporary slope angles, and construction means and methods. Ancillary features such as temporary access roads, fences, light poles, and non-structural fills are not within our scope and are also not addressed.

To verify that pertinent issues have been addressed and to aid in conformance with the intent of this report, it is requested that final grading and foundation plans be submitted to this office for review. In the event that there are any changes in the nature, design, or locations of improvements, or if any assumptions used in the preparation of this update report prove to be incorrect, the conclusions and recommendations contained herein should not be considered valid unless the changes are reviewed and the conclusions of this update report are verified or modified in writing by the geotechnical engineer. The criteria presented in this update report are considered preliminary until such time as they are verified or modified in writing by the geotechnical engineer in the field during construction.

3.0 FIELD INVESTIGATION

Subsurface Exploration

Our subsurface exploration program consisted of drilling two exploratory borings at the site on August 29, 2018 at the approximate locations shown on the Site Plan, Figure 2. The borings were



drilled using a truck-mounted drilling rig equipped with 6-inch diameter solid stem augers and sampled to depths ranging from 15 to 25 feet below the ground surface (bgs).

The drilling process consisted of augering to the desired depth and upon reaching that depth, the augers were retrieved from the hole and a standard split-spoon sampler connected to steel rods was lowered into the hole. The samplers were driven with a 140-pound, safety hammer falling about 30 inches per drop using a rope and cathead. The samplers were driven up to 18 inches and the hammer blows required to drive the samplers were recorded every six inches and are presented on the boring logs. The sampler was then retrieved to the surface, taken apart, and the brass liners containing the soil samples were examined to assist with logging and selected samples were sealed, labeled and transported to the laboratory for testing. Efforts were made to minimize sample disturbance and moisture losses during sample transportation and storage in the laboratory.

Our staff geologist supervised the drilling program, logged the soil conditions encountered in the borehole and collected representative samples for laboratory testing. Subsurface conditions revealed by our borings were described by our staff engineer. The borings were backfilled with lean cement grout. The boring logs show soil description including: color, major and minor components, USCS classification, changes in soil conditions with depth, moisture content, consistency/density, plasticity, sampler type, and sampling depths and laboratory test results. Copies of the boring logs advanced for this investigation are presented in Appendix A.

Subsurface Profile

A review of the logs of borings drilled at the site by Earth Systems, indicates the near surface soils consist of stiff, moist, fat clay extending to approximately 8 to 9 feet below the ground surface (bgs). Below the upper fat clayey soil, the borings encountered alternating layers of medium dense clayey sand and stiff lean clay with varying sand contents to the maximum depths explored of 25 feet bgs.

Groundwater was encountered during our subsurface exploration at a depth of approximately 20 feet bgs. It should be noted, however, that fluctuations in the level of subsurface water can occur due to variations in rainfall, and temperature, and groundwater levels should not be considered constant.



4.0 DATA ANALYSIS

Subsurface Soil Classification

Based on the data acquired during our subsurface investigation (See Appendix A), the site is assigned to Site Class D ("stiff soil") as defined by Table 20.3-1 of the ASCE 7-10.

Seismic Design Parameters

The following seismic design parameters represent the general procedure as outlined in Section 1613 of the CBC and in ASCE 7. The values determined below are based on the 2009 National Earthquake Hazard Reduction Program (NEHRP) maps and were obtained using the United States Geological Survey's Design Maps Web Application.

Summary of Seismic Parameters - CBC 2016
(Site Coordinates 36.9720°N, 121.7765°W)

Parameter	Design Value
Site Class	D
Mapped Short Term Spectral Response Parameter, (S_s)	2.36g
Mapped 1-second Spectral Response Parameter, (S_1)	0.98g
Site Coefficient, (F_a)	1.0
Site Coefficient, (F_v)	1.5
Site Modified Short Term Response Parameter, (S_{Ms})	2.36g
Site Modified 1-second Response Parameter, (S_{M1})	1.47g
Design Short Term Response Parameter, (S_{Ds})	1.57g
Design 1-second Response Parameter, (S_{D1})	0.98g

Static Settlement

The possibility of settlement is minimized by the light structural loads expected for the proposed improvements. Anticipated static settlements of the onsite native soils are on the order of 1 inch with a differential settlement of ½ inches.

5.0 CONCLUSIONS

General

Based on the results of the field investigation and the laboratory testing program, in our opinion,



the site is geotechnically suitable for the planned new machinery canopy provided that the recommendations contained herein are implemented in the design and construction. The primary geotechnical concerns are the presence of highly expansive surface soils at the site. To reduce the shrinkage and swelling potential, special provisions as those outlined in the following sections of the report will be necessary.

Site Preparation and Grading

Grading plans were not available during the preparation of this report; however, it is anticipated that site grading will consist of removing the existing concrete slab, reworking the native soils, and preparation of the subgrade to receive new foundations.

Soil Expansion Potential

A plasticity index test performed on a sample of the upper soils from the site resulted in a liquid limit (LL) of 55 and a plasticity index of (PI) of 37. These values indicate that the sample tested has a very high expansion potential. Soils with high shrinkage-swelling potential undergo pronounced volume changes with moisture content fluctuations and when constrained they could exert significant uplift forces on the overlying structures.

In our experience, the commonly used engineering measures used to minimize post-construction distress to lightly loaded structures overlying expansive soils include one or a combination of the following:

- Increase the depth of footings to act as a moisture cutoff barrier and extend the footings to depths where moisture fluctuations are anticipated to be less pronounced;
- Pre-expand clays by compacting them at a high degree of saturation and relative compaction in the range of 88 to 92 percent;
- Add a layer of non-expansive soil on top of the expansive soils and place lightly loaded structures on top of the non-expansive soil layer;
- Keep the soils moist until they are covered with concrete; and
- Manage surface water runoff and irrigation water in such a way that it does not have a chance to penetrate the areas around the structures and the hardscape



areas where it could result in creating pronounced moisture content fluctuations in soil.

Foundations

The proposed loads of the canopy may be adequately supported on conventional spread footings. Details of the foundation recommendations are included in the following sections of the report.

Groundwater

Groundwater was encountered in boring B1 during the subsurface exploration at a depth of approximately 20 feet bgs. Variations in rainfall, temperature, and other factors may affect water levels, and therefore groundwater levels should not be considered constant; however, groundwater is not expected to have an adverse effect on the construction of the planned machinery canopy.

Seismicity

The Watsonville area is recognized by geologists and seismologists as one of the most seismically active regions in the United States. The significant earthquakes in this area are generally associated with crustal movement along well-defined, active fault zones which regionally trend in a northwesterly direction. Although research on earthquake prediction has greatly increased in recent years, seismologists cannot predict when and where an earthquake will occur. Nevertheless, based on current technology, it is reasonable to assume that the proposed development will be subjected to at least one moderate to severe earthquake during its lifetime. During such an earthquake, the danger from fault offset on the site is low, but strong shaking of the site is likely to occur and, therefore, the project should be designed in accordance with the seismic design provisions of the latest California Building Code. The California Building Code seismic design parameters are not intended to prevent structural damage during an earthquake, but to reduce damage and minimize loss of life.

6.0 RECOMMENDATIONS

Site Preparation and Grading

General Site Preparation

1. The site area is already covered with an at-grade concrete slab; therefore, no further site



preparation is needed. However, we have included these recommendations herein, in case additional area is prepared to receive a new slab.

2. Site clearing, placement of fill, and grading operations at the site should be conducted in accordance with the recommendations provided in this report. Compaction recommendations for site grading can be found later in this section.
3. The site should be prepared for grading by removing vegetation, debris, and other potentially deleterious materials from areas to receive improvements. Existing utility lines that will not be serving the proposed project should be either removed or abandoned. The appropriate method of utility abandonment will depend upon the type and depth of the utility. Recommendations for abandonment can be made as necessary.
4. Due to potential ground disturbance from demolition activities, a program of over-excavation and backfilling may be required. Loose, disturbed soil within the building areas should be cleaned out (excavated) to competent, undisturbed soil. The exposed ground should be inspected by the geotechnical engineer to determine the need for additional excavation work.
5. Ruts or depressions resulting from the removal of utilities, fill soils, tree root systems, and abandoned and/or buried structures, buried debris, and remnants of the former use of the site that are discovered during site grading should be removed and properly cleaned out down to undisturbed native soil. The bottoms of the resulting depressions should be scarified and cross-scarified at least 8 inches in depth, moisture conditioned and recompacted. The depressions should then be backfilled with approved, compacted, moisture conditioned structural fill, as recommended in other sections of this report.
6. Site clearing, and backfilling operations should be conducted under the field observation of the geotechnical engineer.
7. The geotechnical engineer should be notified at least 48 hours prior to commencement of grading operations.



Compaction Recommendations

1. In general, the underlying native soil should be scarified at least 8 inches, moisture conditioned to a minimum of 3 percent over optimum moisture content and recompacted to relative compaction value ranging between 88 to 92 percent. Relative compaction should be measured relative to the maximum dry density measured using ASTM D1557. This scarification operation should be performed at all locations designated for proposed structural fill, exterior flatwork, foundations, and pavement areas.

Fill Recommendations

1. The on-site native and fill soils that are free of debris, excessive amounts of organics and other deleterious material, may be used as structural fill; however, because these soils are deemed to have high shrinkage/swelling potential, they should not be placed within the upper 18 inches of the subgrade beneath the exterior flatwork.
2. If fill is to be imported for general use at the site as non-expansive imported material, the soil should meet the following criteria:
 - a. Be coarse grained and have a plasticity index of less than 15 and/or an expansion index less than 20;
 - b. Be free of organics, debris or other deleterious material;
 - c. Have a maximum rock size of 3 inches; and
 - d. Contain sufficient clay binder to allow for stable foundation and utility trench excavations.
3. A representative sample of the proposed imported soils should be submitted at least three days before being transported to the site for evaluation by the geotechnical engineer. During importation to the site the material should be further reviewed on an intermittent basis.

Foundations

1. The planned machinery canopy may be supported by conventional spread footings bearing on the stiff native soil or engineered fill material. The footings should have



minimum depths of 24 inches below the lowest adjacent grade or the bottom of the slab. The footing excavations should be clean, free of loose material, and should be observed by the geotechnical engineer prior to placement of formwork or reinforcement. Since the underlying soils are very expansive, footing excavations should be kept moist to avoid any cracking by frequently spraying it with water up until concrete is placed in the excavations.

2. The footings should be designed using a maximum allowable bearing capacity of 1,500 psf dead plus live load. This value may be increased by one-third when transient loads such as wind or seismicity are included.
3. Resistance to lateral loads should be calculated based on a passive equivalent fluid pressure of 250 pcf and a friction factor of 0.30. Passive and frictional resistance can be combined in the calculations without reductions. These values are based on the assumption that backfill adjacent to foundations is properly compacted. The upper 12 inches of embedment should be disregarded.

Surfacewater Drainage Management and Finish Improvements

1. Unpaved ground surfaces should be finish graded to direct surface runoff away from site improvements at a minimum 5 percent grade for a minimum distance of 10 feet. If this is not practical due to the terrain or other site features, swales with improved surfaces should be provided to divert drainage away from improvements. The landscaping should be planned and installed to maintain proper surface drainage conditions.
2. Runoff from driveways, roof gutters, downspouts, planter drains and other improvements should be collected in a closed pipe system which discharge in a non-erosive manner away from foundations, pavements, and other improvements.
3. Stabilization of surface soils, particularly those disturbed during construction, by vegetation or other means during and following construction is essential to protect the site from erosion damage. Care should be taken to establish and maintain vegetation.



4. Raised planter beds adjacent to foundations should be provided with sealed sides and bottoms so that irrigation water is not allowed to penetrate the subsurface beneath foundations. Outlets should be provided in the planters to direct accumulated irrigation water away from foundations.
5. Open areas adjacent to exterior flatwork should be irrigated or otherwise maintained so that constant moisture conditions are created throughout the year. Irrigation systems should be controlled to the minimum levels that will sustain the vegetation without saturating the soil.
6. Bio-retention swales constructed within 10 feet or less from the building foundation should be lined with a 20-mil pond liner.

Geotechnical Observation and Testing

1. It must be recognized that the recommendations contained in this report are based on a limited number of borings and rely on continuity of the subsurface conditions encountered.
2. It is assumed that the geotechnical engineer will be retained to provide consultation during the design phase, to interpret this report during construction, and to provide construction monitoring in the form of testing and observation.
3. Unless otherwise stated, the terms "compacted" and "recompacted" refer to soils placed in level lifts not exceeding 8 inches in loose thickness and compacted to a minimum of 90 percent of maximum dry density. The standard tests used to define maximum dry density and field density should be ASTM D 1557-12 and ASTM D 6938-17, respectively, or other methods acceptable to the geotechnical engineer and jurisdiction.
4. "Moisture conditioning" refers to adjusting the soil moisture to at least 3 percentage points above optimum moisture content prior to application of compactive effort. If the soils are overly moist so that they become unstable, or if the recommended compaction cannot be readily achieved, drying the soil to optimum moisture content or just above may be necessary. Placement of gravel layers or geotextiles may also be necessary to



help stabilize unstable soils. The geotechnical engineer should be contacted for recommendations for mitigating unstable soils.

5. At a minimum, the following should be provided by the geotechnical engineer:
 - Review of final grading and foundation plans,
 - Professional observation during site preparation, grading, and foundation excavation,
 - Oversight of soil compaction testing during grading,
 - Oversight of soil special inspection during grading.

6. Special inspection of grading should be provided as per Section 1705.6 and 1705.8 and Table 1705.6 and 1705.8 of the CBC; the soils special inspector should be under the direction of the geotechnical engineer. In our opinion, the following operations should be subject to *continuous* soils special inspection:
 - Scarification and recompaction,
 - Fill placement and compaction,
 - Foundation pier drilling,
 - Over-excavation to the recommended depth.

7. In our opinion, the following operations may be subject to *periodic* soils special inspection; subject to approval by the Building Official:
 - Site preparation,
 - Compaction of utility trench backfill,
 - Removal of existing development features,
 - Compaction of subgrade and aggregate base,
 - Observation of foundation excavations,
 - Building pad moisture conditioning.



8. It will be necessary to develop a program of quality control prior to beginning grading. It is the responsibility of the owner, contractor, or project manager to determine any additional inspection items required by the architect/engineer or the governing jurisdiction.
9. The locations and frequencies of compaction tests should be as per the recommendations of the geotechnical engineer at the time of construction. The recommended test locations and frequencies may be subject to modification by the geotechnical engineer based upon soil and moisture conditions encountered, the size and type of equipment used by the contractor, the general trend of the compaction test results, and other factors.
10. A preconstruction conference among a representative of the owner, the geotechnical engineer, soils special inspector, the architect/engineer, and contractors is recommended to discuss planned construction procedures and quality control requirements. Earth Systems should be notified at least 48 hours prior to beginning grading operations.

7.0 CLOSURE

This report is valid for conditions as they exist at this time for the type of project described herein. Our intent was to perform the investigation in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing in the locality of this project at this time under similar conditions. No representation, warranty, or guarantee is either expressed or implied. This report is intended for the exclusive use by the client as discussed in the Scope of Services section. Application beyond the stated intent is strictly at the user's risk.

If changes with respect to the project type or location become necessary, if items not addressed in this report are incorporated into plans, or if any of the assumptions stated in this report are not correct, Earth Systems should be notified for modifications to this report. Any items not specifically addressed in this report should comply with the California Building Code and the requirements of the governing jurisdiction.

The preliminary recommendations of this report are based upon the geotechnical conditions encountered during the investigation and may be augmented by additional requirements of the



architect/engineer, or by additional recommendations provided by this firm based on conditions exposed at the time of construction.

If Earth Systems is not retained to provide construction observation and testing services, it will not be responsible for the interpretation of the information by others or any consequences arising there from.

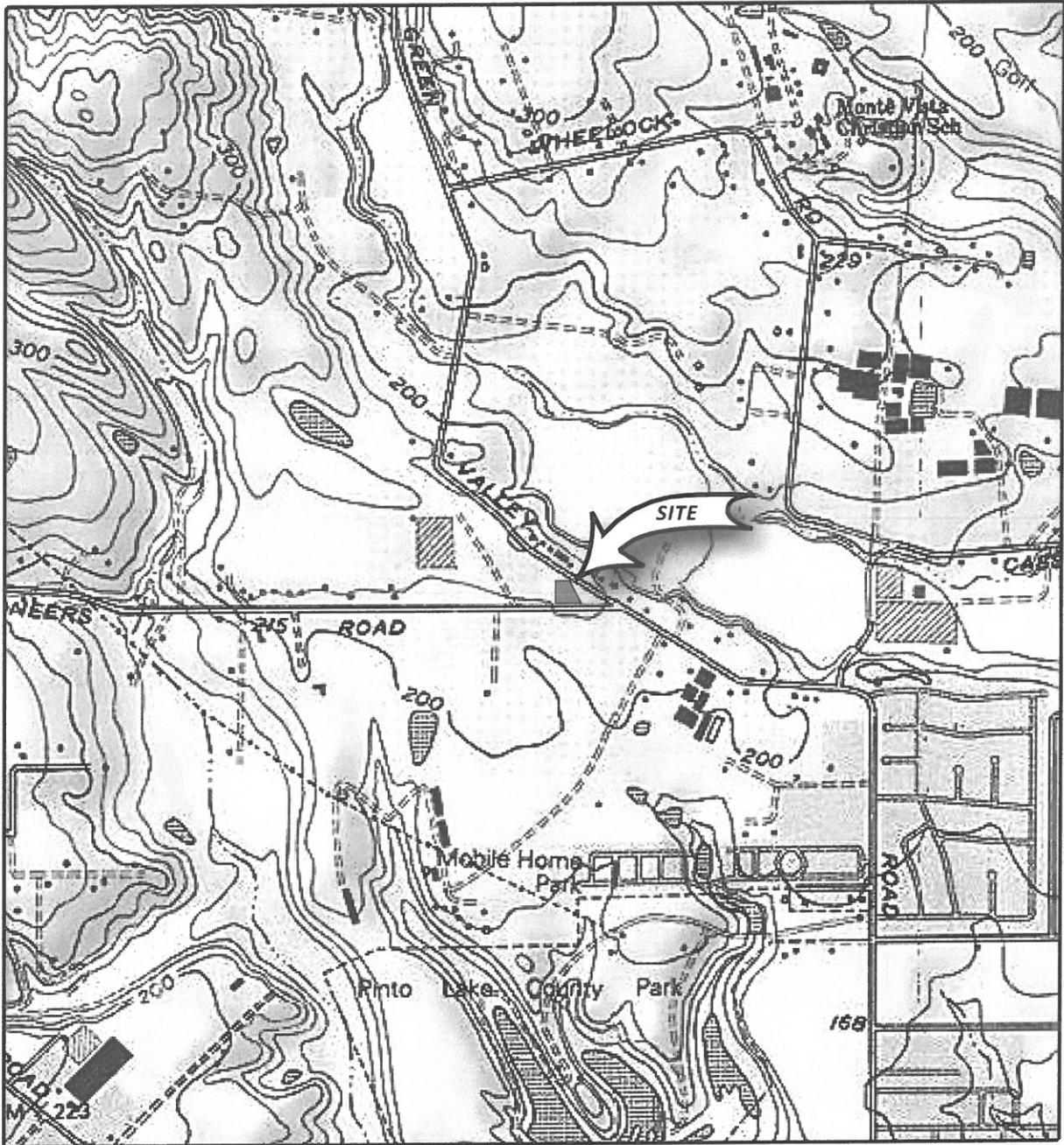
This document, the data, conclusions, and recommendations contained herein are the property of Earth Systems. This report should be used in its entirety, with no individual sections reproduced or used out of context. Copies may be made only by Earth Systems, the client, and his authorized agents for use exclusively on the subject project. Any other use is subject to federal copyright laws and the written approval of Earth Systems.

FIGURES

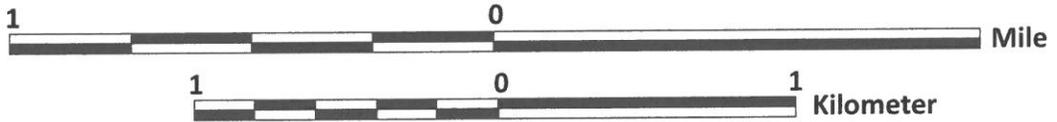
Figure 1 - Vicinity Map

Figure 2 - Site Plan

TN MN
13.2



Approximate Scale 1: 24,000



Base: USGS 7.5 Minute Series, Cordelia Quadrangle (2015)

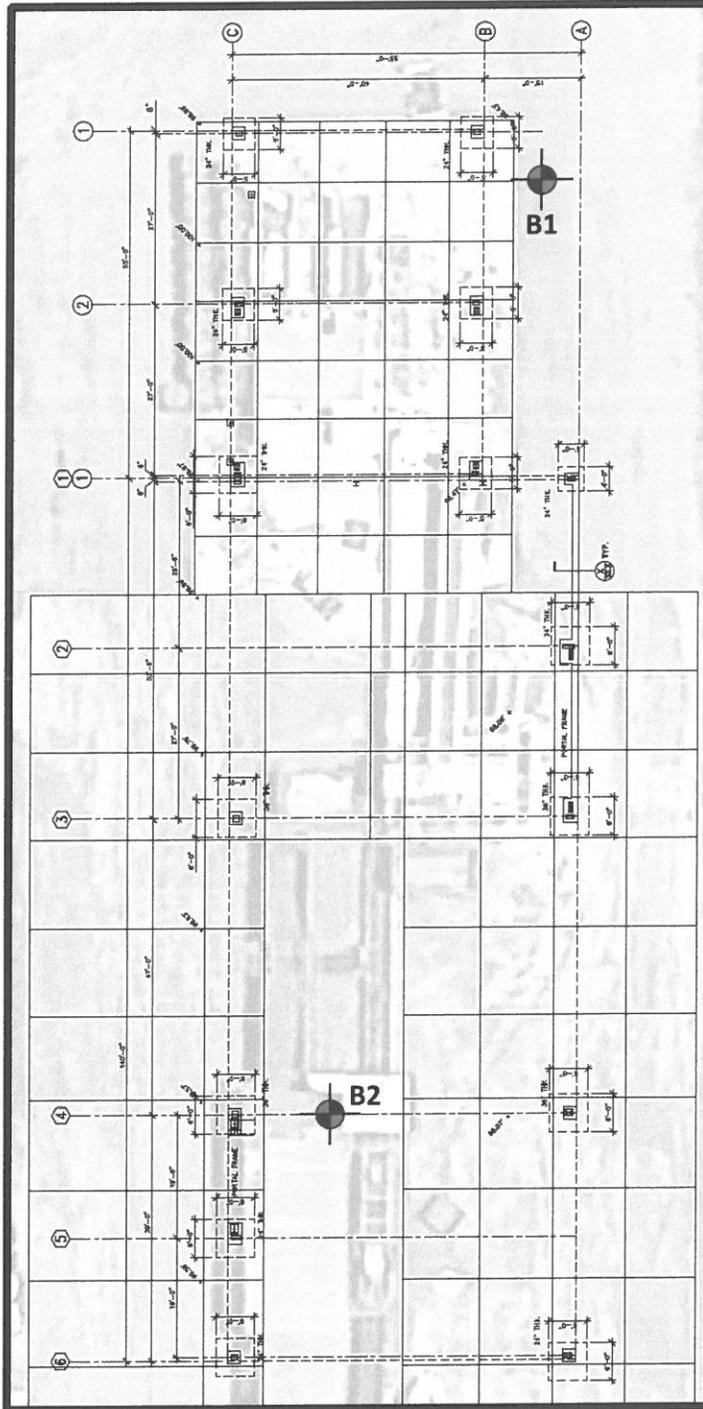


Earth Systems Pacific

Sun-Land Garden Machinery Canopy
90 Pioneer Road
Watsonville,

Vicinity Map

302452-001



 **B2** Approximate boring location

Base: Pacific Engineering Group, Inc. (date unknown)



Earth Systems Pacific

Sun-Land Garden Machinery Canopy
90 Pioneer Road
Watsonville, California

Site Plan
302452-001

APPENDIX A

Boring Logs



Earth Systems Pacific

Boring No. 1

PAGE 1 OF 1

LOGGED BY: D. Teimoorian

DRILL RIG: SIMCO 2400 SK-1

AUGER TYPE: 6" Solid Stem Auger

JOB NO.: 302452-001

DATE: 8/29/18

DEPTH (feet)	USCS CLASS	SYMBOL	Sun-Land Garden Products Machinery Canopy 90 Pioneer Road Watsonville, Santa Cruz County, California	SAMPLE DATA						
				INTERVAL (feet)	SAMPLE NUMBER	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.	POCKET PEN (t.s.f)
0			AC-2.5", AB-2.0"							
1	CH		FAT CLAY; stiff, olive brown, moist, few fine sand							
2			- grayish brown, very moist, oxidation [LL = 55; PI = 18]	1.5-3.0	1-1		102.7	21.7	5	
3			- moist, less oxidation						6	
4				3.5-5.0	1-2		103.5	21.0	9	
5									4	
6									9	
7									11	
8									14	
9	SC		CLAYEY SAND; medium dense, gray brown, moist, mostly fine to medium sand, few fine gravel, free water on gravels, oxidized	8.5-10.0	1-3					
10										
11										
12										
13										
14	SP-SC		POORLY graded SAND with CLAY; medium dense, orange brown, wet, fine sand	13.5-15.0	1-4				6	
15	CL		LEAN CLAY; stiff, orange brown, very moist						5	
16									6	
17										
18	CL		SANDY LEAN CLAY; stiff, light gray brown, very moist, fine to medium sand	18.5-20.0	1-5				3	
19									5	
20									11	
21										
22										
23	SC		CLAYEY SAND; medium dense, dark orange brown, very moist, fine to medium sand	23.5-25.0	1-6				4	
24									5	
25									10	
26			Bottom of boring at 25.0' Groundwater encountered at 20.0'							

LEGEND: 2.5" Mod Cal Sample 2.0" Cal Sample SPT Bulk Sample Groundwater

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.



LOGGED BY: D. Teimoorian
 DRILL RIG: SIMCO 2400 SK-1

JOB NO.: 302452-001

AUGER TYPE: 6" Solid Stem Auger

DATE: 8/29/18

DEPTH (feet)	USCS CLASS	SYMBOL	Sun-Land Garden Products Machinery Canopy 90 Pioneer Road Watsonville, Santa Cruz County, California	SAMPLE DATA						
				INTERVAL (feet)	SAMPLE NUMBER	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.	POCKET PEN (t.s.f)
0			Concrete - 3.5", AB - 4.00"							
1	CH		FAT CLAY; stiff, dark brown, moist, few fine sand, slightly oxidized	0.5-5.0	Bag A					5
2				1.5-3.0	2-1		107.5	18.6		6
3										10
4			- very stiff, less oxidation							6
5				3.5-5.0	2-2		109.7	19.7		11
6										19
7										
8										
9	SC		CLAYEY SAND, medium dense, orange brown, moist, fine to medium sand	8.5-10.0	2-3					9
10										10
11										10
12										
13										
14				13.5-15.0	2-4					4
15										5
16			Bottom of boring at 15.0' Groundwater not encountered							6
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										

LEGEND: 2.5" Mod Cal Sample 2.0" Cal Sample SPT Bulk Sample Groundwater

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.

APPENDIX B

Laboratory Test Results



Sun-Land Garden Products Canopy

302452-001

BULK DENSITY TEST RESULTS

ASTM D 2937-17 (modified for ring liners)

September 19, 2018

BORING NO.	DEPTH feet	MOISTURE CONTENT, %	WET DENSITY, pcf	DRY DENSITY, pcf
1-1	2.5 - 3.0	21.7	125.0	102.7
1-2	4.5 - 5.0	21.0	125.2	103.5
2-1	2.5 - 3.0	18.6	127.4	107.5
2-2	4.5 - 5.0	19.7	131.2	109.7



Sun-Land Garden Products Canopy

302452-001

PLASTICITY INDEX

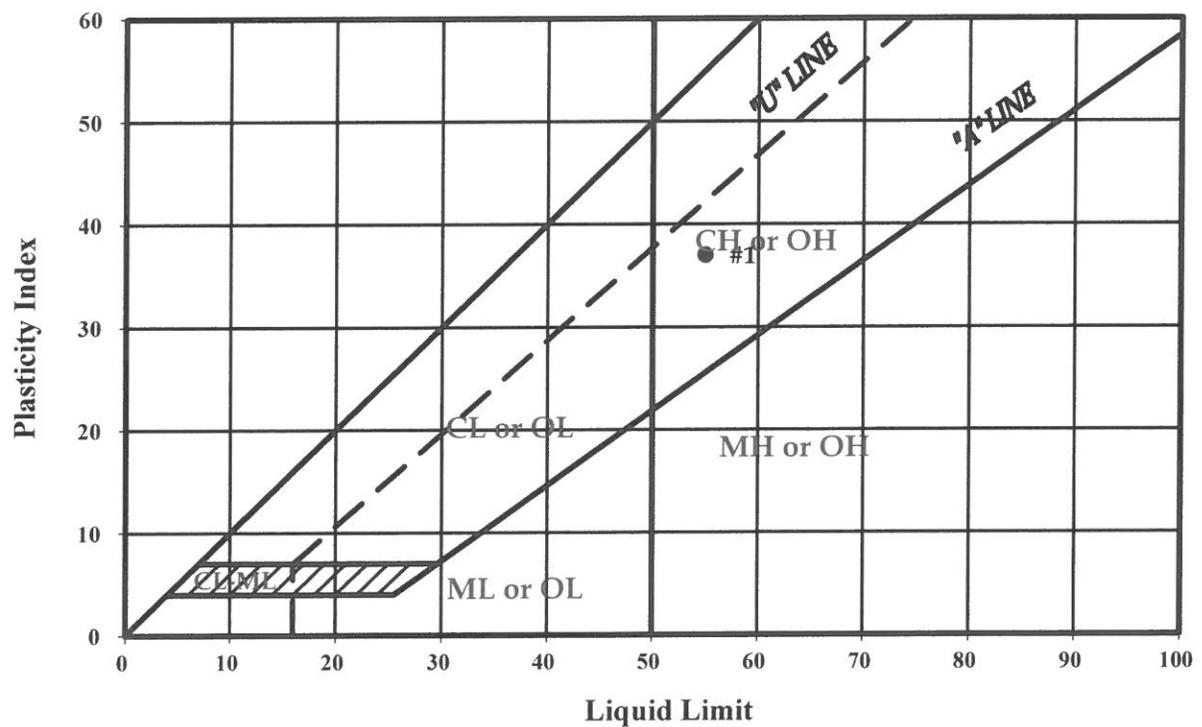
ASTM D 4318-17

Light Olive Brown Fat Clay (CH)

September 19, 2018

Test No.:	1	2	3	4	5
Boring No.:	B1-1				
Sample Depth:	2.5 - 3.0'				
Liquid Limit:	55				
Plastic Limit:	18				
Plasticity Index:	37				

Plasticity Chart



Geotechnical Report Acceptance Letter

Application Number 181155

Attachment 3



COUNTY OF SANTA CRUZ

PLANNING DEPARTMENT

701 OCEAN STREET, 4TH FLOOR, SANTA CRUZ, CA 95060
(831) 454-2580 FAX: (831) 454-2131 TDD: (831) 454-2123
KATHLEEN MOLLOY, PLANNING DIRECTOR

22 April 2019

Sun Land Garden Products
Attn: Melissa Berger
90 Pioneer Way
Watsonville, Ca 95076

Subject: Review of the Geotechnical Engineering Study for Proposed Sun Land Garden Products Machinery Canopy at 90 Pioneer Road dated 28 September 2018 by Earth Systems Pacific – File No: 302452-001

Project Site: 90 Pioneer Way
APN 109-231-09
Application No. REV191015

Dear Applicant:

The purpose of this letter is to inform you that the Planning Department has accepted the subject report. The following items shall be required:

1. All project design and construction shall comply with the recommendations of the report.
2. Final plans shall reference the subject report by title, author, and date. Final Plans should also include a statement that the project shall conform to the report's recommendations.
3. After plans are prepared that are acceptable to all reviewing agencies, please submit a completed Soils (Geotechnical) Engineer Plan Review Form to Environmental Planning. The author of the soils report shall sign and stamp the completed form. Please note that the plan review form must reference the final plan set by last revision date.

Any updates to report recommendations necessary to address conflicts between the report and plans must be provided via a separate addendum to the soils report.

Electronic copies of all forms required to be completed by the Geotechnical Engineer may be found on our website: www.sccoplanning.com, under "Environmental", "Geology & Soils", and "Assistance & Forms".

After building permit issuance the soils engineer *must remain involved with the project* during construction. Please review the Notice to Permits Holders (attached).

Our acceptance of the report is limited to its technical content. Other project issues such as zoning, fire safety, septic or sewer approval, etc. may require resolution by other agencies.

Review of the Geotechnical Engineering Study for Proposed Sun Land Garden Products Machinery Canopy at 90 Pioneer Road dated 28 September 2018 by Earth Systems Pacific

APN 109-231-09

22 April 2019

Page 2 of 3

Please note that this determination may be appealed within 14 calendar days of the date of service. Additional information regarding the appeals process may be found online at: http://www.sccoplanning.com/html/devrev/plnappeal_bldg.htm

If we can be of any further assistance, please contact the undersigned at (831) 454-3168 or rick.parks@santacruzcounty.us

Sincerely,



Rick Parks, GE 2603

Civil Engineer – Environmental Planning

Cc: Earth Systems Pacific, Attn: Kira Ortiz, PE
Environmental Planning, Attn: Robert Loveland
Primary Contact: Grace Gurreri

Attachments: Notice to Permit Holders

**NOTICE TO PERMIT HOLDERS WHEN A SOILS REPORT HAS BEEN PREPARED,
REVIEWED AND ACCEPTED FOR THE PROJECT**

After issuance of the building permit, the County requires your soils engineer to be involved during construction. Several letters or reports are required to be submitted to the County at various times during construction. They are as follows:

1. **When a project has engineered fills and / or grading**, a letter from your soils engineer must be submitted to the Environmental Planning section of the Planning Department prior to foundations being excavated. This letter must state that the grading has been completed in conformance with the recommendations of the soils report. Compaction reports or a summary thereof must be submitted.
2. **Prior to placing concrete for foundations**, a letter from the soils engineer must be submitted to the building inspector and to Environmental Planning stating that the soils engineer has observed the foundation excavation and that it meets the recommendations of the soils report.
3. **At the completion of construction**, a *Soils (Geotechnical) Engineer Final Inspection Form* from your soils engineer is required to be submitted to Environmental Planning that includes copies of all observations and the tests the soils engineer has made during construction and is stamped and signed, certifying that the project was constructed in conformance with the recommendations of the soils report.

If the *Final Inspection Form* identifies any portions of the project that were not observed by the soils engineer, you may be required to perform destructive testing in order for your permit to obtain a final inspection. The soils engineer then must complete and initial an *Exceptions Addendum Form* that certifies that the features not observed will not pose a life safety risk to occupants.

Phase 1 Site Assessment

Application Number 181155

Attachment 4



WEBER, HAYES & ASSOCIATES
Hydrogeology and Environmental Engineering
120 Westgate Drive, Watsonville, CA 95076
(831) 722-3580 // www.weber-hayes.com

PHASE I ENVIRONMENTAL SITE ASSESSMENT



Sun Land Garden Products

Subject Site:
Sun Land Garden Products
90 Pioneer Road
Watsonville, California

Santa Cruz County
Assessor Parcel Number (APN):
109-23-109

November 12, 2018

Prepared for:
Sun Land Garden Products
c/o: Melissa Berger
90 Pioneer Road
Watsonville, California 95076

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- APPENDIX B: *Historical Research – Aerials, Topo Maps, Sanborn Maps*
- APPENDIX C: *EDR Radius Report (database review of regulated sites)*
- APPENDIX D: *Local Agency Records: Related Reports, Closure Letters, and Regulatory Correspondence*

ABBREVIATIONS AND ACRONYMS

APN	<i>Assessor's Parcel Number</i>	NFA	<i>No Further Action (de minimis Condition)</i>
ASTM	<i>American Society for Testing & Materials</i>	ppm	<i>Parts Per Million</i>
bgs	<i>Below Ground Surface</i>	NPL	<i>USEPA National Priorities List of Superfund</i>
CERCLIS	<i>Comprehensive Environmental Response, Compensation, and Liability Information System</i>	ppb	<i>Parts Per Billion</i>
CERC-NFRAP	<i>CERCLIS – No Further Remedial Action Required</i>	REC	<i>Recognized Environmental Condition</i>
CHMIRS	<i>California Hazardous Material Incident Report System</i>	SCC-EHS	<i>Santa Cruz County Environmental Health Services</i>
CREC	<i>Controlled Recognized Environmental Condition</i>	SLIC	<i>Spills, Leaks, Investigation & Clean-up</i>
CUPA	<i>Certified Unified Program Agency (A Local Haz-Mat Regulatory Oversight Agency)</i>	TPH	<i>Total Petroleum Hydrocarbons</i>
EDR	<i>Environmental Data Resources</i>	µg/L	<i>Micrograms per Liter</i>
ESA	<i>Environmental Site Assessment</i>	USGS	<i>United States Geological Society</i>
ESL	<i>Environmental Screening Level</i>	UST	<i>Underground Storage Tank</i>
HMBP	<i>Hazardous Materials Business Plan</i>	VCA	<i>Voluntary Cleanup Agreement</i>
HREC	<i>Historical Recognized Environmental Condition</i>	VCP	<i>Voluntary Cleanup Program</i>
LUST	<i>Leaking Underground Storage Tank</i>	VEC	<i>Vapor Encroachment Condition</i>
LTCP	<i>Low Threat Closure Policy</i>	VOC	<i>Volatile Organic Compound</i>
mg/Kg	<i>Milligrams per kilogram</i>		

EXPLANATION OF *PHASE I ENVIRONMENTAL SITE ASSESSMENT* TERMINOLOGY

(source: ASTM Standard E 1527-13)

'REC' - Recognized Environmental Condition: the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions.

'CREC' – Controlled Recognized Environmental Condition: a *recognized environmental condition* resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls). A condition considered by the environmental professional to be a *controlled recognized environmental condition* shall be listed in the findings section of the Phase I Environmental Site Assessment report, and as a recognized environmental condition in the conclusions section of the Phase I Environmental Site Assessment report.

'HREC' - Historical Recognized Environmental Condition: a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls). Before calling the past release a historical recognized environmental condition, the environmental professional must determine whether the past release is a recognized environmental condition at the time the Phase I Environmental Site Assessment is conducted (for example, if there has been a change in the regulatory criteria). If the EP considers the past release to be a recognized environmental condition at the time the *Phase I ESA* is conducted, the condition shall be included in the conclusions section of the report as a recognized environmental condition.

De minimis Condition: a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be de minimis conditions are not recognized environmental conditions nor controlled recognized environmental conditions.

1.0 EXECUTIVE SUMMARY

This report contains results of a *Phase I Environmental Site Assessment (ESA)*, which has been conducted to evaluate the potential for environmental liabilities on a single commercial/agricultural parcel. The approximately 22-acre property, occupied by Sun Land Garden Products is located at 90 Pioneer Road in Watsonville (herein referred to as the subject "Site" – see *Topographic Location Map, Figure 1*). It is our understanding that there are existing Site improvement plans that include replacement of existing non-conforming structures and the installation of new stormwater management infrastructure.

This *Phase I ESA* evaluation includes standard assessment ingredients that include historical land use research, a review of regulatory records pertaining to the Site and vicinity properties, Site reconnaissance, and interviews with persons knowledgeable about the Site. A synopsis of this research and fieldwork is presented in this *Executive Summary*.

The Site contains both commercial and agricultural operations. The commercial operations are conducted by Sun Land Garden Products, Inc., (Sunland). It houses six warehouse structures (Buildings 1-6) and a small office building, which are approximately 50 years old. Sunland operates a commercial garden supply business that includes the manufacture/mixing of various soils and potting products, including redwood chips, peat moss, perlite, coco husks, dry fertilizers, worm casings, and more. Additionally, the Site contains orchard row crops along the eastern and northern boundary of the property which runs along Green Valley Road, these orchards are farmed and operated by a third party.



Subject Site contains six (6) primary buildings and one office building along with orchards surrounding the facility to the north and east. Property parcel boundary shown in blue above. Neighboring land use is primarily residential and agricultural. See Figure 3 for building explanation and property features.

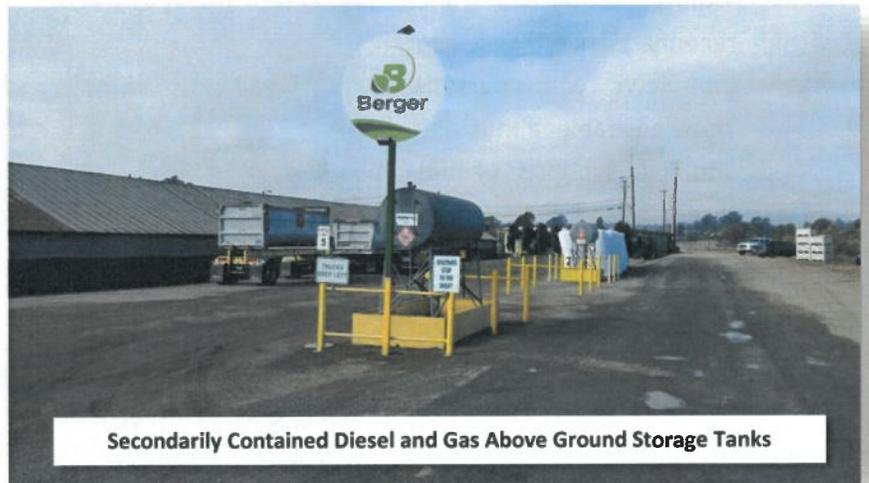
The topography of the Site is fairly flat lying and first groundwater was previously encountered at depths ranging from 12 to 20 feet below ground surface.¹ Neighboring properties are predominately agricultural and residential.

1.1 Executive Summary of Phase I Research

Phase I ESAs provide limited assurances of risk, since they rely on current Site conditions (i.e., a Site inspection), cooperative and candid interviews/questionnaires, and a limited database of regulatory and historical documentation. The Site inspections, interviews, and review of regulatory and historic documents are designed to identify real and potential environmental liabilities of concern. Potential liabilities have been categorized by the *American Society for Testing and Materials (ASTM)* into the following four conditions based on decreasing levels environmental risk: (1) **recognized environmental conditions (REC)**, (2) **controlled recognized environmental conditions (CREC)**, (3) **historical recognized environmental conditions (HREC)**, and (4) **de minimis conditions**. Definitions of these terms is provided in an *Explanation of Environmental Assessment Terminology*, provided on page iv of this report.

1.1.1 On-Site Findings

Historical Review: Historical images show that the northern and eastern portions of the Site have been utilized as orchard fields since at least 1948 to the present day. Historical aerials show the six (6) large, on-site buildings were constructed sometime between 1956 and 1968. These buildings are currently utilized as part of the on-Site operations, including packaging, storing, maintenance, and office space.



Secondarily Contained Diesel and Gas Above Ground Storage Tanks

Prior Investigation: A *Phase I ESA* was conducted in 2011 as part of a potential property transaction and the ESA identified a number of *Recognized Environmental Conditions (RECs)*.² Specifically the *Phase I ESA* identified the following potential environmental liabilities:

¹: Weber Hayes & Associates report: *Phase I/II Environmental Site Assessment*, February 28, 2011

²: Recognized Environmental Condition (REC): The presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions

- Long-term fuel dispensing and storage over native soil.
- Long-term machine shop utilizing lubricants and solvents on unpaved surface.
- Long-term vehicle/equipment maintenance operations
- Long-term open-air vehicle/equipment storage on native soils.

Phase II soil and groundwater sampling was conducted to evaluate the *potential* for contaminants of concern to impact soil and groundwater across the Site in worst case scenario locations. The sampling and testing of shallow soil and groundwater *did not reveal any significant contaminant concentrations in shallow soil or groundwater* (see Appendix D, for details).

Inspection: The 22-acre subject Site is comprised of two types of land use: Approximately 80% of the Site is utilized for commercial soil blending operations described further below. The remaining 20% of the Site is utilized for orchard farming, located primarily in the northern and eastern portions of the Site. The orchards are farmed by an independent, third party.

Sun Land Garden Products (Sunland) owns and operates the on-site commercial soil blending operations. Primary operations consist of receiving raw ingredients, grinding wood chips, stockpiling ingredients, mixing, packing, laboratory testing mixes, raw and finished goods storage, vehicle maintenance, equipment repair, and shipping finished goods. Petroleum products (fuels and oils) are maintained on-site and include three (3) above-ground storage tanks (ASTs) containing diesel (1,000-gallon AST and a back-up generator with a 100 gallon diesel tank), red diesel (2,000-gallon AST), up to two (2), 55-gallon drums of virgin motor oil, waste motor oil, and hydraulic oil.

The Site inspection was conducted on October 23rd, 2018 and all petroleum hydrocarbon storage appeared to be well maintained and secondarily contained. The dry storage of fertilizers was similarly well managed. Overall, facility operations appeared well maintained and good housekeeping was apparent. All 55-gallon drums and other large containers were properly labeled. Only minor stains were observed inside the vehicle maintenance area (impermeable concrete surfacing).

In addition, the majority of *recognized environmental conditions* previously identified in the 2011 Phase I ESA were no longer present at the Site (e.g. fuel-dispensing is well maintained, machine shop was paved and well maintained, little to no vehicle maintenance operations, no vehicle storage on native soils). The elimination of previously identified, *recognized environmental conditions* appears to be attributable to the new property management of Berger.

One location along the eastern border of the Site is used for storage of retired/obsolete packing and assembly equipment and tires (see photo sheets in Appendix A). Historical aerial photographs indicate this location has been used for open air storage since sometime between 2009 and 2012.

indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment

On Site Conclusion: Current Site conditions indicate that the property was well maintained with the majority of previously identified *recognized environmental conditions* no longer present. In addition, review of Santa Cruz County inspection reports indicate no significant violations in recent years following the 2011 ownership transition. Research, review of historical documents, and a recent Site inspection indicate there is no apparent environmental liability of significance associated with the subject Site (i.e., **no Recognized Environmental Conditions**).

- **Opinion:** Retired mixing equipment and tires can accumulate over time. Off-hauling and proper disposal of relic equipment and unnecessary materials is a best management practice that will limit the buildup of debris and prevent potential environmental liabilities from occurring.

1.1.2 Vicinity Findings

Our *Phase I ESA* review of regulated sites identified no vicinity chemical release sites that have the potential to negatively impact the subject Site. **The *Phase I ESA* research documented there were no identified Recognized Environmental Conditions in the vicinity of the subject Site.**

1.2 Executive Summary: Conclusions and Recommendations

We have performed a standard of care, *Phase I Environmental Site Assessment* in conformance with protocols established in ASTM Practice E1527-13, for the Sun Land Garden Products Site located at 90 Pioneer Road in Watsonville CA (see *Aerial Site Map*, Figure 3). There were no exceptions to, or deletions from, this practice (i.e. data gaps), as described in Section 9.0 of this report.

- **Potential, on-site liabilities:** The current *Phase I ESA* review did not identify any *Recognized Environmental Conditions* on the subject Site.
 - **Opinion:** Continuing the best management practice of removal and proper disposal of retired commercial equipment and materials will prevent potential environmental liabilities from occurring.
- **Potential, off-site liabilities:** The *Phase I ESA* review of vicinity sites did not identify any vicinity chemical release sites having the potential to negatively impact the subject Site.

This concludes the *Executive Summary*.

2.0 PURPOSE AND SCOPE

This report contains results of a *Phase I Environmental Site Assessment* (ESA) that has been conducted to identify environmental liabilities resulting from historic or existing environmental risks for the subject properties. Completed work tasks conformed to the recommended guidelines established by the American Society for Testing and Materials (ASTM). *Limitations and Exceptions of Assessment* are listed at the end of this report.

The purpose of this ESA is to provide a professional opinion regarding *recognized environmental conditions* at the Site, including potential impacts from known environmental problems in the surrounding area. The term “*recognized environmental conditions*”, is defined as “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions” (ASTM Standard E 1527-13). A short list of the essential *Phase I ESA* terminology is presented after the *Assessment Findings Summary* in the Table of Contents.

2.1 Defined Scope and Methodology

The scope of services completed for this *Phase I ESA*, included the following tasks:

- We reviewed historical maps, and aerial photographs, available geologic, topographic and groundwater data of the Site and vicinity (Sections 3.3 and 4 of this report).
- We completed a visual inspection of the Site, to check for indicators that might suggest a potential source of contamination such as current hazardous materials storage or use, unusually stained ground surfaces (soils, slabs), stressed vegetation, sumps/drains/tanks, and discarded hazardous material containers (Section 6 of this report). A copy of our Site Inspection Checklist, which includes Site photos, is included in Appendix A.
- We reviewed a *User Questionnaire* (Section 7.1, copy of completed questionnaire provided in Appendix A).
- We completed interviews with parties who have specialized knowledge about the subject Site (Section 7.2, interviewing documentation provided in Appendix A).
- We contracted with EDR, an information research firm specializing in environmental data collection, to conduct a regulatory list search of sites with underground fuel storage tanks (UST's), contaminated sites, hazardous waste generation or treatment-storage-and disposal facilities, and landfills located within ASTM survey radius. We evaluated the locations of all identified sites in relation to the Site (see Section 5.1, *Figure 4 – Surrounding Site Regulatory Review*, and Appendix C for EDR's Radius Report, which compiles and locates regulatory records from numerous local, state and federal agencies).
- We reviewed reasonably ascertainable records of hazardous materials storage and documented releases from online, public right-to-know local and State regulatory databases and physical archives, such as the State of California GeoTracker and EnviroStor databases, and local environmental health and/or building/planning department archives. Our review included a search for records pertaining to the subject Site and sites within the search distances established by ASTM E 1527-13 (see Section 5.1 through 5.4; Appendix D contains some referenced documents).

- We evaluated the collected information and prepared this summary report

3.0 SITE SETTING & BACKGROUND

3.1 Site Description and Background

The subject property (the "Site") consists of a single 22-acre parcel located at 90 Pioneer Road in an agricultural/residential area of Watsonville, California. According to available records, the Site has been developed since at least 1968, and has operated as a soil mix manufacturer since at least 1987.

- *Santa Cruz County Assessor's Parcel Numbers (APN):* 109-23-109
- Subject Site is approximately a 22-acre single parcel property.

The Site operates as a soil mix manufacturer for various horticulture distributors, suppliers, and growers. Operations on-site consist of shipping and receiving raw ingredients/finished goods, grinding redwood chips, mixing, stockpiling, packaging, maintenance of equipment/vehicles, fueling, fuel storage, and general office operations. Additionally, there are apple orchards along the northern and eastern perimeter, however these are farmed and operated by a third party.

The majority of the surrounding land use consists of residential and agricultural. Historical land-use maps and records are discussed in Section 4 and the corresponding records (Sanborn Maps, historical aerial photographs and telephone directories) are presented in Appendix B.

3.1.1 Utilities, Wells, and Storage Tanks

Utilities: Electrical provided by PG & E.

Wells/Sumps: One water supply well on-site that supplies all on Site operations except for drinking (bottled water service is provided for all workers). Orchards are watered by an off Site supply well.

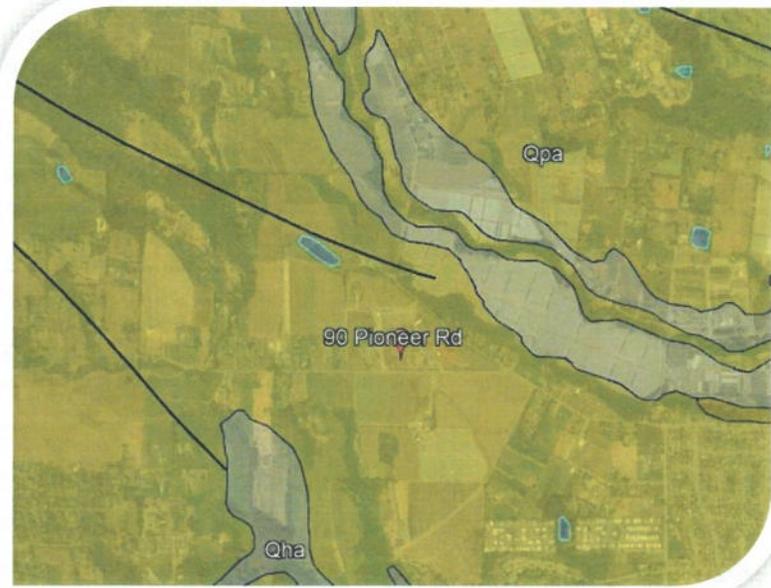
Storage Tanks: Five Above Ground Storage Tanks (AST) were identified on Site.

- 500-gallon Gasoline AST (secondarily contained)
- 1,000-gallon Diesel AST (secondarily contained)
- 2,000-gallon red Diesel AST (secondarily contained)
- Large Propane Tank
- Approximate 100-Gallon fuel tank for backup generator

3.2 Local Hydrogeological Conditions

The subject Site is located within an area comprising older flood plain deposits which include semi consolidated moderately to poorly sorted silt, sand, silty clay, and gravel. These deposits can be as much as 200 feet thick (Brabb, Earl E., Geologic Map of Santa Cruz County, 1989). The depth to groundwater of the uppermost aquifer was encountered at depths ranging from approximately 12 to 20 feet below ground surface (bgs).

Based on regional topography and the locations of nearby streams and lakes, the shallow groundwater flow direction beneath the Site is believed to be toward the south or southeast. It should be noted that localized groundwater flow and direction might vary due to the differential permeability of existing subsurface deposits and seasonal changes in the magnitude of groundwater flow. A former onsite environmental investigation in 2011 completed detailed soil logging at depths of up to twenty-seven (27) ft below ground surface. Detailed geologic logs from this investigation are provided in Appendix D.



Regional Geologic Map:
Qpa: Alluvium (Pleistocene) underlie the subject site.

4.0 HISTORICAL REVIEW

Historical maps, telephone directories, and aerial photographs can be a valuable resource for determining obvious past uses of the property. These records can provide evidence of notable land use changes to the property and potential clues of hazardous material storage (copies of these historical records are included in Appendix B). Land-use observations of these historical records are summarized below.

4.1 City Telephone Directories

Historical City Telephone Directories from 1977 through 2014 were available from a combination historical directory listing services. Copies of the reviewed listings are provided in Appendix B, under 'EDR City Directory'. This records review identified the occupants of the subject Site as follows (land-uses of potential concern are highlighted in **boldface**):

TARGET PROPERTY OCCUPANTS/BUSINESSES		
Site Address	Year	Occupants
90 Pioneer Road, Watsonville, CA	2014	Sun Land Garden Products Inc, Martin Reyes
	2010	Sun Land Garden Products Inc
	2005	SK Foods LP, Sun Land Garden Products Inc
	2000	Sun Land Garden Products, Edward Minasian
	1995	Sun Land Garden Products, Edward Minasian
	1992	Sun Land Garden Products, Organic Materials Inc, Edward Minasian
	1987	Sun Land Garden Products, Organic Materials Inc
	1982	Organic Materials Inc, Watsonville Sawdust
1977	Watsonville Sawdust	

Vicinity Land-Uses: This record check listed the occupants of the adjoining/vicinity parcels as follows. Commercial/industrial land-uses that could be a potential source of concern are highlighted in **boldface**. Upgradient, sidegradient and downgradient refer to the hydraulic position of the nearby property in relation to the subject Site.

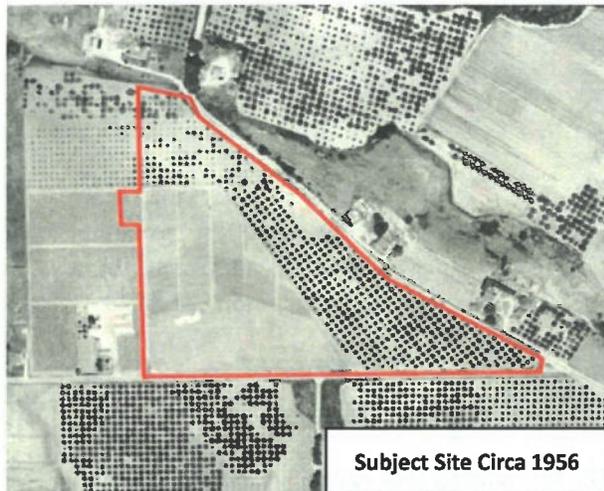
VICINITY OCCUPANTS/BUSINESSES		
Site Address	Year	Occupants
94 Pioneer Road <i>Residential, Agricultural Property</i>	2014	MINASIAN, BRIAN N
	2010	MINASIAN, BRIAN N
	2005	MINASIAN, BRIAN N
	2000	MINASIAN, BRIAN N
	1995	MINASIAN, BRIAN N
	1992	MINASIAN, BRIAN N
	1987	No Listing
	1982	No Listing
1977	No Listing	

In summary, reverse phone directories indicated Sun Land Garden Products has occupied the Site since at least 1987.

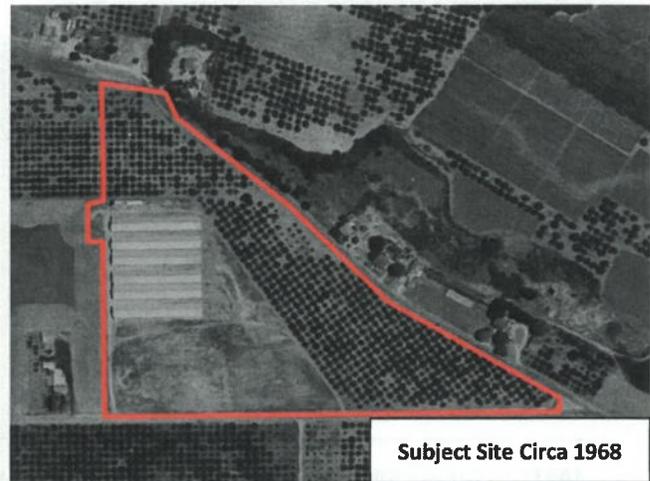
The adjoining and nearby property land-uses have been primarily residential, and agricultural.

4.2 Sanborn Fire Insurance Maps

Sanborn fire insurance maps provide detailed snapshots of historical land-use within generally urban locations where an insurance company provided coverage. The Sanborn Map database was reviewed, and coverage was not available for this area. A copy of EDR's Sanborn database review statement is provided in Appendix B.



Subject Site Circa 1956



Subject Site Circa 1968

4.3 Aerial Photographs

Eleven (11) historical aerial photographs ranging from 1948 through 2016 were obtained from EDR's collection. These aerial photographs provide snapshots of historical land-use over the last 79 years. Copies of these same aerial photos are provided in Appendix B, which show more detail on the surrounding area than can be described in the summary descriptions below. The aerial photographs generally have approximate scales of 1 inch = 500 feet. The following table summarizes land-use observations from the available aerial photographs.

YEAR	<u>ON-SITE</u> AERIAL PHOTO OBSERVATIONS	<u>OFF-SITE</u> AERIAL PHOTO OBSERVATIONS
1948	The Site is located at the intersection of South Green Valley Rd and Pioneer Rd. Orchards appear present in the northern and eastern portions of the property (along S Green Valley Road). The remainder of the property is undeveloped.	The neighboring properties in all directions appear agricultural orchards. Neighboring properties also include sparsely populated residential dwellings. A reservoir is visible just north of the subject Site in what appears to be a natural drainage following south along South Green Valley Rd. There are 6 structures on the westerly adjoining property all located along Pioneer Road.
1956	The subject Site appears largely the same as the previous year	The neighboring properties in all directions appear similar to the previous configuration in 1948. Additional orchards appear present to the west of the property.
1968	Site has undergone major changes; the undeveloped area of the Site has been developed with 6 long warehouse structures and an approximately two (2) small support	The neighboring properties in all directions appear similar to the previous configuration in 1956

YEAR	<u>ON-SITE</u> AERIAL PHOTO OBSERVATIONS	<u>OFF-SITE</u> AERIAL PHOTO OBSERVATIONS
	structures. The north and east portions remain orchards.	
1974	Subject Site appears much as it did in the previous image with the exception that the Site appears actively utilized, some storage areas appear present in the south along Pioneer Road.	The neighboring properties in all directions appear similar to the previous configuration in 1968
1981	Subject Site appears to have undergone a few changes. It appears that stockpiling of soil and other materials is present along the eastern and southern borders of the 6 long warehouse structures. The present day office structure building appears constructed in the northwest of the Site.	The surrounding area appears much as it did in the previous configuration in 1974. A number of residential homes appear to be developed along Green Valley Road.
1993	Subject Site appears much as it did in the previous aerial, clearly showing the stockpiling of soil and other organic matter along the southern portion of the property.	The neighboring properties in all directions appear similar to the previous configuration in 1981
2005	Some changes to the subject Site along the eastern boundary. It appears storage areas, possibly for finished goods or other materials, are now present. Possible equipment and staging area south of the 6 long structures. Orchards still present along western and northern property line.	A few additional residential homes have been added along Green Valley Road, however most of the surrounding area appears the same as the previous image.
2009 through 2016	Subject Site appears much as it did in the previous aerial.	Surrounding area is appears much as it did in the previous aerial.

Historical aerial photographs taken between 1948 and 2016 indicate that the subject Site has been partially developed since at least 1948 with orchards with the remainder of the Site undeveloped until 1968. The six long structures that were built in the 1960's are still present today. The western and northern portion of the property has continuously been farmed with orchards and possibly row crops since at least 1948.

Adjoining and surrounding land-use has been predominantly agricultural and residential since at least 1948 to 2016.

4.4 Topographic Maps

Historical topographic maps, which include the subject property and surrounding sites, were obtained and reviewed (see Appendix B). There is no evidence from these topographic maps of significant geophysical or hydrogeological changes at the Site or surrounding area that would indicate the potential for negative impacts to Site soil or groundwater conditions.

4.5 Summary of Historical Review

Historical aerial photographs taken between 1948 and 2016 indicate that the subject Site has been partially developed since at least 1948 with orchards with the remainder of the Site undeveloped until 1968. The six long warehouse structures that were built in the 1960's are still present today. The western and northern portion of the property has continuously been farmed with orchards and possibly row crops since at least 1948. Sun Land Garden Products has occupied the Site since at least 1987.

Adjoining and surrounding land-use has been predominantly agricultural and residential since at least 1948 to the present.

5.0 REGULATORY AGENCY INFORMATION

5.1 Database Search of Federal and State Environmental Records

Records of hazardous material, petroleum products and waste storage, as well as unauthorized releases of said materials into the environment, are required by law to be maintained by regulatory agencies overseeing these environmental conditions. An information research firm specializing in environmental data collection, *Environmental Data Resources (EDR)*, generated a Radius Map Report for the Site (included in Appendix C). The Radius Map Report identifies sites listed in the selected regulatory databases, presents location maps and details on identified sites, provides a description of the Federal and State agency data reviewed, and limitations to the search. The search specifically documents sites having registered underground fuel storage tanks (UST's), hazardous waste generation, hazardous waste treatment-storage-disposal, and subsurface contamination. Search distances are per ASTM's E-1527 13 standard (see Appendix C for a list of all sites and full descriptions of all regulatory databases). The database search identified the following information for the target property and surrounding sites.

SUBJECT PROPERTY: 90 Pioneer Road (*"Target property" in EDR Radius Report*) ***was listed*** in a number of regulatory databases. A summary of the database review finding is provided in the table below.

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted	Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS									INDIAN LUST								
<i>Federal NPL site list</i>									CPS-SLIC								
NPL	1 000		0	0	0	0	NR	0		0		0	0	0	NR	NR	0
Proposed NPL	1 000		0	0	0	0	NR	0	<i>State and tribal registered storage tank lists</i>								
NPL LIENS	0 001		0	NR	NR	NR	NR	0	FEMA UST								
<i>Federal Deleted NPL site list</i>									UST								
Deleted NPL	1 000		0	0	0	0	NR	0	AST								
<i>Federal CERCLIS list</i>									INDIAN UST								
FEDERAL FACILITY	0 500		0	0	0	NR	NR	0	<i>State and tribal voluntary cleanup sites</i>								
SEMS	0 500		0	0	0	NR	NR	0	VCP								
<i>Federal CERCLIS NFRAP site list</i>									INDIAN VCP								
SEMS-ARCHIVE	0 500		0	0	0	NR	NR	0	<i>State and tribal Brownfields sites</i>								
<i>Federal RCRA CORRACTS facilities list</i>									BROWNFIELDS								
CORRACTS	1 000		0	0	0	NR	NR	0	ADDITIONAL ENVIRONMENTAL RECORDS								
<i>Federal RCRA non-CORRACTS TSD facilities list</i>									<i>Local Brownfield lists</i>								
RCRA-TSDF	0 500		0	0	0	NR	NR	0	US BROWNFIELDS								
<i>Federal RCRA generators list</i>									Local Lists of Landfill / Solid Waste Disposal Sites								
RCRA-LOG	0 250		0	0	NR	NR	NR	0	WJUDS/SWAT								
RCRA-SQG	0 250		0	0	NR	NR	NR	0	SWRCY								
RCRA-CESQG	0 250		0	0	NR	NR	NR	0	HAULERS								
<i>Federal institutional controls / engineering controls registries</i>									INDIAN ODI								
LUCIS	0 500		0	0	0	NR	NR	0	ODI								
US ENG CONTROLS	0 500		0	0	0	NR	NR	0	DEBRIS REGION 9								
US INST CONTROL	0 500		0	0	0	NR	NR	0	IHS OPEN DUMPS								
<i>Federal ERNS list</i>									<i>Local Lists of Hazardous waste / Contaminated Sites</i>								
ERNS	0 001		0	NR	NR	NR	NR	0	US HIST CDL								
<i>State- and tribal - equivalent NPL</i>									HIST Cal-Sites								
RESPONSE	1 000		0	0	0	NR	NR	0	SCH								
<i>State- and tribal - equivalent CERCLIS</i>									CDL								
ENVIROSTOR	1 000		0	0	0	NR	NR	1	Toxic PHS								
<i>State and tribal landfill and/or solid waste disposal site lists</i>									US CDL								
SWFALF	0 500		0	0	0	NR	NR	0	CERS HAZ WASTE								
<i>State and tribal leaking storage tank lists</i>									<i>Local Lists of Registered Storage Tanks</i>								
LUST	0 500		0	0	0	NR	NR	0	US HIST CDL								
									HIST UST								
									CA FID UST								
									CERS TANKS								
									<i>Local Land Records</i>								
									LIENS								
									LIENS 2								

NR = Not reviewed, as per the search distances established in ASTM 1527-13. This table was excerpted from the EDR Radius Report, provided in Appendix C. A full list of the databases reviewed is provided on page GR-1 of EDR's report. EDR updates many of these listings on a quarterly or semi-annual basis.

FACILITY / LOCATION / DATABASE SOURCE(S)	DETAILS
SUN LAND GARDEN PRODUCTS INC	The subject Site is identified on the aforementioned databases;
Databases Listed: WDS, NPDES, HIST UST, AST, HAZNET	<ul style="list-style-type: none"> WDS (Waste Discharge System) – A site which has been issued waste discharge requirement. NPDES (NPDES Permits Listing) – A listing of NPDES permits including storm water. HIST UST (Historical Underground Storage Tank) – The Site is reported to have had a 1,000 gallon Gasoline fuel storage tank installed in 1983. AST (Aboveground Storage Tank) – The Site is reported to have a 5,010-gallon AST. HAZNET (Facility & Manifest Data) – The Site is reported to generate a hazardous waste manifest each year.

SURROUNDING SITES: Our review of the EDR Radius Report revealed the following notable business operations / properties in the Site vicinity that have notable records of hazardous materials and/or petroleum hydrocarbon releases, waste generators and other notable regulated activities.

- **Federal Chemical/Fuel Release Sites:** The records search **did not identify any sites** located within a 1-mile radius from the subject Site that was listed on the USEPA National Priority List (NPL) or Superfund.
- **State Chemical/Fuel Release Sites:** The records search **did not identify any sites within a ¼-mile radius** of the Site as having a record of a petroleum or other chemical impact to soil or groundwater [i.e. Leaking Underground Storage Tanks (LUST), Cortese, Spills Leaks Investigations and Cleanup (SLIC), Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) and Voluntary Cleanup Priority Listing (VCP)]. **No sites are located within ¼-mile radius** from the subject Site. See *Figure 4* for relative locations of these active and completed release investigations.
- **Underground Storage Tanks (USTs):** The database search of generally historical regulatory records **identified three (3) sites** located within a ¼-mile radius having a current or historical record of permitted UST's (UST, HIST UST, SWEEPS UST, Cal FID UST and/or Indian UST).
- **Hazardous Waste:** The records search **did not identify any sites** located within a ¼-mile radius as having records showing generation and proper disposal of hazardous waste, typically a waste oil or oily waste (RCRA-SQG, RCRA-LQG, RCRA-NonGen, FINDS, Notify 65, EDR Proprietary Records).
- **Dry Cleaners:** The records **did not identify any sites** operating as dry cleaners within ¼-mile radius.
- **Orphan Sites:** The EDR report lists **zero (0)** unmapped site ("**orphans**") obtained from the list of databases, for which EDR was not able to determine an exact location.
- **Combined Regulated Hazardous Sites - ¼-Mile Radius Map (Figure 4):** A comprehensive radius map documenting nearby release sites, hazardous materials and waste management sites, UST/AST storage and other significant regulated environmental conditions, is presented on Figure 4.

5.2 Geotracker / EnviroStor File Review

Records of hazardous materials storage and releases can also be found in state regulatory agency databases, such as the California State Water Resources Control Board Geotracker[®] database and Department of Toxic Substances Control EnviroStor[®] database. A review was conducted for records on the subject Site, vicinity properties, and additional sites identified in the Federal and State environmental database review detailed in Section 5.1.

- Our review of the California State GeoTracker database, conducted in October 2018, **did not reveal any additional sites** within a ¼-mile radius of the subject Site as having a record of a release of contamination to soil or groundwater (see Figure 8 – ‘Surrounding Site Regulatory Review’).

5.3 Local Oversight Agency File Reviews

Subject Site Records: Records on the Santa Cruz Department of Environmental Health and Safety database were reviewed, documents that pertained to a former 1,000-gallon UST in May of 2000, an active HMMP, and HMMP inspection reports.

<u>Facility Name</u>	<u>Comment</u>
<p>Sun Land Garden Products Inc</p> <p>90 Pioneer Road Watsonville</p>	<p>An Environmental Investigation Report dated May 2, 2000 was completed by Sampson Engineering Inc. The report summarizes work completed for the removal of a 1,000-gallon Underground Storage Tank located at the property. The UST was removed on Jan 13, 2000. Soil samples were taken for the excavation pit and analyzed. Results showed low levels of TPH and Benzene. The excavation pit was backfilled. A Workplan for further assessment was requested by SCCEHS and submitted by Sampson Engineer on March 9, 2000. Further sampling and temporary wells were installed around the previous location of the UST. California Regional Water Quality Control Board issued a No Further Action Letter dated July 17, 2000 (see Appendix D for copy of Letter and reports).</p>
<p>Sun Land Garden Products Inc</p> <p>90 Pioneer Road Watsonville</p>	<p>Sunland Garden Products maintains a current Hazardous Material Management Plan (HMMP) with the Santa Cruz County Environmental Health Department (SCCEHD). Chemical Inventory Form identifies on-site chemicals as; Argon Gas (260 cu ft container), Acetylene (398 cu ft), Oxygen (251 cu ft), Motor Oil (55-gal drum), Waste Oil (300-gal container), Gasoline (500-gal tank), Red Diesel (1,000 gal tank), Propane (1,000 gal tank), and various different types of fertilizer mix ingredients, please see HMMP in Appendix D for full list.</p>
<p>Sun Land Garden Products Inc</p> <p>90 Pioneer Road Watsonville</p>	<p>Official Inspection Report by the Santa Cruz County Environmental Health Department (SCCEHD) dated February 06, 2009 reported ‘oil spilled all over the floor of the waste oil shed’. A request to develop transfer procedures in a manner to avoid spills was noted. The inspection Report noted to properly label antifreeze, properly dispose of waste antifreeze, and a 55-gal drum of waste kerosene without secondary containment. A follow up inspection was completed on July 09, 2009. The inspection report noted, ‘add antifreeze, diesel, and propane to HMMP, housekeeping in oil shed has improved and employees have received Hazardous material training. The follow up inspection also noted to ‘properly dispose of waste antifreeze and kerosene and provide a documental manifest of this disposal.</p>

5.4 Vapor Encroachment Conditions (VEC) Review

In accordance with current standards for assessing vapor encroachment (ASTM E2600-10), we evaluated the Site and its vicinity for vapor encroachment conditions, or conditions that may indicate that sources and pathways for hazardous volatilized chemicals to enter current or future on-site buildings that are present at the Site and/or Site vicinity. ASTM E 2600-10 defines the following minimum search distances for the *Area of Concern* for vapor encroachment:

- **1/3-mile** for known or suspected volatile/semi-volatile chemical contaminated sites (e.g., a dry cleaners site with a PCE release) We reviewed the nearby solvent / volatile organic compound (VOC) release sites discussed in Section 5.1-5.3 and assessed them for vapor encroachment potential (copy included in Appendix C). No sites were identified within a 1/3 mile of the subject Site with the potential of vapor encroachment.
- **1/10-mile** for known or suspected petroleum hydrocarbon contaminated sites (e.g., a gasoline release from a fueling station) We reviewed the nearby petroleum hydrocarbon release sites discussed in Section 5.1 for vapor encroachment potential. We did not identify any sites within a 1/10-mile radius of the subject Site as having a documented VOC-containing plume that would appear to have preferential pathways for VOCs in vapor phase that would encroach on the subject Site.

5.5 Summary of Regulatory Review

In summary, our review of regulatory databases and local/State agency record repositories did not reveal any apparent risk or threat of liability for the subject Site.

6.0 USER QUESTIONNAIRE & INTERVIEWS

6.1 User Questionnaire

A *User Questionnaire* was completed by Mr. Martin Reyes, Director of Sun Land Operations signed on October 22nd, 2018.

USER QUESTIONNAIRE SUMMARY	
Reason for Performing ESA?	No Answer
Environmental Liens?	No
Land-Use Limitations?	No Answer
Any Specialized Knowledge of the Subject Site or Adjoining Properties?	No

USER QUESTIONNAIRE SUMMARY

Discounted Price Relative to Fair Market Value? No

Current or Historical Chemical/Hazardous Materials Usage? Yes: Company uses solid fertilizers, 3 AST fuel tanks secondarily contained, Used oil and filters are discharged by Bay Side Oil Company.

Environmental and Title Reports No

6.2 Additional User Provided Documentation

The User did not provide any additional information pertaining to hazardous materials and environmental conditions at the Site.

6.3 Interviews

We interviewed long term (8 years) on-site Director of Operations, Martin Reyes, and asked the following questions:

INTERVIEWEE	SUMMARY
<p>Martin Reyes Director of Operations 90 Pioneer Road, Watsonville</p> <p>October 23, 2018 (In Person)</p>	<p>Question: Have hazardous materials been used or stored on the property? Answer: Yes.</p> <p>Question: Have there been any underground/aboveground storage tanks on the Site? Answer: Yes</p> <p>Question: Has there been any large-scale dumping of debris on the Site? Answer: No.</p> <p>Question: Have there ever been orchards present on the property? Answer: Yes.</p>

6.4 Summary of Questionnaire/Interview Review

The *User Questionnaire* and *interviews* are intended to identify previous or current land-uses that may indicate environmental impacts, or provide further details regarding previously identified environmental impacts and regulatory release investigation cases. Our interviews did not identify any additional environmental conditions at the subject property.

Copies of interviewing documentation are included in Appendix A.



7.0 SITE INSPECTION

7.1 Overview

A Site inspection was conducted on October 23rd, 2018, to note potential sources of contamination associated with on-site activities. A copy of the completed *Site Inspection Checklist*, which contains detailed documentation of the Site survey including a photographic record of the inspection, is presented in Appendix A.

SITE INSPECTION OBSERVATIONS

Subject Property Observations:

Current Use of Property The Site is a moderately large facility which manufacturers a large variety of soil mixes for retail and commercial use. To produce these soil mixes a varying quantity of ingredients are combined which include: peat moss, perlite, lava rock, dry fertilizers, dolomite, coco husk, worm droppings, redwood, and sand. Large quantities of redwood chips are constantly stockpiled before being chopped into smaller fragments for use as a mix ingredient. Other operations include raw material management, ingredient mixing, packaging, delivery/pickup, along with maintenance on heavy machinery/fork lifts and processing machinery. Site contains 6 large structures and one office building. Site has processed soil on site since at least 1970 with prior land use being a chicken farm. Site contains 3 secondarily contained ASTs of petroleum which include a 500-gallon tank of gasoline, 1,000-gallon tank of diesel, and 2,000-gallon tank of diesel. A variety of equipment is used for chopping, mixing, and packaging. Site also contains orchards along the northern and eastern property boundary, which are managed by a third party. Site is mostly flat with a slight slant towards Pioneer Road.

Potable Water Source Water is provided by one on Site production well for all on Site operations, with a second well (off site) utilized for irrigation of the orchards.

**Interior Drains?
Where to?** None Observed

Sewage Disposal Source Septic System

Pools of Liquid / Odors? None Observed

Hydraulic equipment? Fork Lifts, Packaging and processing machinery

Storage tanks? 3 ASTs (500 gall gas, 1,000 gall diesel, 2,000 gall diesel) secondarily contained, backup generator also contains small storage tank of diesel (100 gallon)

Exterior Observations:

Pits, Ponds, Lagoons? None observed

Stained soil or pavement? Minor staining observed in mechanic/maintenance building on concrete flooring

Storm water discharge? Between each building are stormwater catch basins which drain to the southern boundary of the property along Pioneer Road. Facility maintains active industrial SWPPP with sampling point location along Pioneer Road drainage ditch. Site is currently re designing on Site stormwater infrastructure. Currently natural grass swales are implemented in and around woodchip stockpile locations.

SITE INSPECTION OBSERVATIONS

Wells or Water Towers?	One on Site production well
Sumps?	None observed
Electrical Infrastructure?	Electrical services provided by PG&E, backup diesel generator
Hazardous Materials or Petroleum Products?	Site actively uses petroleum (diesel, gas), dry fertilizers, virgin and used oil, and hydraulic oil

Neighborhood Observations:

Topography of property and vicinity	Fairly level property, with slight slope to the south.
Current uses of adjoining properties	West: Residential/Agricultural South: Agricultural East: Residential North: Residential/Agricultural

7.2 Summary of Site Inspection

The Site inspection showed that the facility operates as a soil mixing and processing facility, manufacturing a variety of soil mixes for retail stores and commercial operations. The three petroleum ASTs observed are all secondarily contained and appeared well maintained. Overall facility housekeeping appeared in good order with all hazardous containers properly labeled, organized, and no major staining observed. Stormwater management appeared to be implemented with additional stormwater management infrastructure planned for development. The site contained an area near the eastern property boundary along the orchards which contained retired processing machinery/equipment and a number of used tires. A large portion of the site is on a combination of native soil with base rock mixed in, however all buildings were completely encapsulated in cement, along with the area where the major mixing and processing ingredients machinery is located. Neighboring land use is largely residential and agricultural.

8.0 DATA GAPS

No data gaps were discovered during this investigation.

9.0 FINDINGS & OPINIONS

9.1 Subject Site

Historical Review: Historical images show that the northern and eastern portions of the Site have been utilized as orchard fields since at least 1948 to the present day. Historical aerials show the six (6) large, on-site buildings were constructed sometime between 1956 and 1968. These buildings are currently utilized as part of the on-Site operations, including packaging, storing, maintenance, and office space.

Prior Investigation: A *Phase I ESA* was conducted in 2011 as part of a potential property transaction and the *ESA* identified a number of *Recognized Environmental Conditions* (RECs).³ Specifically the *Phase I ESA* identified the following potential environmental liabilities:

- Long-term fuel dispensing and storage over native soil.
- Long-term machine shop utilizing lubricants and solvents on unpaved surface.
- Long-term vehicle/equipment maintenance operations
- Long-term open-air vehicle/equipment storage on native soils.

Phase II soil and groundwater sampling was conducted to evaluate the *potential* for contaminants of concern to impact soil and groundwater across the Site in worst case scenario locations. The sampling and testing of shallow soil and groundwater *did not reveal any significant contaminant concentrations in shallow soil or groundwater* (see Appendix D, for details).

Inspection: The 22-acre subject Site is comprised of two types of land use: Approximately 80% of the Site is utilized for commercial soil blending operations described further below. The remaining 20% of the Site is utilized for orchard farming, located primarily in the northern and eastern portions of the Site. The orchards are farmed by an independent, third party.

Sun Land Garden Products (Sunland) owns and operates the on-site commercial soil blending operations. Primary operations consist of receiving raw ingredients, grinding wood chips, stockpiling ingredients, mixing, packing, laboratory testing mixes, raw and finished goods storage, vehicle maintenance, equipment repair, and shipping finished goods. Petroleum products (fuels and oils) are maintained on-site and include three (3) above-ground storage tanks (ASTs) containing diesel (1,000-gallon AST and a back-up generator with a 100 gallon diesel tank), red diesel (2,000-gallon AST), up to two (2), 55-gallon drums of virgin motor oil, waste motor oil, and hydraulic oil.

³: Recognized Environmental Condition (REC): The presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment

The Site inspection was conducted on October 23rd, 2018 and all petroleum hydrocarbon storage appeared to be well maintained and secondarily contained. The dry storage of fertilizers was similarly well managed. Overall, facility operations appeared well maintained and good housekeeping was apparent. All 55-gallon drums and other large containers were properly labeled. Only minor stains were observed inside the vehicle maintenance area (impermeable concrete surfacing).

In addition, the majority of *recognized environmental conditions* previously identified in the 2011 Phase I ESA were no longer present at the Site (e.g. fuel-dispensing is well maintained, machine shop was paved and well maintained, little to no vehicle maintenance operations, no vehicle storage on native soils). The elimination of previously identified, *recognized environmental conditions* appears to be attributable to the new property management of Berger.

One location along the eastern border of the Site is used for storage of retired/obsolete packing and assembly equipment and tires (see photo sheets in Appendix A). Historical aerial photographs indicate this location has been used for open air storage since sometime between 2009 and 2012.

On Site Conclusion: Current Site conditions indicate that the property was well maintained with the majority of previously identified *recognized environmental conditions* no longer present. In addition, review of Santa Cruz County inspection reports indicate no significant violations in recent years following the 2011 ownership transition. Research, review of historical documents, and a recent Site inspection indicate there is no apparent environmental liability of significance associated with the subject Site (i.e., **no Recognized Environmental Conditions**).

Opinion: Retired mixing equipment and tires can accumulate over time. Off-hauling and proper disposal of relic equipment and unnecessary materials is a best management practice that will limit the buildup of debris and prevent potential environmental liabilities from occurring.

9.1.1 Vicinity Findings

Our Phase I ESA review of regulated sites identified no vicinity chemical release sites that have the potential to negatively impact the subject Site. **The Phase I ESA research documented there were no identified Recognized Environmental Conditions in the vicinity of the subject Site.**

10.0 CONCLUSIONS & RECOMMENDATIONS

10.1 Phase I Investigation Conclusions

We have performed a standard of care, *Phase I Environmental Site Assessment* in conformance with protocols established in ASTM Practice E1527-13, for the Sun Land Garden Products Site located at 90 Pioneer Road in Watsonville CA (see *Aerial Site Map*, Figure 3). There were no exceptions to, or deletions from, this practice (i.e. data gaps), as described in Section 9.0 of this report.

- **Potential, on-site liabilities:** The current *Phase I ESA* review did not identify any *Recognized Environmental Conditions* on the subject Site.
 - **Opinion:** Continuing the best management practice of removal and proper disposal of retired commercial equipment and materials will prevent potential environmental liabilities from occurring.
- **Potential, off-site liabilities:** The *Phase I ESA* review of vicinity sites did not identify any vicinity chemical release sites having the potential to negatively impact the subject Site.

11.0 LIMITATIONS AND EXCEPTIONS OF ASSESSMENT

This report and the associated work have been provided in accordance with the principles and practices generally employed by the local environmental consulting profession. This is in lieu of all other warranties, expressed or implied. This report has been prepared solely for our client. The assessment is provided so the client may make a more informed decision as to Site conditions. This report shall not be relied upon by or transferred to any other party or used for any other purpose. *Weber, Hayes and Associates* will not distribute this report to any regulatory agency without the consent by the User, unless required by law or court order.

This ESA is not a regulatory compliance audit or an evaluation of the efficiency of the use of any hazardous materials at the Site. Unless otherwise stated, no evaluation for the presence of asbestos-containing building materials, lead-based paint, urea-formaldehyde foam insulation, or other potentially hazardous building materials; methane; radon gas; lead in drinking water; or wetlands, is included in our assessment.

Our findings and opinions are based on information collected from regulatory agency files and lists, interviews, and Site conditions at the time of our Site reconnaissance. Note that our findings and opinions are based on information that we obtained on specific dates through records review, Site reconnaissance, and related activities. It is possible that other information exists or subsequently has become known, just as it is possible for conditions we observed to have changed after our observations.

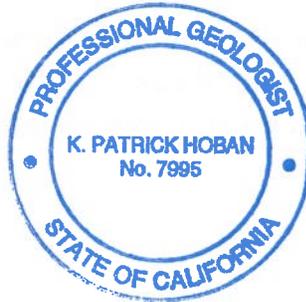
The accuracy and thoroughness of any environmental assessment depend on a variety of factors and optimally will include soil and groundwater sampling. *Weber, Hayes and Associates* cannot and will not provide guarantees, certifications or warranties that the investigated property is or is not free of environmental impairment. Any person who is aware of any *recognized environmental conditions* of the Site or surrounding areas that are different from those described in the report should report them immediately to this office for evaluation as part of an additional scope of work.

Thank you for this opportunity to be of service. Should you have any questions or comments regarding this project, please contact us at our offices.

Respectfully submitted,

WEBER, HAYES AND ASSOCIATES

A California Corporation



By: _____

Pat Hoban, PG
Senior Geologist

And: _____
Shaun Ersoy
Staff Scientist

12.0 QUALIFICATION OF ENVIRONMENTAL PROFESSIONAL

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in §312.10⁴ of this part.

I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

By



Pat Hoban
Senior Geologist

⁴ ASTM Standard E 1527-13, X2.1.1.1 and Federal Register 40 CFR Part 312, §312.10:

Environmental Professional means:

- (1) A person who possesses sufficient specific education, training, and experience necessary to exercise professional judgment to develop opinions and conclusions regarding conditions indicative of releases or threatened releases...on, at, in, or to a property, sufficient to meet the objectives and performance factors...
- (2) Such a person must:
 - (i) Hold a current Professional Engineer's or Professional Geologist's license or registration from a state, tribe, or U.S. territory (or the Commonwealth of Puerto Rico) and have the equivalent of three (3) years of full-time relevant experience; or
 - (ii) Be licensed or certified by the federal government, a state, tribe, or U.S. territory (or the Commonwealth of Puerto Rico) to perform environmental inquiries ... and have the equivalent of three (3) years of full-time relevant experience; or
 - (iii) Have a Baccalaureate or higher degree from an accredited institution of higher education in a discipline of engineering or science and the equivalent of five (5) years of full-time relevant experience; or
 - (iv) Have the equivalent of ten (10) years of full-time relevant experience...

13.0 REFERENCES

Environmental Assessment Standards and State/Local Information Systems

ASTM E1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, 2013

ASTM E2600-10, Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions, 2010.

State Water Resources Control Board Online "GeoTracker" Database, www.geotracker.swrcb.ca.gov, 2017.

California State Department of Toxic Substances Control Online "EnviroStor" Database, www.envirostor.dtsc.ca.gov/public/, 2017.

Regional Maps and Geologic References

The National Geologic Map Database, http://ngmdb.usgs.gov/ngmdb/ngmdb_home.html, 2015.

Geologic Map of Santa Clara County, California, Wagner, dated 2002.

Site Records and Reports

Phase I/II Environmental Site Assessment, Weber Hayes & Associates, February 28, 2011

Nearby Property Records and Reports

FIGURES

FIGURE 1: Location Map

FIGURE 2: Vicinity Map

FIGURE 3: Site Map

FIGURE 4: Regulated Hazardous Sites Map



WEBER, HAYES & ASSOCIATES
 Hydrogeology and Environmental Engineering
 120 Westgate Drive, Watsonville, CA
 831.722.3580 / www.weber-hayes.com

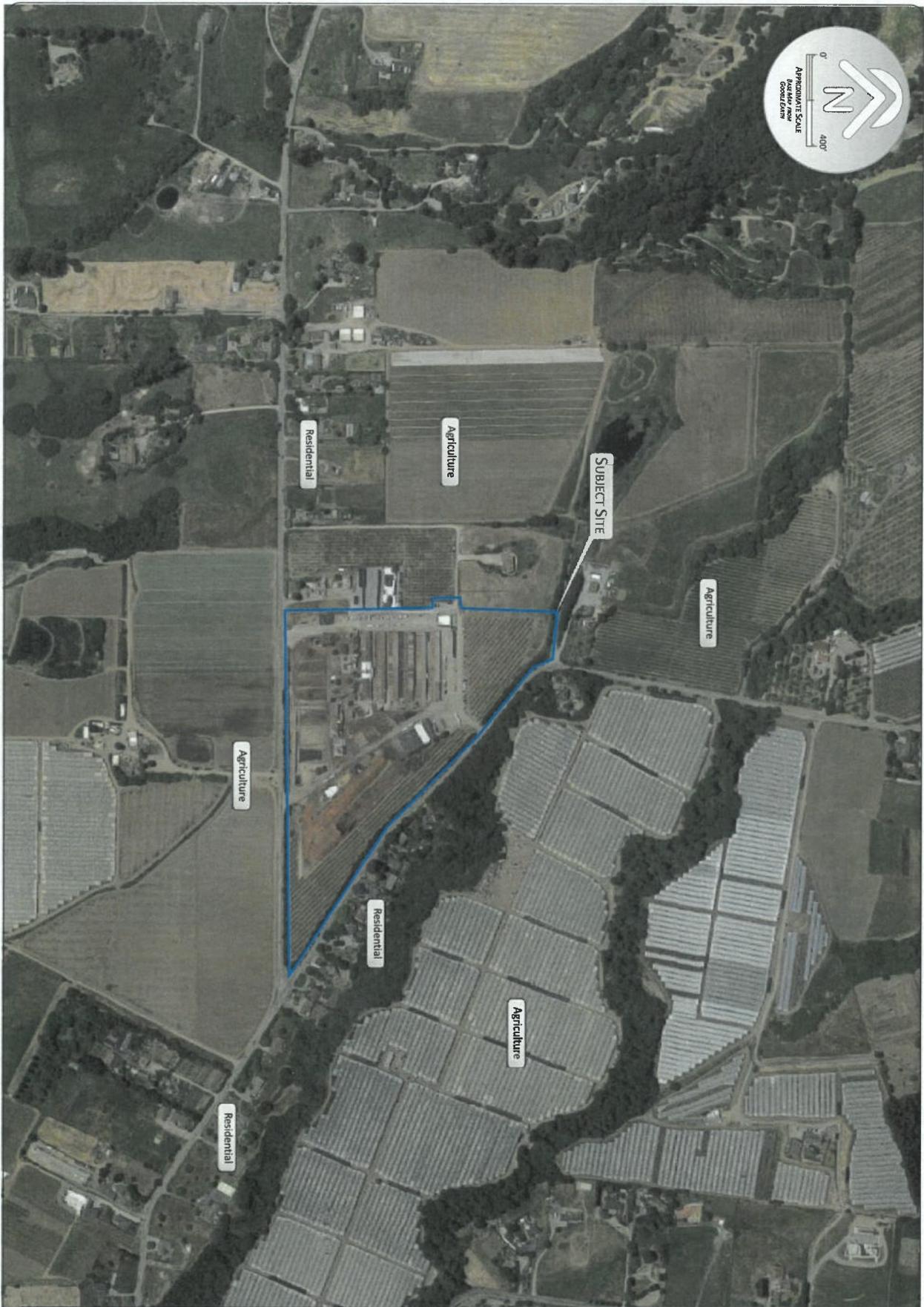
LOCATION MAP
PHASE I ENVIRONMENTAL SITE ASSESSMENT

SITE: SUN LAND GARDEN ESA
 ADDRESS: 90 PIONEER ROAD, WATSONVILLE, CA 95076
 APN: 109-23-109

DATE: OCTOBER 2018

REVISIONS/NOTES:

FIGURE
1
 Project
 2X848



WEBER, HAYES & ASSOCIATES
Hydrogeology and Environmental Engineering
120 Westgate Drive, Watsonville, CA
831.722.3580 / www.weber-hayes.com

VICINITY MAP PHASE I ENVIRONMENTAL SITE ASSESSMENT

SITE: SUN LAND GARDEN ESA
ADDRESS: 90 PIONEER ROAD, WATSONVILLE, CA 95076
APN: 109-23-109

DATE: OCTOBER 2018

REVISIONS/NOTES:

FIGURE
2
Project
2X848



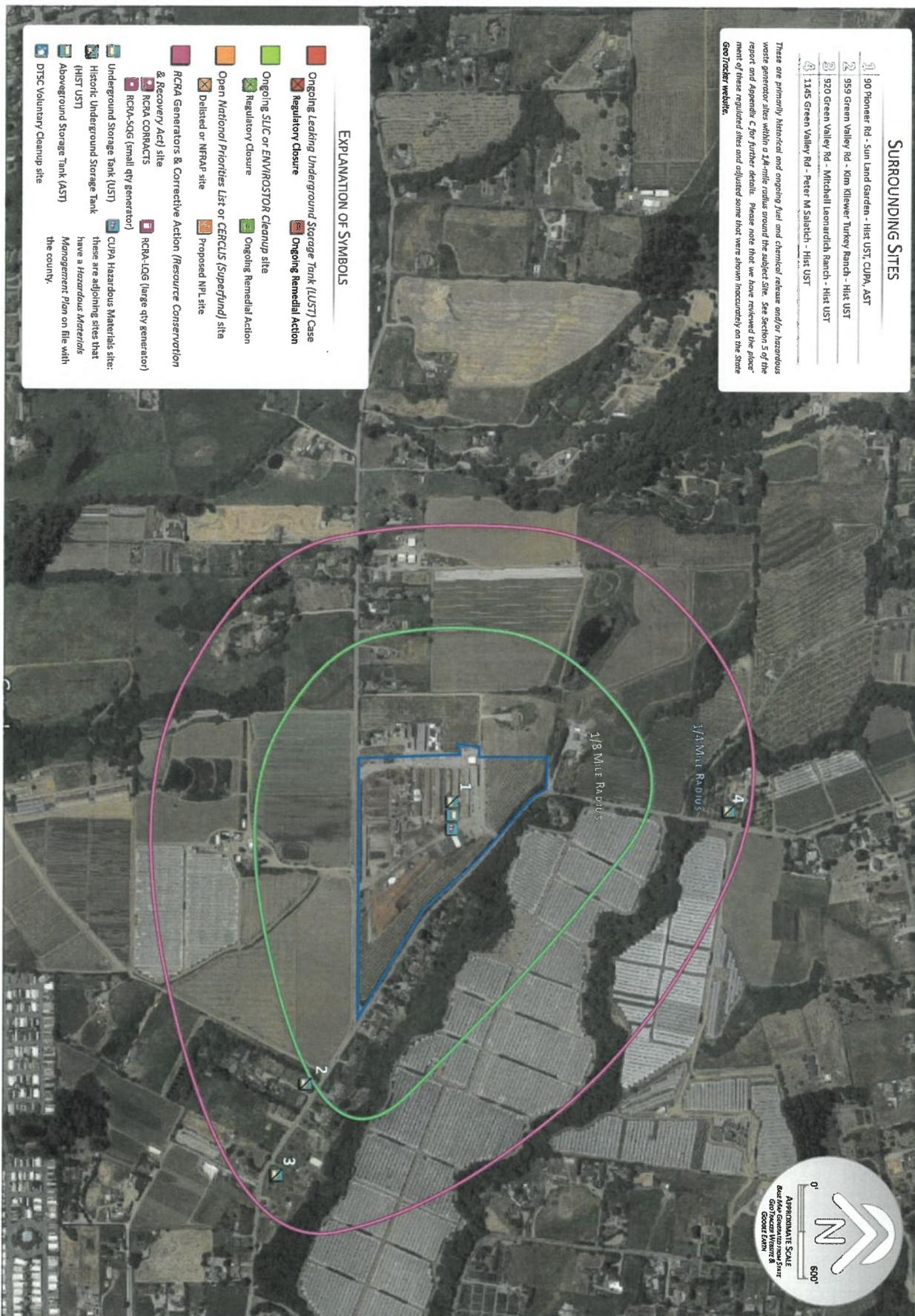
SURROUNDING SITES

- 1 90 Pioneer Rd - Sun Land Garden - Hit UST, CUPA, AST
- 2 959 Green Valley Rd - Kim Kluwer Turkey Ranch - Hit UST
- 3 920 Green Valley Rd - Mitchell Leonardich Ranch - Hit UST
- 4 1445 Green Valley Rd - Peter M. Salatch - Hit UST

These are primarily historical and ongoing fuel and chemical release and/or hazardous waste generator sites within a 1/4-mile radius around the subject site. See Section 5 of the report and Appendix C for further details. Please note that we have reviewed the placement of these regulated sites and adjusted some that were shown inaccurately on the State GeoTracker website.

EXPLANATION OF SYMBOLS

	Ongoing Leaking Underground Storage Tank (LUST) Case		Ongoing Remedial Action
	Ongoing 51LC or ENVIROSTOR Cleanup site		Ongoing Remedial Action
	Regulatory Closure		Ongoing Remedial Action
	Open National Priorities List or CERCLIS (Superfund) site		Ongoing Remedial Action
	Delisted or NPL site		Ongoing Remedial Action
	Proposed NPL site		Ongoing Remedial Action
	RCRA Generators & Corrective Action (Resource Conservation & Recovery Act) site		RCRA-CORRECTIVE ACTION
	RCRA-CORRECTIVE ACTION		RCRA-CORRECTIVE ACTION
	RCRA-SOG (small qty generator)		RCRA-LOG (large qty generator)
	Underground Storage Tank (UST)		CUPA Hazardous Materials sites: these are adjoining sites that have a Hazardous Materials Management Plan on file with the county.
	Historic Underground Storage Tank (HIST UST)		CUPA Hazardous Materials sites: these are adjoining sites that have a Hazardous Materials Management Plan on file with the county.
	Aboveground Storage Tank (AST)		CUPA Hazardous Materials sites: these are adjoining sites that have a Hazardous Materials Management Plan on file with the county.
	DTSO Voluntary Cleanup site		CUPA Hazardous Materials sites: these are adjoining sites that have a Hazardous Materials Management Plan on file with the county.




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REGULATED HAZARDOUS SITES - 1/4 MILE RADIUS PHASE I ENVIRONMENTAL SITE ASSESSMENT

SITE: SUN LAND GARDEN ESA
 ADDRESS: 90 PIONEER ROAD, WATSONVILLE, CA 95076
 APN: 109-23-109

DATE: OCTOBER 2018

REVISIONS/NOTES: :

FIGURE 4
 Project 2X848

APPENDIX A

COLLECTED *PHASE I* ESA INFORMATION

- Site Inspection Checklist with Photo Sheets
- Land Use Questionnaire
- Interviewing Documentation



Phase I Environmental Site Assessment
 Site Inspection Checklist

Objective: To visually evaluate and document the extent of the target property(ies) for the likely presence of recognized environmental conditions. Photodocumentation gathered during the site inspection are appended at the end of this form.

Site/Facility Name: Sun Land (Berger) Garden Products
 Site Address: 90 Pioneer Rd, Watsonville, CA
 Site Contact: Martin Reyes

1. **Current Uses of the Property:** To include (1) general description of the facility & commercial or industrial processes therein, (2) topography, (3) site improvements [# of buildings, size/age/condition], (4) occupants/vacancies and the nature of business operations, and (5) any indications of past site use.

Site is a large facility which manufactures a variety of ~~mixing~~ soil mixes. Soil mixes ~~are~~ vary quantity of a number of ingredients (peat moss, perlite, lava rock, dry fertilizer, dolomite, coco husk, worm poop, and sand). On site operations include chopping redwood chips into ^{edwood,} sorting stockpiles, mixing ingredients/raw materials, bagging and packaging, delivery and pick up, along with some maintenance of heavy equipment and fork lifts along with fabrication and maintenance on processing machinery. Site contains six (6) long equally shaped buildings along with one office building. Site has manufactured soil on site since at least 1970, with prior land use as a chicken farm. Site contains three (3) secondarily contained above ground storage tanks in excellent condition. Site also contains massive stockpiles of redwood chips. A variety of equipment is used for chopping, mixing, and packaging. Site also contains along the outside perimeter of the site apple orchards which are maintained/fermed by third party. Site has a very faint slope to the south.

Project #: Jx 848
 Date: 10-23-18
 Inspector: Shawn Ervey

2. Site Infrastructure:

- | | <u>Yes</u> | <u>No</u> |
|---|-------------------------------------|-------------------------------------|
| ▪ Any wells, water tanks or water towers? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| ▪ Boiler rooms? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| ▪ Electrical transformers? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| ▪ Septic System? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| ▪ Drainage wells or dry wells? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Notes:

Note observations and data for heating sources, water supply source(s), solid waste disposal and electrical systems.

Site contains one water supply well for all onsite operations with one additional well just off site for orchard irrigation. All electrical and gas provided by PG&E. Entire site is serviced with two septic tank locations. Between each of the large six buildings there is a drain/grated that ultimately leads to the main drainage area along Pioneer Rd which connects to the city stormwater main.

3. Evidence of Hazardous Materials Storage & Use (check appropriate):

- | | <u>Yes</u> | <u>No</u> |
|---|-------------------------------------|-------------------------------------|
| ▪ Haz-mat storage area(s)? Location? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| ▪ Abandoned drums or containers? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| ▪ Aboveground Storage Tanks? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| ▪ Underground Storage Tanks? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| ▪ Fuel or Chemical Dispensing Equipment or vent piping? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| ▪ Pools of liquid? Characteristics? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| ▪ Sumps, oil/water separators and collection pits? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| ▪ Unusual Odors, staining or distressed vegetation? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

3- secondary contained AST's (500 gall - Gas, 1,000 gall - Diesel, 2,000 gall Building 5 - Maintenance/Mechanic Shop - contains, virgin oil, red diesel hydraulic fluid, used waste oil, filters all secondary contained, with appropriate labels

Building 6 - fabrication shop - contained household quantities of paints, degreasers, and other haz chemicals contained in fire proof cabinet.

Project #: _____

Date: _____

Inspector: _____

HAZ-MAT CONTINUED:

4. Exterior Observations:

- Exterior surface coverings? (describe condition, type, % native soils)
- Paving patches/staining?
- Manholes/utility covers?
- Any stacks or HVAC units visible on roof?
- Mounds or depressions?
- Do surface water catch basins drain?
- Any ditches or drainages? (If flow is present, identify the source)

Yes

No

-
-
-
-
-
-
-

-
-
-
-
-
-
-

50/50
mild/moderate
1 HVAC on office

All interior buildings ~~were~~ are paved. Exterior roads were mostly unpaved on native soil/basement, however all processing areas were paved. Mild to no staining was observed across property with the most impact which was extremely minor in the maintenance/mechanic shop.

Project #: _____

Date: _____

Inspector: _____

5. Interior Observations:

- Maintenance Areas?
- Hydraulic equipment?
- Interior floor staining, cracking or patching?
- Interior floor drains? Outlet Sump?
- Interior floor integrity (good, satisfactory or poor)?

Yes

No

Building 5 - Maintenance/Mechanic shop, hydraulic equipment (forklifts)
with good interior floor integrity.
All buildings ~~are~~ are paved interior.

6. Describe Adjoining Site Land Uses and Note Any Areas of Concern:

Residential / Agricultural fields

7. Any inaccessible Areas of the Property:

N/A

Project #: _____

Date: _____

Inspector: _____

ADDITIONAL INFORMATION OBTAINED & UTILIZED DURING SITE INSPECTION

	Yes	No
Photo Sheets	<input type="checkbox"/>	<input type="checkbox"/>
Hazardous Materials Management Plans (HMMP)	<input type="checkbox"/>	<input type="checkbox"/>
Permits	<input type="checkbox"/>	<input type="checkbox"/>
Previous Reports/Inspections	<input checked="" type="checkbox"/>	<input type="checkbox"/> SOU Phase I/II ESA
Other	<input type="checkbox"/>	<input type="checkbox"/>

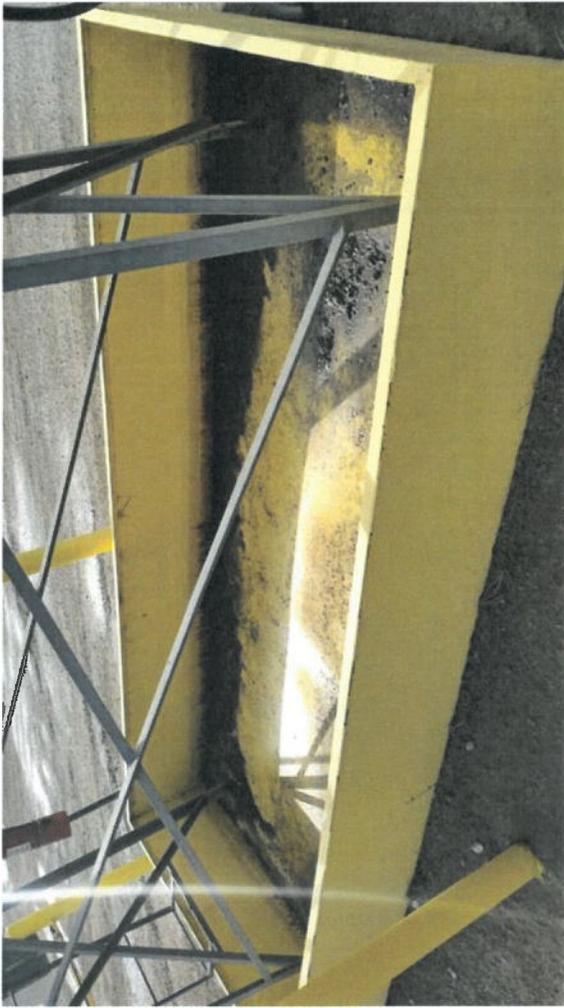
Project #: _____

Date: _____

Inspector: _____

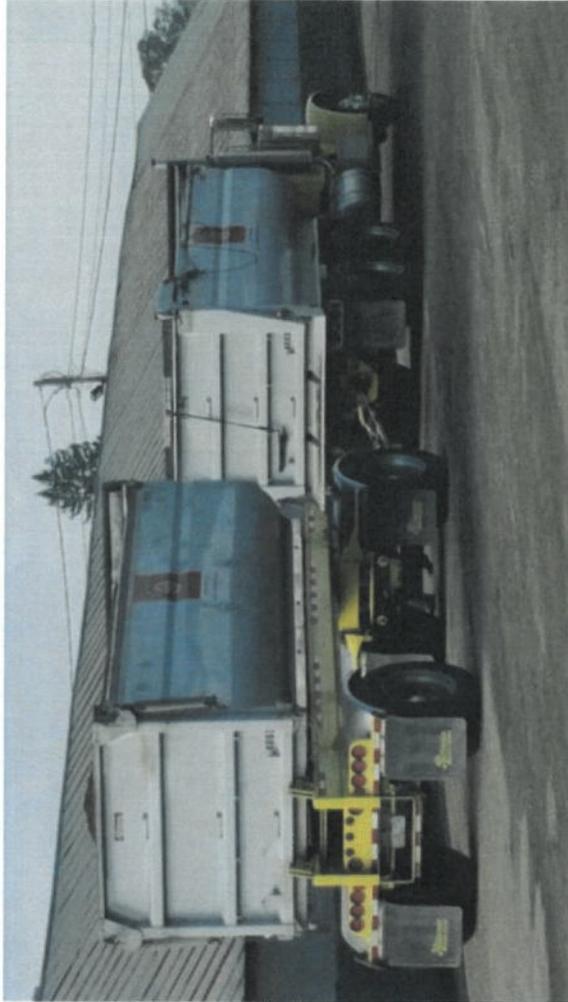


1,000 gallon Diesel AST w/
Secondary Containment

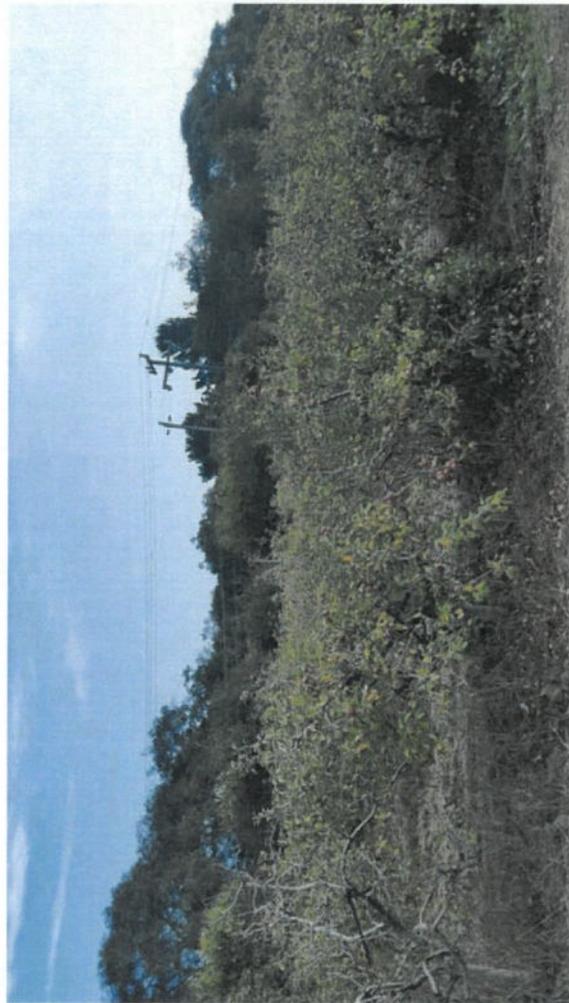


500 gallon Gasoline AST
w/ Secondary Containment





Sun Land Bulk Shipping Truck



Apple Orchards Northern Perimeter



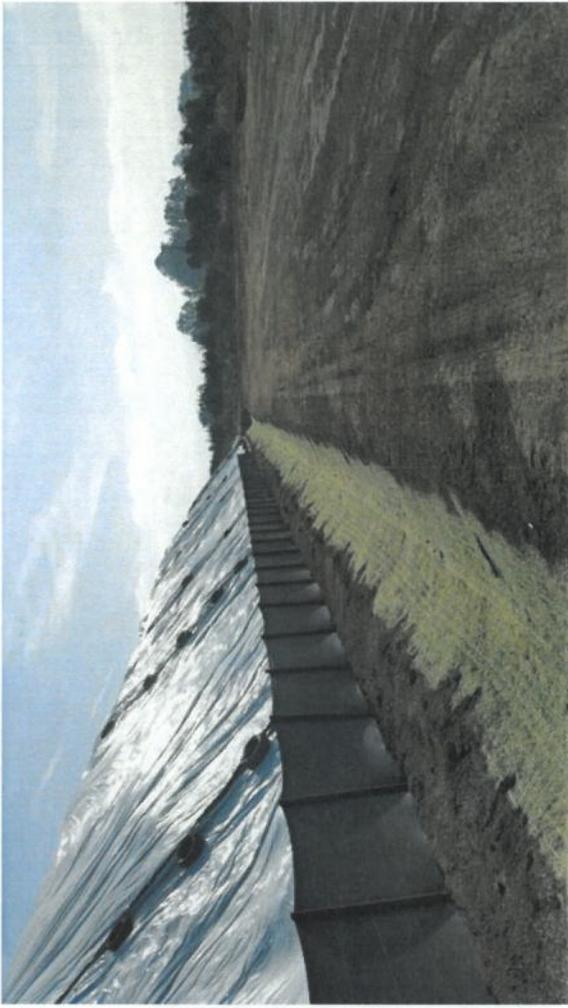
Debris Area - Retired Equipment and Tires



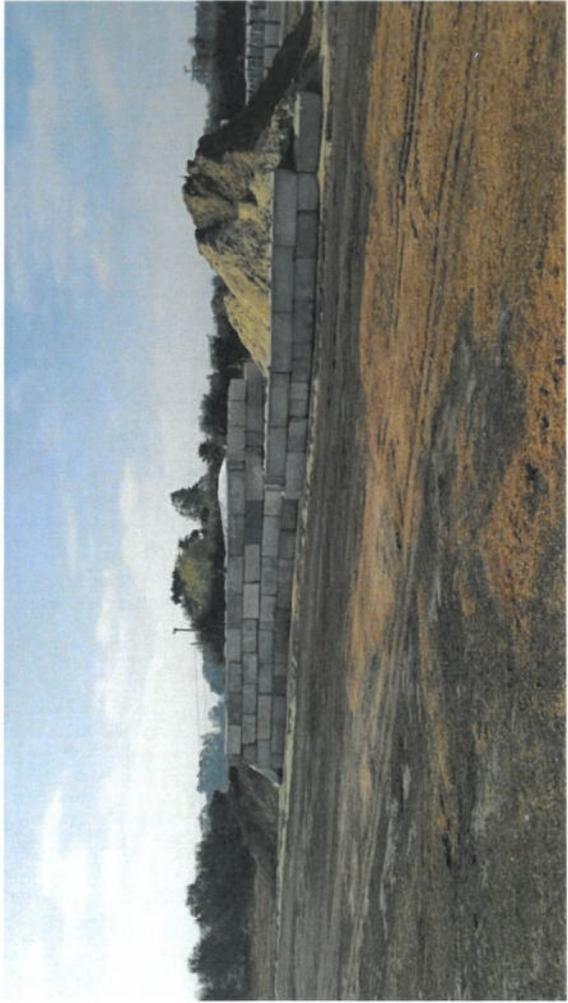
Debris Area - Retired
Equipment and Tires



Red Wood Chip Stock
Piles-Unprocessed



Red Wood Chip Stock Piles-Unprocessed w/
Storm drain swales w/ natural grass filter



Storm water collection area



Storm Water Sampling Location - Most on Site water ends up here via exterior drains and swales

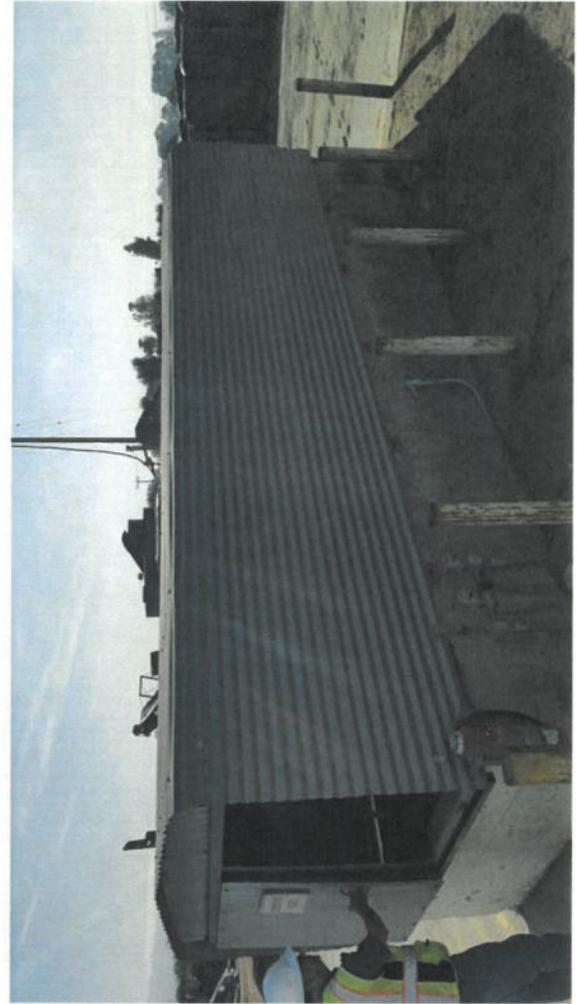




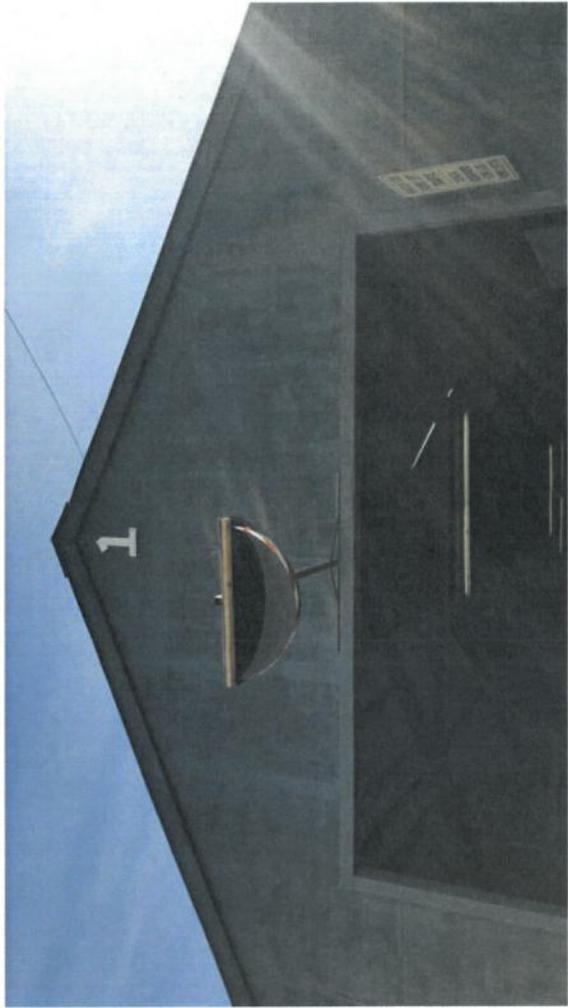
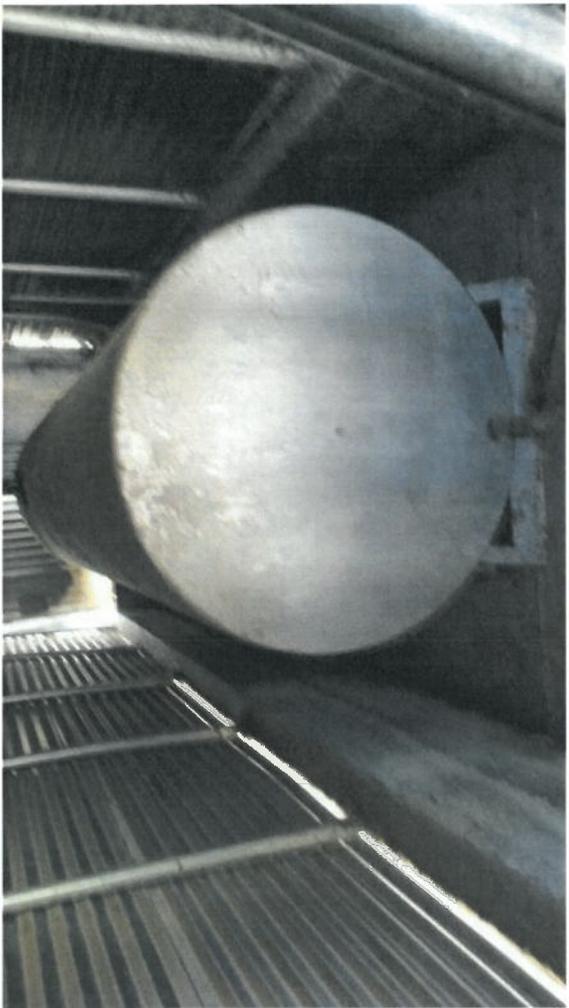
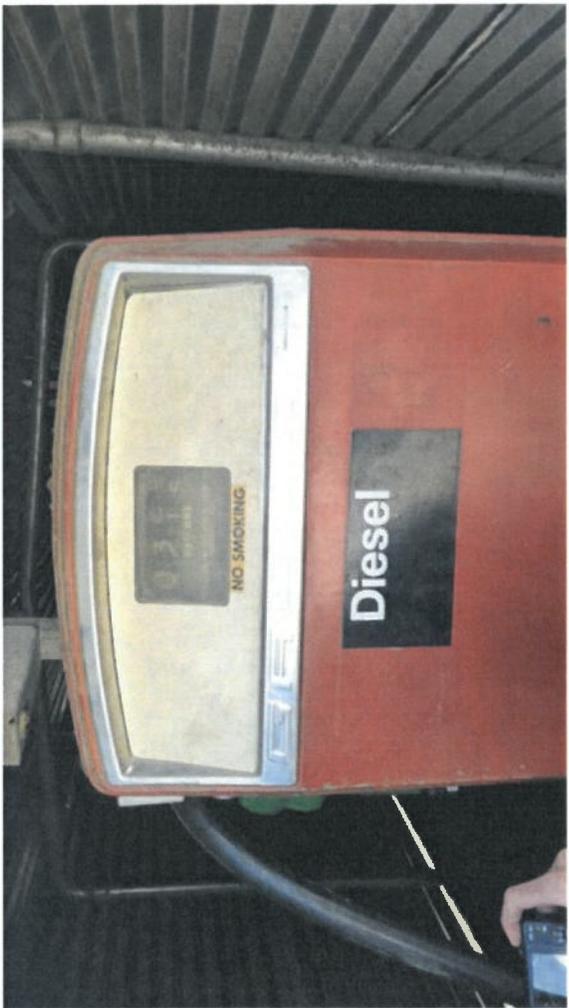
Truck Scale



Well House - Well 1



2,000 gallon Diesel AST w/ secondary containment and housing



Backup generator w/ 200 gallon diesel tank

Building 1- Packaging

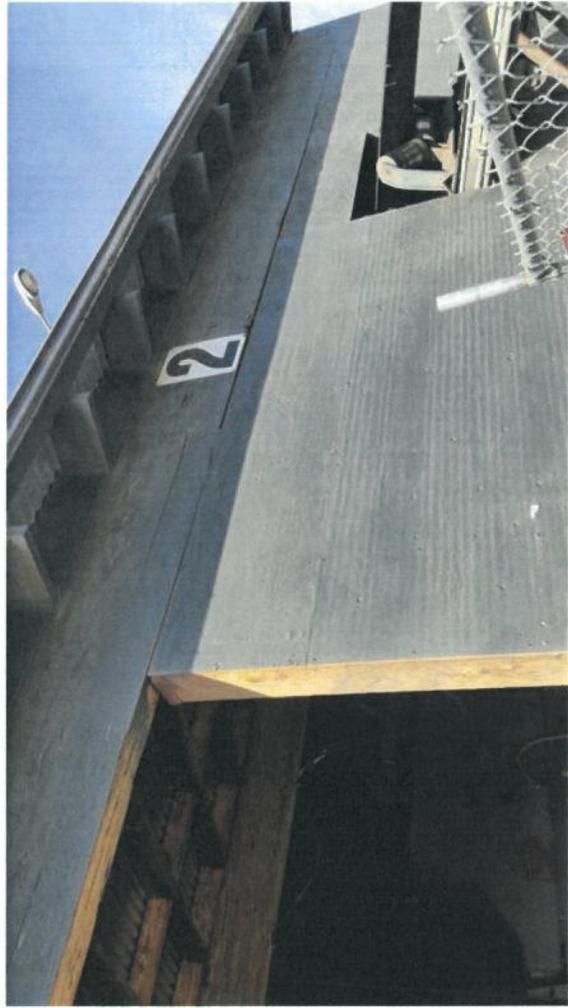


Packaging Equipment





Outside building 1 in Primary mixing and staging area



Building 2- Smaller Package Packing



Packaging Equipment



Finished Good Storage



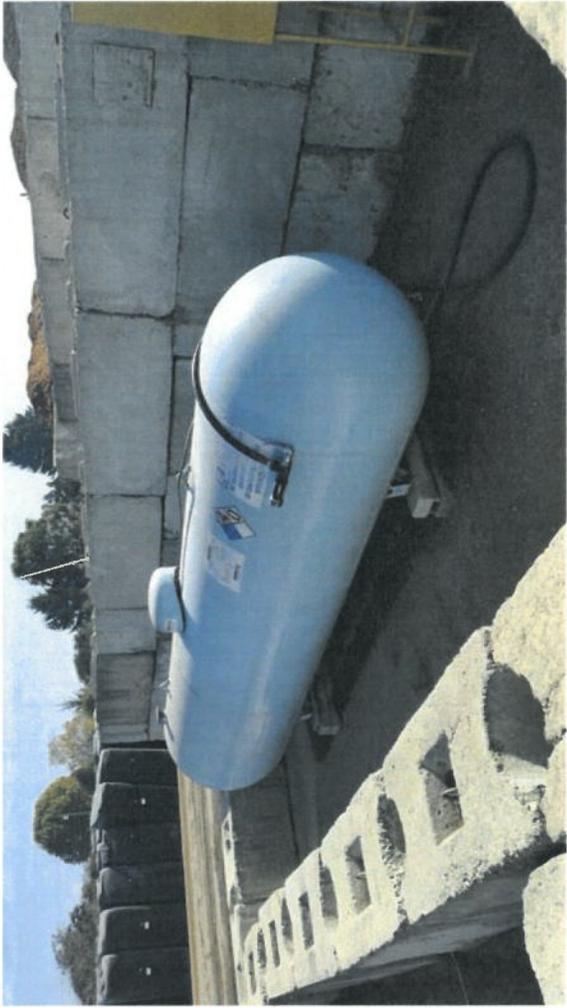
Small Office Spaces



Building 3 - Raw good Storage



Building 4 - Raw Ingredient



Cement Barrier Protected Propane Tank outside building 3



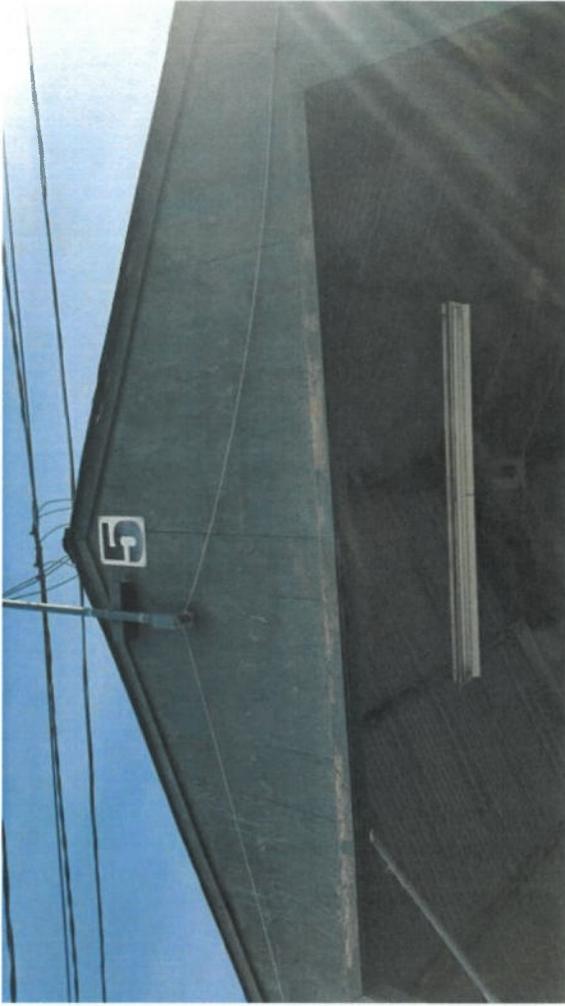
Building 4 - Raw Ingredient



Recyclables



Coco husk storage -
Raw ingredient



Building 5 - Finished
Good Storage and
Vehicle Maintenance
Shop



Finished Goods





Forklift parking Area



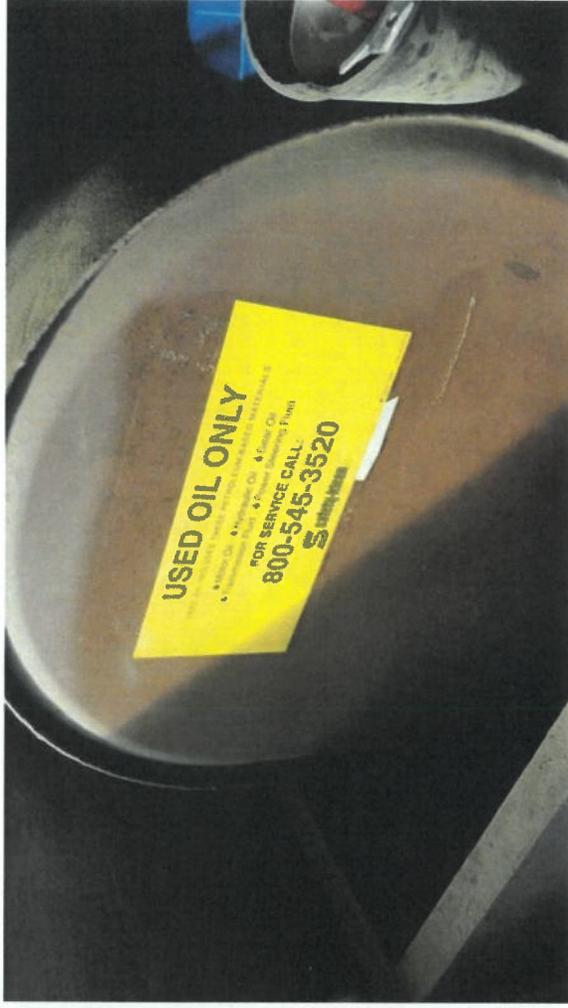
Compressor



Virgin Oil - Secondary Containment



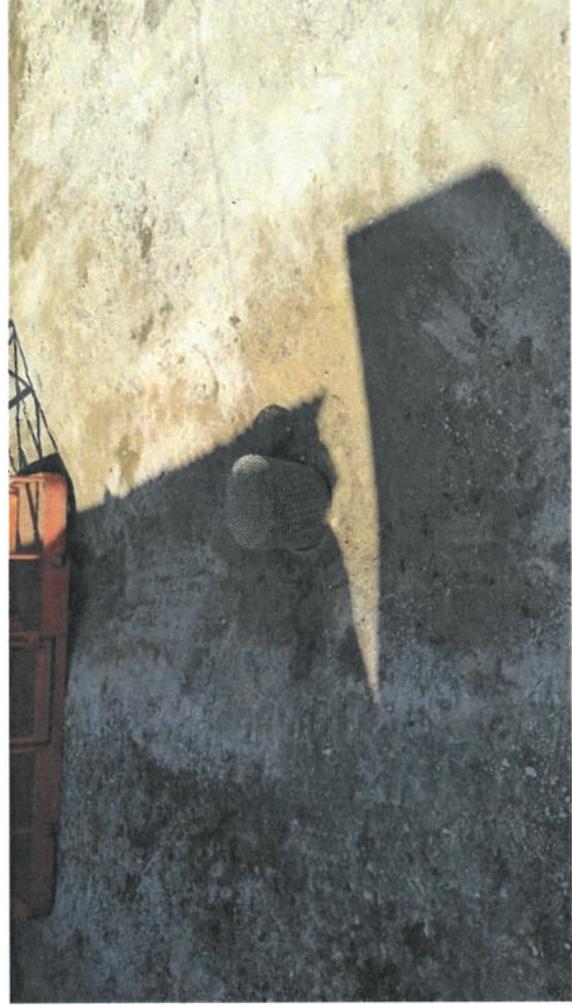
Used Oil Filters



Used Oil Container -
Secondarily Contained



Exterior Drain -
between building 4
and 5



Exterior drain - between building 5 and 6



Building 6 - Metal
Shop - Equipment



Metal Fabrication Equipment



Used/New Part storage



Metal Storage lockers for household sized hazardous materials (paint, varnish, solvents, glues)



Phase I Environmental Site Assessment
 User/Client Questionnaire

Overview: *Phase I Environmental Site Assessment (ESA)* standards¹ require that the party requesting this ESA (i.e., the “user”, or client), make a good faith effort to provide and/or obtain the following disclosure items, which are generally available during the property transaction escrow process:

- Reason for contracting this Phase I ESA
- Knowledge of any environmental liens or agency restrictions on the property
- Specialized knowledge of the property
- Any discounts to the property fair-market value associated with chemical spills or releases
- Commonly known (“reasonably ascertainable”) information regarding chemical storage/use
- Available environmental reports

Please provide the following information to the best of your recollection/knowledge.

Site/Facility Name: Sun Land Garden Products Inc.

Site Address: 90 Pioneer Road Watsonville CA 95076

Name/Title: Martin Hayes Director Sun land operations

1. Reason for Performing this ESA (check appropriate):

- Lender: Property sale requirement for lender
- Buyer: Due diligence property screening by buyer.
- General Liability: “Landowner Liability Protections” (LLPs) as per Federal environmental laws
- Personal Comfort Level: Better understanding of land uses & potential environmental liabilities
- Other: _____

2. Environmental Cleanup Liens (check appropriate):

Yes No Are you aware of any **environmental liens** placed on the property by a regulatory agency (Federal, State or Local)?

If **yes**, please provide details:

¹: ASTM Standard E 1527-05 and EPA All Appropriate Inquiries (AAI) guidelines,

3. Land-Use Limitations (check appropriate):

Yes No Are you aware of any "**Activity Land-Use Limitations**" (AULs) placed upon the Site by Federal, State or Local regulatory agencies such as engineering or institutional controls?

If **yes**, please provide details: _____

4. Specialized Knowledge of the User/Client (check appropriate):

As the person or entity requesting this *Phase I ESA* ("user"), do you have any specialized knowledge or experience pertaining to the subject Site or nearby/adjoining property that would give you distinct knowledge of chemical usage and/or industrial processes at the subject Site?

Yes No Are you a current or former occupant of the Site?

Yes No Are you involved in the same type of business/industry, and are familiar with commercial/industrial processes or chemical storage

If **yes**, please provide details: _____

5. Comparison of Purchase Price to Fair Market Value (check appropriate):

To the extent of your knowledge, does the requested purchase price of the subject Site reflect the fair market value of the property? If a discrepancy is present, have you considered whether the lower purchase price is due to environmental contamination believed to be or known to be present at the Site?

Yes No Does the property purchase price reflect a discounted value relative to fair market value?

Yes No If the property is being sold below fair market value, is the reason attributed to a known/perceived chemical release (i.e., contamination)

If **yes**, please provide details: _____

6. **"Reasonably Ascertainable Information"** (brief description):

Are you aware of any **commonly known** or **reasonably ascertainable information** pertaining to chemical storage/usage on the subject Site? Specifically:

a) **Prior Land Use(s)**: Do you know previous land use(s) at the subject Site (land uses/businesses)?

NO

b) **Chemical Use or Storage**: Do you know of any current or historical use/storage/generation of chemicals, fuels, or hazardous waste at the subject Site?

Company only use Solid fertilizers always storages in building 3
Fuel tanks above ground, the are on a secondary containers
use oil. Filters are always discharge by Bay oil il inc Company

c) **Chemical Releases**: Are you aware of any reported or unreported chemical spills or releases that occurred at the subject Site? [Current or Historical]

NO

d) **Environmental Clean-ups**: Are you aware of any reported or unreported environmental cleanups that have occurred at the subject Site? [Current or Historical]

NO

7. **Degree of Obviousness of Contamination:**

Based on your knowledge of the property, are you aware of any obvious indicators that would suggest the presence (or likely presence) of contamination at the subject Site?

NO

8. **Helpful Documents:** Are you aware of existing reports (listed below) for the subject Site?

- | <u>Yes</u> | <u>No</u> | |
|-------------------------------------|-------------------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Previous Phase I or Phase II ESAs |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Hazardous Materials Management Plans (HMMPs) or Chemical Storage Inventories |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Industrial Stormwater Monitoring Plans/Reports (SWPPPs or compliance reports) |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Permitting or Documentation re: Aboveground or Underground Storage Tanks |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Hazardous Waste Generator notices, disposal manifests, or compliance reports |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Regulatory directives or No Further Action (NFA) letters. |

If yes to any of the above, please provide details (year, author/consultant if possible):

2014 - 2015 Phase I California Water Board
Central Coast Regional Water Quality Board
Company Management Sun Land SW
Sidera Environmental inc 1-800-336-3039

Additional Comments & Extra Space for Affirmative Answers?

To the best of my knowledge I attest that the above information is true:

Signature: WES Date: 10/22/18

Title: Director of Sun Land Operations

Reference: Information & Definitions

As per ASTM Standard E 1527-05 and EPA All Appropriate Inquiries (AAI), the user (i.e. the party requesting this Phase I ESA), is required to provide a short list of items that are more readily available to the parties involved with the property transaction. This information is used to support the case for the user of the ESA to qualify for one of the landowner liability protections (LLPs) defenses under Federal environmental law.

"In order to qualify for one of the Landowner Liability Protections (LLPs)² offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the 'Brownfields Amendments'), the user must provide the following information (if available) to the environmental professional [Weber, Hayes and Associates]. Failure to provide this information could result in the determination that 'all appropriate inquiry' is not complete."

²: From ASTM E 1527-05: "Landowner Liability Protections (LLPs), is the term used to describe the three types of potential defenses to Superfund liability in the EPA's *Interim Guidance Regarding Criteria Landowners Must Meet to Qualify for Bona Fide Prospective Purchaser, Contiguous Property or Innocent Landowner Limitations* under CERCLA Liability issued March 6, 2003."



QUESTIONS FOR OWNER/PROPERTY MANAGER

Regarding: Sun Land Garden Products

From: Martin Reyes

Date: 10-23-18

Weber Hayes & Associates is completing a standardized Environmental Site Assessment. As part of the assessment process, we are tasked with reviewing historical land uses and environmental conditions. All research indicates the property has no red flags associated with it. In order to complete the assessment requirements, we have a couple of follow-up questions that we'd like to ask you to answer to the best of your knowledge:

Questions	Answer (To the best of your knowledge,)	
Has hazardous materials been used or stored on the property (i.e. fuels, petroleum products, pesticides, or other chemicals)?	Yes <input checked="" type="radio"/>	No <input type="radio"/>
Has the property ever contained: 1) Above or below ground petroleum storage tanks? 2) Water Supply Wells	1) Yes <input checked="" type="radio"/> 2) Yes <input checked="" type="radio"/>	No <input type="radio"/> No <input type="radio"/>
Has there been any large scale dumping of debris on the site? If so, when?	Yes <input type="radio"/>	No <input checked="" type="radio"/>
Have there ever been orchards present on the Site during your ownership?	Yes <input checked="" type="radio"/>	No <input type="radio"/>

If answered "yes" to any of the above, please provide some simple description: _____

3-AST's with petroleum
 Orchards currently present
 1 water supply well

Thank you for your insights.

Completed by:


Signature

Shawn Essoy
Printed Name

Martin Reyes
Representing

APPENDIX B

HISTORICAL RESEARCH REPORTS (EDR)

- *City Directory Listings*
- *Aerial Maps*
- *Sanborn Maps*
- *Historical Topo Maps*

2x848 Sun Land Garden ESA

90 Pioneer Road
Watsonville, CA 95076

Inquiry Number: 5452887.5
October 15, 2018

The EDR-City Directory Image Report



6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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City Directory Images

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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Data by

infoUSA[®]

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

<u>Year</u>	<u>Target Street</u>	<u>Cross Street</u>	<u>Source</u>
2014	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
2010	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
2005	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
2000	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
1995	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
1992	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
1987	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
1982	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
1977	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
1971	<input type="checkbox"/>	<input type="checkbox"/>	Polk's City Directory
1965	<input type="checkbox"/>	<input type="checkbox"/>	Polk's City Directory
1960	<input type="checkbox"/>	<input type="checkbox"/>	Polk's City Directory

FINDINGS

TARGET PROPERTY STREET

90 Pioneer Road
Watsonville, CA 95076

<u>Year</u>	<u>CD Image</u>	<u>Source</u>
-------------	-----------------	---------------

PIONEER RD

2014	pg A2	EDR Digital Archive	
2010	pg A4	EDR Digital Archive	
2005	pg A6	EDR Digital Archive	
2000	pg A8	EDR Digital Archive	
1995	pg A10	EDR Digital Archive	
1992	pg A12	EDR Digital Archive	
1987	pg A14	EDR Digital Archive	
1982	pg A16	EDR Digital Archive	
1977	pg A18	EDR Digital Archive	
1971	-	Polk's City Directory	Street not listed in Source
1965	-	Polk's City Directory	Street not listed in Source
1960	-	Polk's City Directory	Street not listed in Source

FINDINGS

CROSS STREETS

Year CD Image Source

GREEN VALLEY RD

2014	pg. A1	EDR Digital Archive	
2010	pg. A3	EDR Digital Archive	
2005	pg. A5	EDR Digital Archive	
2000	pg. A7	EDR Digital Archive	
1995	pg. A9	EDR Digital Archive	
1992	pg. A11	EDR Digital Archive	
1987	pg. A13	EDR Digital Archive	
1982	pg. A15	EDR Digital Archive	
1977	pg. A17	EDR Digital Archive	
1971	-	Polk's City Directory	Street not listed in Source
1965	-	Polk's City Directory	Street not listed in Source
1960	-	Polk's City Directory	Street not listed in Source

City Directory Images

PIONEER RD 2014

51 BLAS, RAUL
JOHN MAXON
MARTINEZ, ZAPATA J
MAXON, JOHN G
MEDINA, CLEMENTE
NUNEZ, CLAUDIA
VENCES, JAIME
90 REYES, MARTIN
SUN-LAND GARDEN PRODUCTS INC
94 MINASIAN, BRIAN N
114 ELAINE PINKERNELL
LUHN, CHRISTOPHER B
141 KING, JOHN W

GREEN VALLEY RD 2014

980 MADSEN, TERRANCE M
990 SAKAJE, ALLAN H
1000 COLENDICH, MARK S
1002 LOEZA, ADRIAN
1004 GOODHART, FOREST W
1016 MONTEREY BAY DOG TRAINING CLUB
VIDAK, ANITA M
1020 GREYER, GORDON J
1024 CLARK, LANNIE S
1030 WARD, JUDSON A
1055 MINASIAN, EDWARD B
WATSON SUMMER
1079 NEGARD CHRISTIAN
NEGARD, CHRISTIAN F
1080 FREDRICKSON, CRAIG L

PIONEER RD 2010

51 BLAS, RAUL
DIFFENBAUGH, JOHN D
GARCIA, JAIME
MARTINEZ, ZAPATA J
NUNEZ, CLAUDIA
PEREZ, EFREN
PIONEER ORGANIC PRODUCE
ROMERO, JUAN
SOTO, C J
VENCES, JAIME
ZAPIEN, GABRIEL
90 SUN-LAND GARDEN PRODUCTS INC
94 MINASIAN, BRIAN N
114 LUHN, CHRISTOPHER B
128 OCHOA, HUGO
141 KING, JOHN W

GREEN VALLEY RD 2010

980 MADSEN, TERRANCE M
SEEAMAN LAURENCE E DVM
990 SAKAUJE, RYOJI
1000 COLENDICH, MARK S
1002 LOEZA, ADRIAN
1004 GOODHART, FOREST M
1016 VIDAK, ANITA M
1020 GREYHER, GORDON J
1024 CLARK, LANNIE S
1030 NICHOLSON, EDWARD J
1055 MINASIAN, EDWARD B
WATSON SUMMER
1079 NEGARD, ASHLEY M
1080 FREDRICKSON, CRAIG L

PIONEER RD 2005

51 BLAS, MARIA G
DIFFENBAUGH, JOHN D
GARCIA, JAIME
MEDINA, JONATHAN
PIONEER ORGANIC PRODUCE
SKINNER, JOHN
SK FOODS LP
90 SUN-LAND GARDEN PRODUCTS INC
MINASIAN, BRIAN N
114 LUHN, CHRISTOPHER
128 RAMOS, MIGUEL A
141 KING, JOHN W

GREEN VALLEY RD 2005

980 BOL, ELIZABETH J
990 SAKAUE, RYOJI
1000 COLENDICH, MARK S
1002 LOEZA, RAYMOND A
1004 GOODHART, FOREST M
1016 VIDAK, LUANE M
1020 GREYER, GORDON J
1024 CLARK, LANNIE P
1030 NICHOLSON, EDWARD J
1050 UEBERRHEIN, JOHN E
1055 MINASIAN, EDWARD B
1059 BIOFEEDBACK OF MONTEREY BAY
GREEN VALLEY HARLEY DAVIDSON
1079 HARNEY, WILLIAM C
1080 FREDRICKSON, CRAIG L

PIONEER RD 2000

51 ANGELES, A
PIONEER ORGANIC PRODUCE
90 MINASIAN, EDWARD B
SUN-LAND GARDEN PRODUCTS INC
94 MINASIAN, BRIAN

GREEN VALLEY RD 2000

980 BOL, E J
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1000 GATES, ERIN S
1002 OCCUPANT UNKNOWN,
1004 GOODHART, FOREST
1016 VIDAK, LUANE M
1020 OCCUPANT UNKNOWN,
1055 MINASIAN, EDWARD B
1056 BIOFEEDBACK OF MONTEREY BAY
1074 TOP SHELF INC
1079 OCCUPANT UNKNOWN,
1080 SPENCER, K J

PIONEER RD 1995

90 MINASIAN, EDWARD B
SUN-LAND GARDEN PRODUCTS INC
94 MINASIAN, BRIAN
114 OCCUPANT UNKNOWN
128 OCCUPANT UNKNOWN

GREEN VALLEY RD 1995

980 OCCUPANT UNKNOWN
990 OCCUPANT UNKNOWN
1000 POHORSKI, GEORGE
1004 GOODHART, FOREST
1016 OCCUPANT UNKNOWN
1020 WITMER, FRED
1065 FARRAR R INC
1074 ERIKS DELICAFE
1080 OCCUPANT UNKNOWN

Target Street

Cross Street

Source

EDR Digital Archive

GREEN VALLEY RD 1992

880 BOL, JOHN
1000 POHORSKI, GEORGE
1004 GOODHART, FOREST
1016 VIDA, LUKE
1020 WITMER, FRED
1030 DATAB CO
1052 TRANSAMERICA FINANCIAL SVCS
1065 FARRAR R INC
1070 ERIKS DELICAFE
1074 ERIKS DELICAFE
1079 SJULIN, THOMAS M
1080 SPENCER, BERTRAM

Target Street

Cross Street

Source

EDR Digital Archive

PIONEER RD 1992

51 FORSON, GEORGE
STRAND, CARROLL
90 MINASIAN, EDWARD B
ORGANIC MATERIALS INC
94 SUN-LAND GARDEN PRODUCTS INC
MINASIAN, BRIAN

Target Street

Cross Street

Source

EDR Digital Archive

GREEN VALLEY RD 1987

1030 DATAB CO

Target Street

Cross Street

Source

EDR Digital Archive

PIONEER RD 1987

90 ORGANIC MATERIALS INC
SUN-LAND GARDEN PRODUCTS

Target Street

Cross Street

Source

EDR Digital Archive

GREEN VALLEY RD 1982

1030 DATAB CO

Target Street

Cross Street

Source

EDR Digital Archive

PIONEER RD 1982

90 ORGANIC MATERIALS INC
WATSONVILLE SAWDUST

Target Street

Cross Street

Source

EDR Digital Archive

GREEN VALLEY RD 1977

1030 DATAB CO

Target Street

Cross Street

Source

EDR Digital Archive

PIONEER RD 1977

90 WATSONVILLE SAWDUST

2x848 Sun Land Garden ESA

90 Pioneer Road

Watsonville, CA 95076

Inquiry Number: 5452887.8

October 16, 2018

The EDR Aerial Photo Decade Package



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Site Name:

2x848 Sun Land Garden ESA
 90 Pioneer Road
 Watsonville, CA 95076
 EDR Inquiry # 5452887.8

Client Name:

Weber, Hayes, & Associates
 120 Westgate Drive
 Watsonville, CA 95076
 Contact: Shaun Ersoy



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Search Results:

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2005	1"=500'	Flight Year: 2005	USDA/NAIP
1993	1"=500'	Acquisition Date: June 12, 1993	USGS/DOQQ
1981	1"=500'	Flight Date: September 22, 1981	USDA
1974	1"=500'	Flight Date: October 14, 1974	USGS
1968	1"=500'	Flight Date: June 14, 1968	USGS
1956	1"=500'	Flight Date: June 02, 1956	USDA
1948	1"=500'	Flight Date: May 14, 1948	USFS

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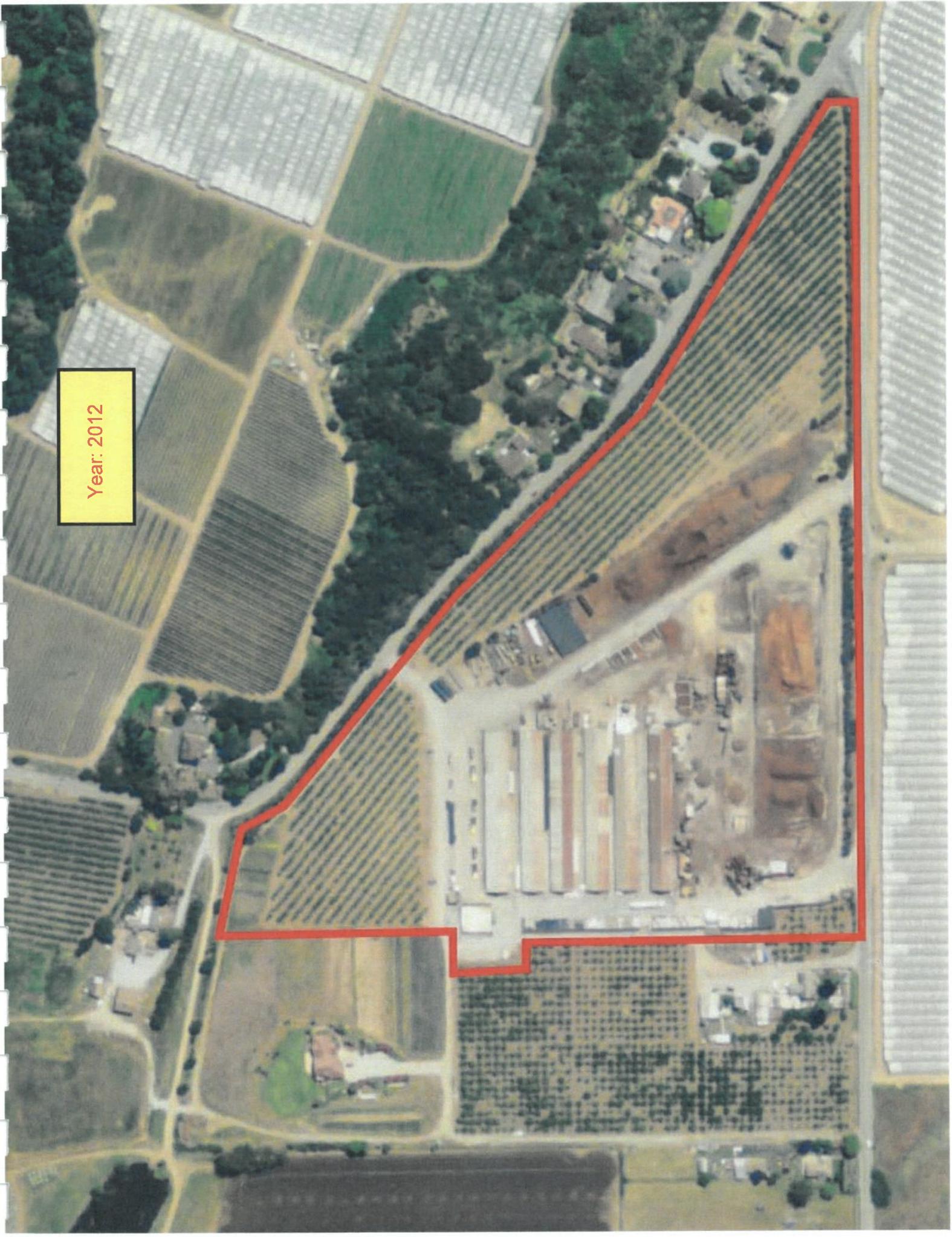
INQUIRY #: 5452887.8

YEAR: 2016

— = 500'



Year: 2012



Year: 2009



Year: 2005



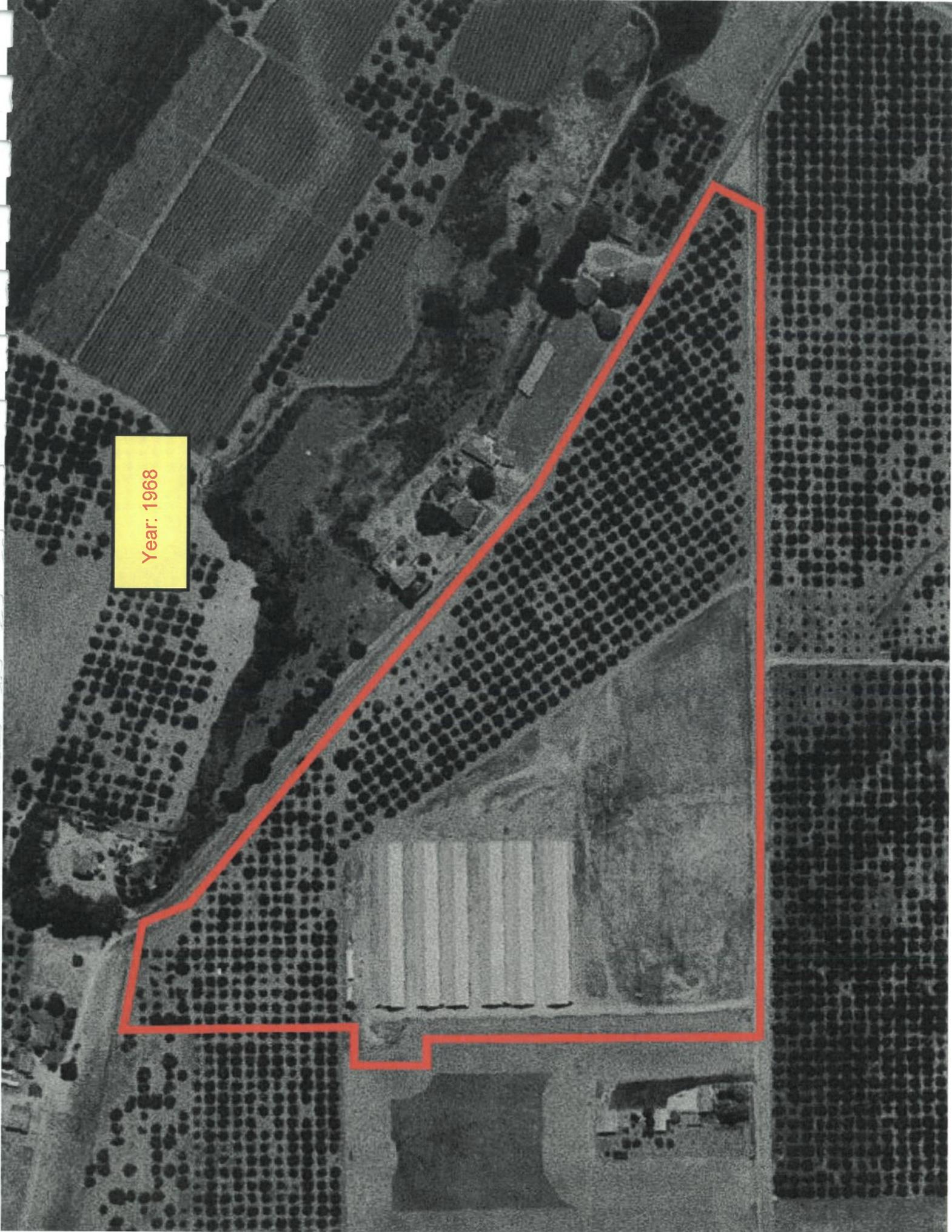
Year: 1981



Year: 1974



Year: 1968



Year: 1956



Year: 1948



2x848 Sun Land Garden ESA
90 Pioneer Road
Watsonville, CA 95076

Inquiry Number: 5452887.3

October 12, 2018

Certified Sanborn® Map Report



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

10/12/18

Site Name:

2x848 Sun Land Garden ESA
90 Pioneer Road
Watsonville, CA 95076
EDR Inquiry # 5452887.3

Client Name:

Weber, Hayes, & Associates
120 Westgate Drive
Watsonville, CA 95076
Contact: Shaun Ersoy



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Certified Sanborn Results:

Certification # ABC3-4924-9CBB
PO # 2x848
Project 2x848 Sun Land Garden ESA



Sanborn® Library search results

Certification #: ABC3-4924-9CBB

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 fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others 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

The Sanborn Library LLC Since 1866™

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2x848 Sun Land Garden ESA
90 Pioneer Road
Watsonville, CA 95076

Inquiry Number: 5452887.4

October 12, 2018

EDR Historical Topo Map Report

with QuadMatch™



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

10/12/18

Site Name:

2x848 Sun Land Garden ESA
90 Pioneer Road
Watsonville, CA 95076
EDR Inquiry # 5452887.4

Client Name:

Weber, Hayes, & Associates
120 Westgate Drive
Watsonville, CA 95076
Contact: Shaun Ersoy



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Search Results:**Coordinates:**

P.O.#	2x848	Latitude:	36.972392 36° 58' 21" North
Project:	2x848 Sun Land Garden ESA	Longitude:	-121.775863 -121° 46' 33" West
		UTM Zone:	Zone 10 North
		UTM X Meters:	608960.58
		UTM Y Meters:	4092509.85
		Elevation:	232.01' above sea level

Maps Provided:

2012
1995
1987
1980
1968
1954, 1955
1914, 1917
1912

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2012 Source Sheets



Watsonville East

7.5-minute, 24000



Watsonville West

7.5-minute, 24000

1995 Source Sheets



Watsonville East

7.5-minute, 24000
Aerial Photo Revised 1987



Watsonville West

7.5-minute, 24000
Aerial Photo Revised 1987

1987 Source Sheets



CAPITOLA

15-minute, 50000



PRUNEDALE

15-minute, 50000

1980 Source Sheets



Watsonville West

7.5-minute, 24000
Aerial Photo Revised 1978



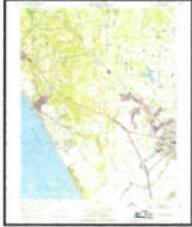
Watsonville East

7.5-minute, 24000
Aerial Photo Revised 1978

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1968 Source Sheets



Watsonville West

7.5-minute, 24000
Aerial Photo Revised 1968



Watsonville East

7.5-minute, 24000
Aerial Photo Revised 1968

1954, 1955 Source Sheets



Watsonville West

7.5-minute, 24000
Aerial Photo Revised 1952



Watsonville East

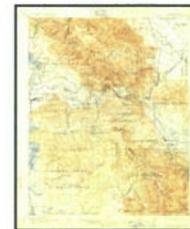
7.5-minute, 24000
Aerial Photo Revised 1952

1914, 1917 Source Sheets



Capitola

15-minute, 62500



San Juan Bautista

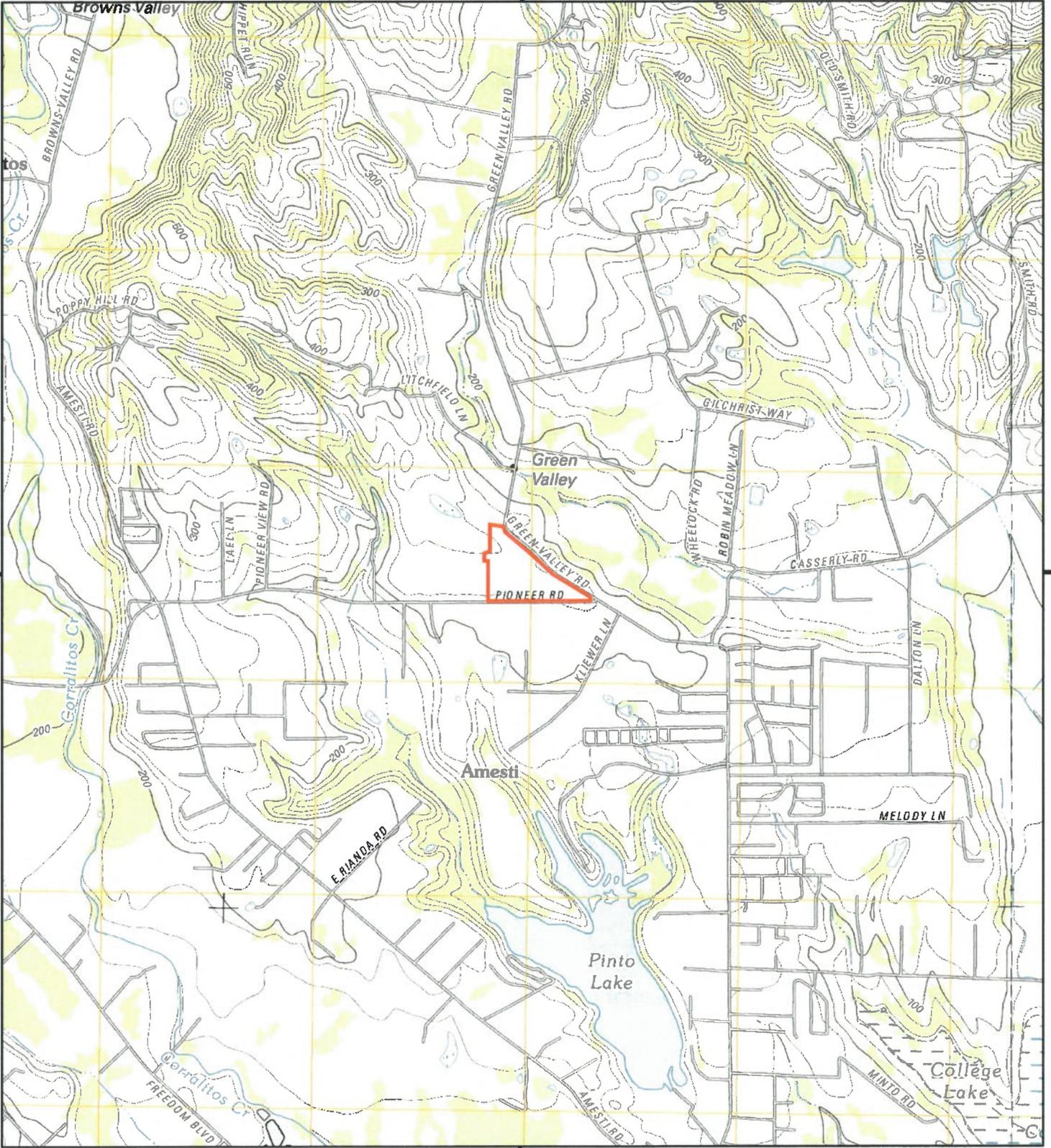
15-minute, 62500

1912 Source Sheets

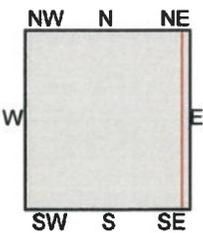


Capitola

15-minute, 62500



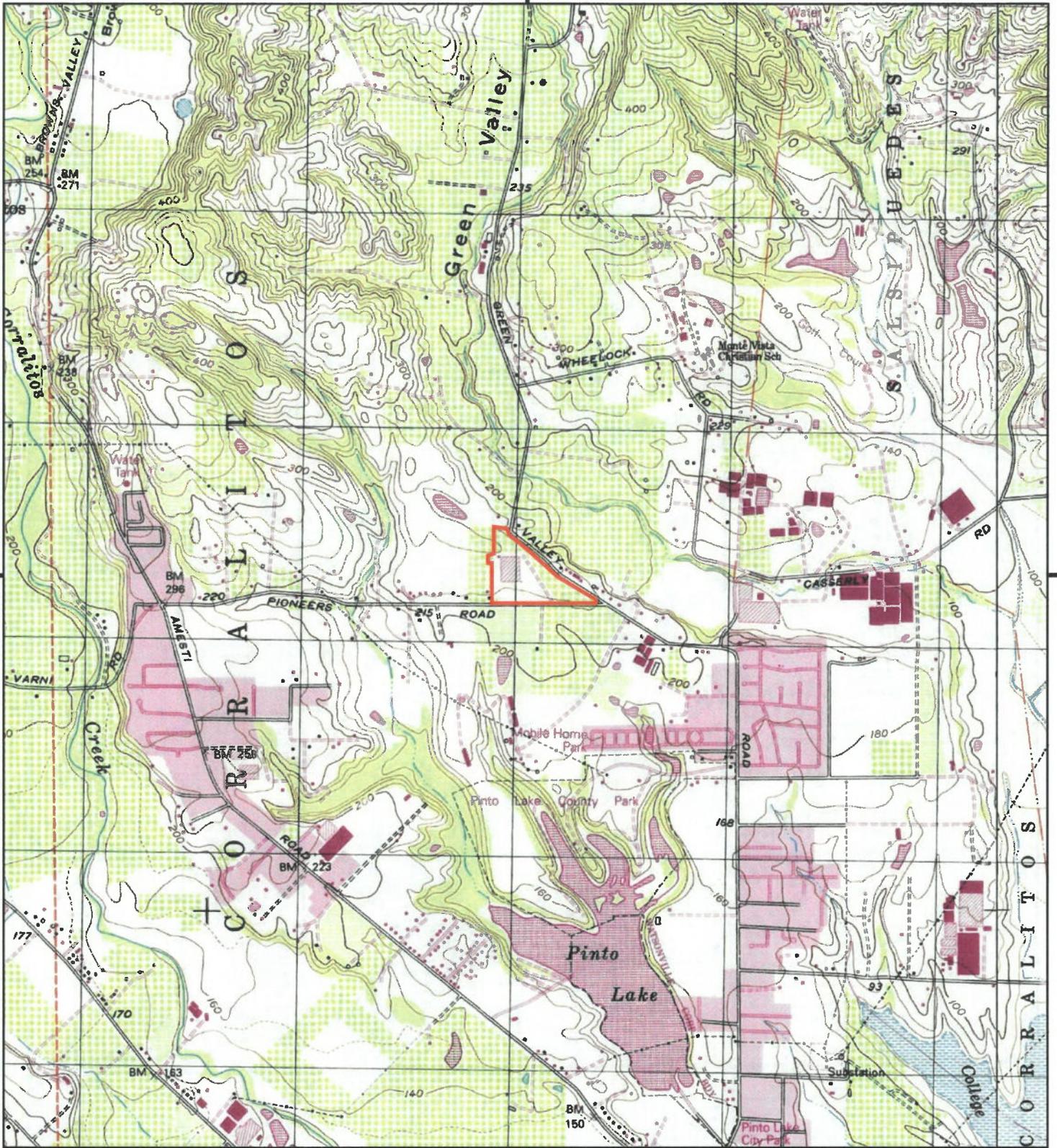
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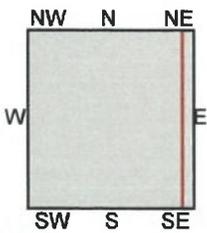
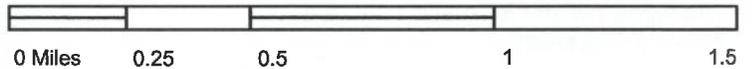
TP, Watsonville West, 2012, 7.5-minute
SE, Watsonville East, 2012, 7.5-minute

SITE NAME: 2x848 Sun Land Garden ESA
ADDRESS: 90 Pioneer Road
Watsonville, CA 95076
CLIENT: Weber, Hayes, & Associates





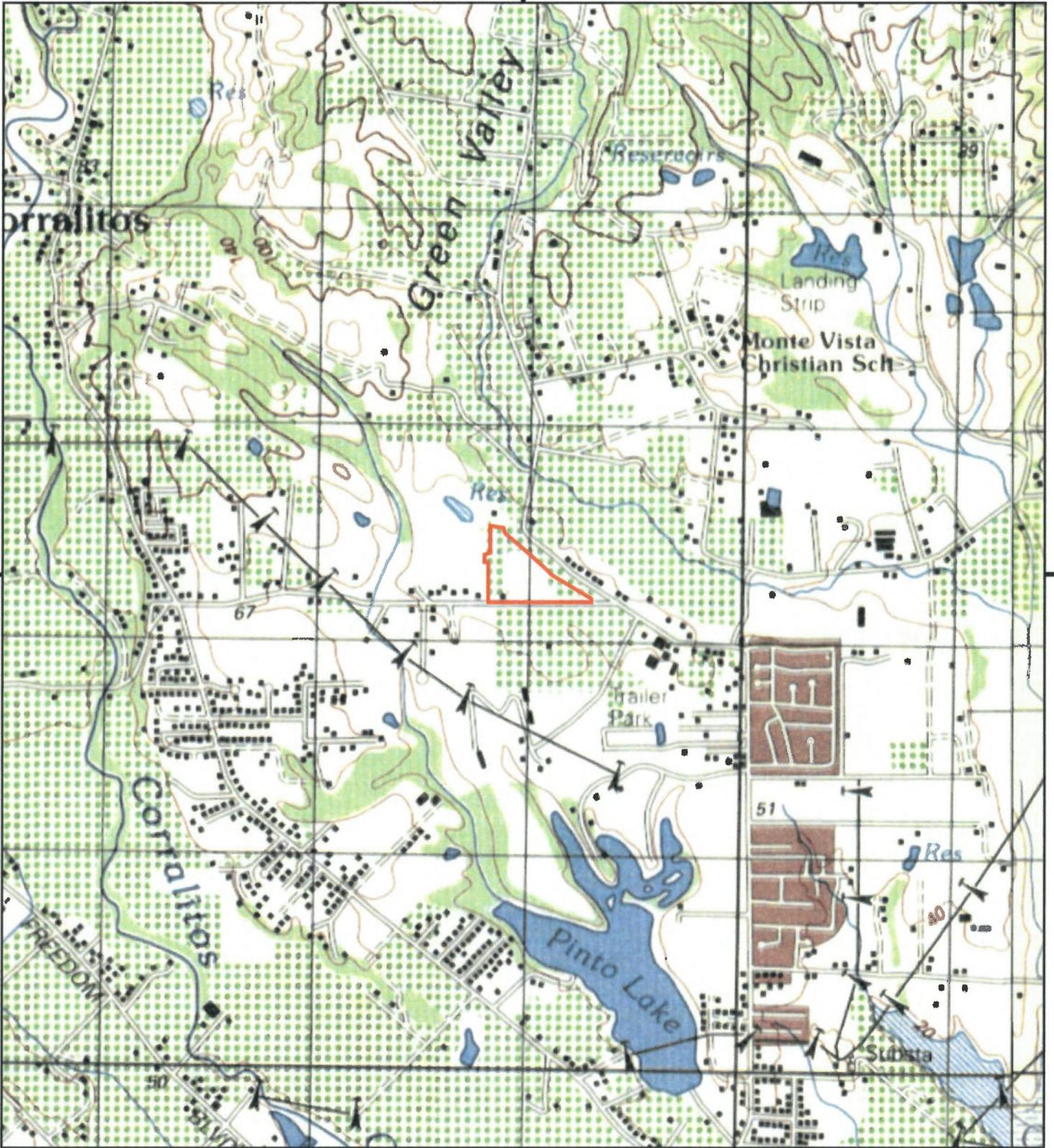
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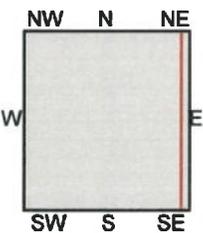
TP, Watsonville West, 1995, 7.5-minute
SE, Watsonville East, 1995, 7.5-minute

SITE NAME: 2x848 Sun Land Garden ESA
ADDRESS: 90 Pioneer Road
Watsonville, CA 95076
CLIENT: Weber, Hayes, & Associates





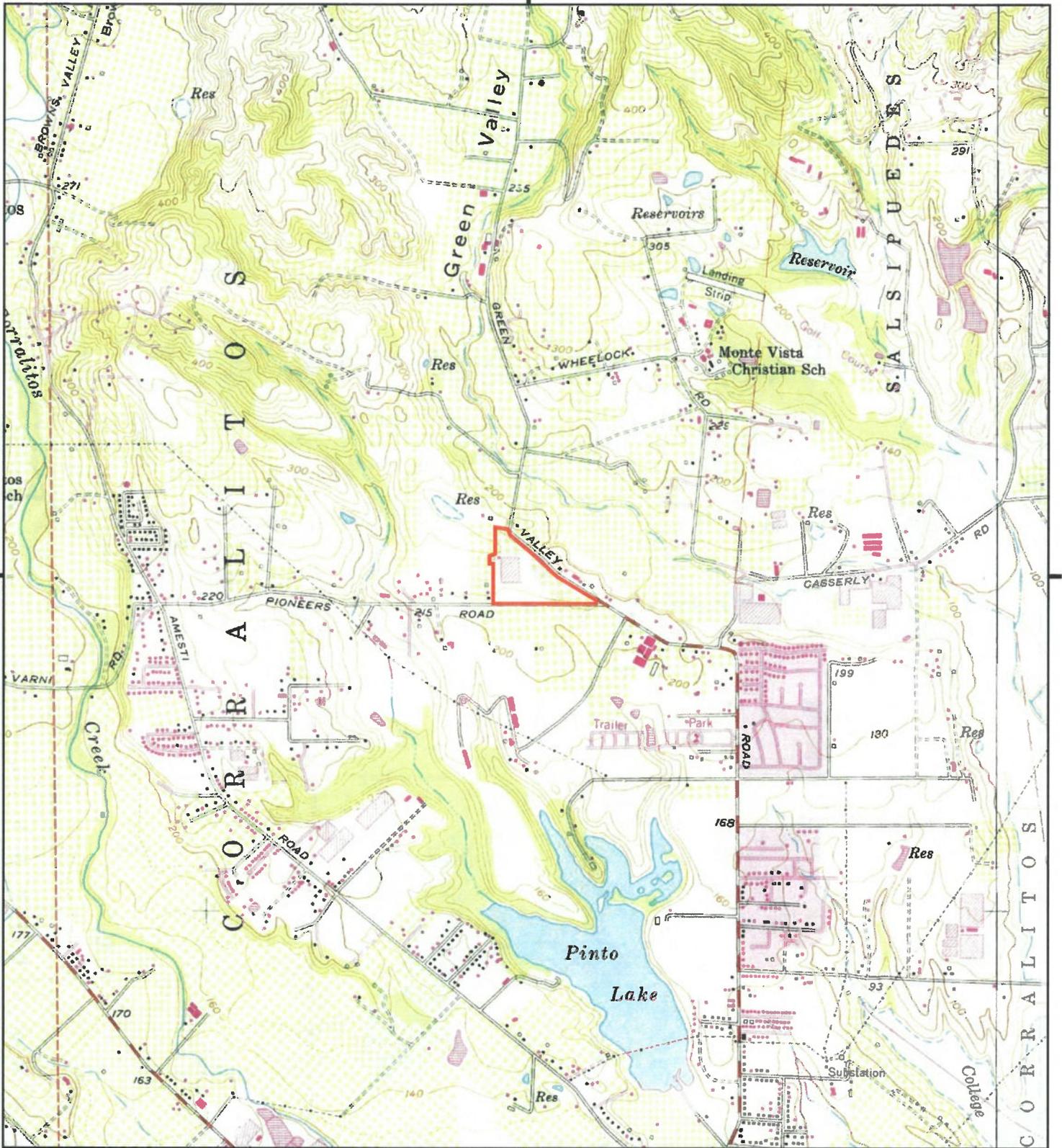
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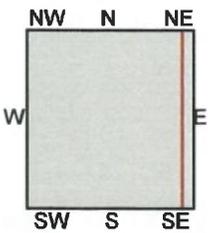
TP, CAPITOLA, 1987, 15-minute
SE, PRUNEDALE, 1987, 15-minute

SITE NAME: 2x848 Sun Land Garden ESA
ADDRESS: 90 Pioneer Road
Watsonville, CA 95076
CLIENT: Weber, Hayes, & Associates





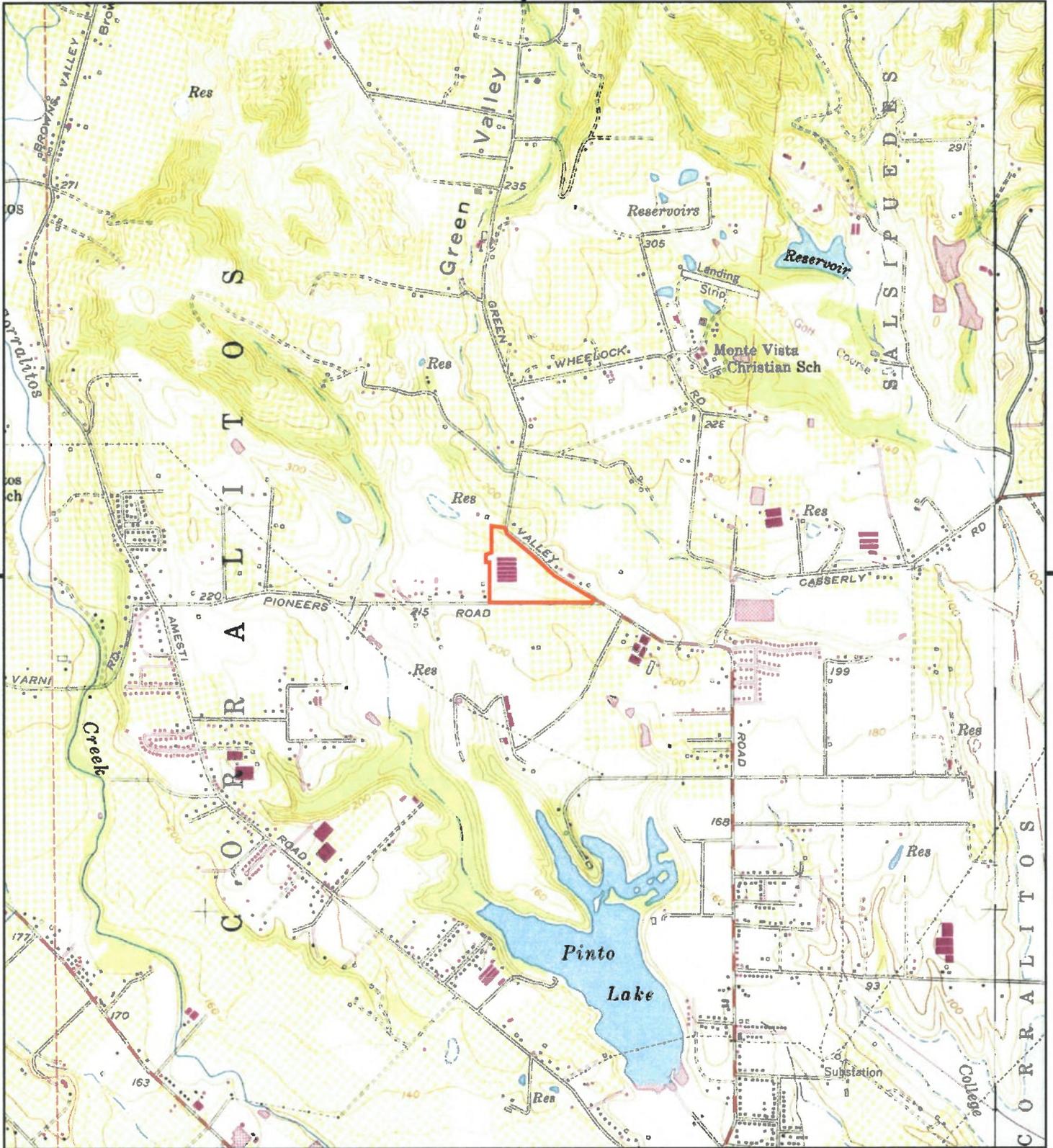
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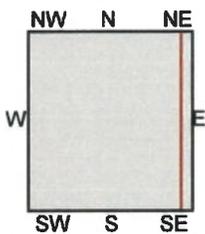
TP, Watsonville West, 1980, 7.5-minute
SE, Watsonville East, 1980, 7.5-minute

SITE NAME: 2x848 Sun Land Garden ESA
ADDRESS: 90 Pioneer Road
Watsonville, CA 95076
CLIENT: Weber, Hayes, & Associates





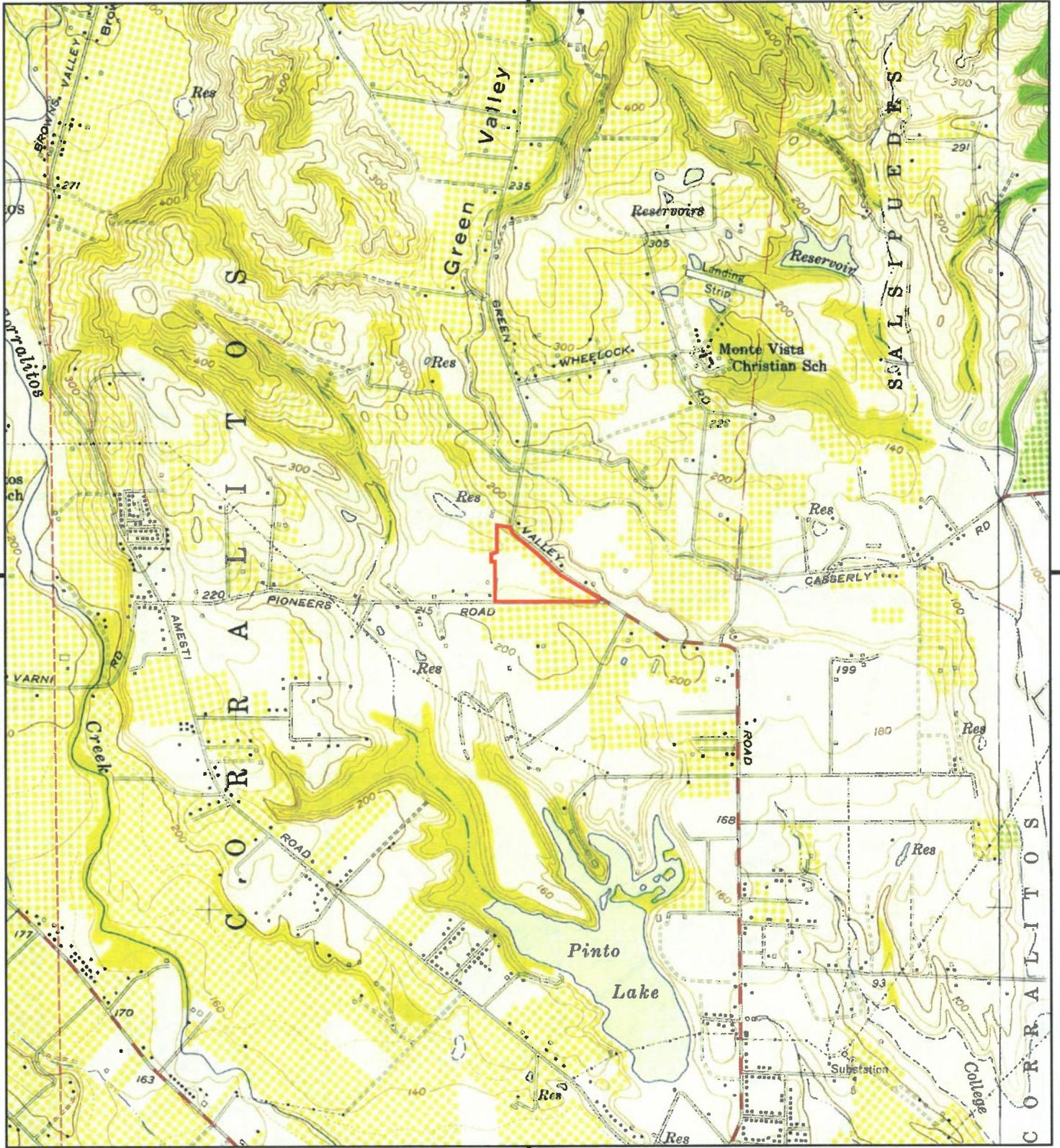
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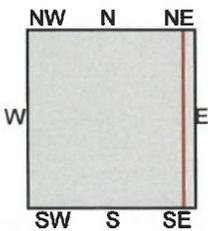
TP, Watsonville West, 1968, 7.5-minute
SE, Watsonville East, 1968, 7.5-minute

SITE NAME: 2x848 Sun Land Garden ESA
ADDRESS: 90 Pioneer Road
Watsonville, CA 95076
CLIENT: Weber, Hayes, & Associates





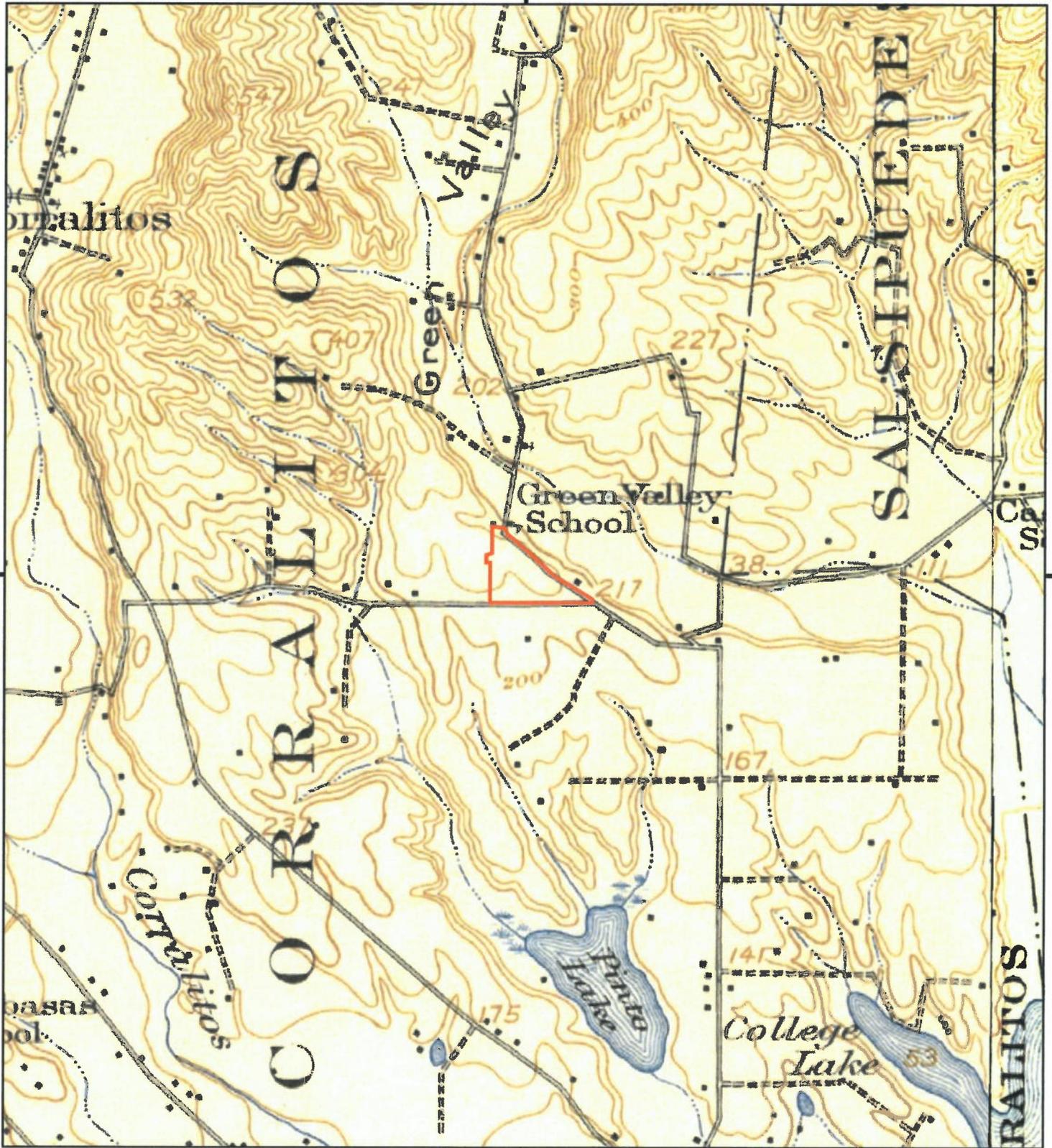
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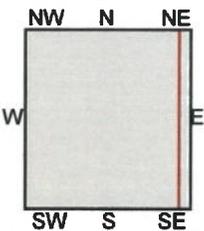
TP, Watsonville West, 1954, 7.5-minute
SE, Watsonville East, 1955, 7.5-minute

SITE NAME: 2x848 Sun Land Garden ESA
ADDRESS: 90 Pioneer Road
Watsonville, CA 95076
CLIENT: Weber, Hayes, & Associates





This report includes information from the following map sheet(s).



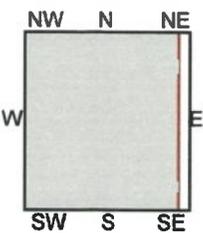
TP, Capitola, 1914, 15-minute
SE, San Juan Bautista, 1917, 15-minute

SITE NAME: 2x848 Sun Land Garden ESA
ADDRESS: 90 Pioneer Road
Watsonville, CA 95076
CLIENT: Weber, Hayes, & Associates





This report includes information from the following map sheet(s).



TP, Capitola, 1912, 15-minute

SITE NAME: 2x848 Sun Land Garden ESA
 ADDRESS: 90 Pioneer Road
 Watsonville, CA 95076
 CLIENT: Weber, Hayes, & Associates



APPENDIX C

EDR RADIUS REPORT

(Database Report of Regulated Sites)

2x848 Sun Land Garden ESA
90 Pioneer Road
Watsonville, CA 95076

Inquiry Number: 5452887.2s
October 15, 2018

The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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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 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

90 PIONEER ROAD
WATSONVILLE, CA 95076

COORDINATES

Latitude (North): 36.9723920 - 36° 58' 20.61"
Longitude (West): 121.7758630 - 121° 48' 33.10"
Universal Transverse Mercator: Zone 10
UTM X (Meters): 608963.2
UTM Y (Meters): 4092306.8
Elevation: 231 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5620290 WATSONVILLE WEST, CA
Version Date: 2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20140613
Source: USDA

MAPPED SITES SUMMARY

Target Property Address:
 90 PIONEER ROAD
 WATSONVILLE, CA 95076

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	SUN LAND GARDEN PROD	90 PIONEER RD	AST, HIST UST, CUPA Listings, NPDES, WDS, CERS HAZ...		TP
A2	SUN-LAND GARDEN PROD	90 PINEER ROAD	HIST UST		TP
A3	SUN-LAND GARDEN PROD	90 PIONEER RD.	HAZNET		TP
A4	SUN LAND GARDEN PROD	90 PIONEER RD	FINDS, ECHO		TP
A5	SUNLAND GARDEN PRODU	90 PIONEER	AST		TP
3	KIM KLIEWER TURKEY R	959 GREEN VALLEY RD	HIST UST	Lower	482, 0.091, ESE
7	PETER M SALATICH	1145 GREEN VALLEY RD	HIST UST	Lower	1118, 0.212, Nor
3	MITCHELL LEONARDICH	920 GREEN VALLEY ROA	HIST UST	Lower	1125, 0.213, ES
3	DALTON SPRAY SERVICE	149 DALTON LANE	ENVIROSTOR	Lower	5035, 0.954, Ea

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
SUN LAND GARDEN PROD 90 PIONEER RD WATSONVILLE, CA 95076	AST Database: AST, Date of Government Version: 07/06/2016	N/A
	HIST UST Facility Id: 00000030809	
	CUPA Listings Database: CUPA SANTA CRUZ, Date of Government Version: 01/21/2017 Facility Id: FA0004490	
	NPDES Facility Status: Active	
	WDS Facility Status: A Facility Id: 3 44I017406	
SUN-LAND GARDEN PROD 90 PINEER ROAD WATSONVILLE, CA 95076	CERS HAZ WASTE CERS TANKS CERS CIWQS	
	HIST UST	N/A
SUN-LAND GARDEN PROD 90 PIONEER RD. WATSONVILLE, CA 95076	HAZNET GEPAID: CAL000159326	N/A
SUN LAND GARDEN PROD 90 PIONEER RD WATSONVILLE, CA 95076	FINDS Registry ID:: 110065175580	N/A
	ECHO Registry ID: 110065175580	
SUNLAND GARDEN PRODU 90 PIONEER WATSONVILLE, CA	AST Database: AST, Date of Government Version: 07/06/2016	N/A

EXECUTIVE SUMMARY

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:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL..... National Priority List
Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY..... Federal Facility Site Information listing
SEMS..... Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG..... RCRA - Large Quantity Generators
RCRA-SQG..... RCRA - Small Quantity Generators
RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS..... Land Use Control Information System
US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROL..... Sites with Institutional Controls

Federal ERNS list

ERNS..... Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE..... State Response Sites

EXECUTIVE SUMMARY

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Solid Waste Information System

State and tribal leaking storage tank lists

LUST..... Geotracker's Leaking Underground Fuel Tank Report
INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land
CPS-SLIC..... Statewide SLIC Cases

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing
UST..... Active UST Facilities
INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

VCP..... Voluntary Cleanup Program Properties
INDIAN VCP..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS..... Considered Brownfields Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT..... Waste Management Unit Database
SWRCY..... Recycler Database
HAULERS..... Registered Waste Tire Haulers Listing
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands
ODI..... Open Dump Inventory
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register
HIST Cal-Sites..... Historical Calsites Database
SCH..... School Property Evaluation Program
CDL..... Clandestine Drug Labs
Toxic Pits..... Toxic Pits Cleanup Act Sites
US CDL..... National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

SWEEPS UST..... SWEEPS UST Listing

EXECUTIVE SUMMARY

CA FID UST..... Facility Inventory Database

Local Land Records

LIENS..... Environmental Liens Listing
LIENS 2..... CERCLA Lien Information
DEED..... Deed Restriction Listing

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System
CHMIRS..... California Hazardous Material Incident Report System
LDS..... Land Disposal Sites Listing
MCS..... Military Cleanup Sites Listing
SPILLS 90..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR..... RCRA - Non Generators / No Longer Regulated
FUDS..... Formerly Used Defense Sites
DOD..... Department of Defense Sites
SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR..... Financial Assurance Information
EPA WATCH LIST..... EPA WATCH LIST
2020 COR ACTION..... 2020 Corrective Action Program List
TSCA..... Toxic Substances Control Act
TRIS..... Toxic Chemical Release Inventory System
SSTS..... Section 7 Tracking Systems
ROD..... Records Of Decision
RMP..... Risk Management Plans
RAATS..... RCRA Administrative Action Tracking System
PRP..... Potentially Responsible Parties
PADS..... PCB Activity Database System
ICIS..... Integrated Compliance Information System
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS..... Material Licensing Tracking System
COAL ASH DOE..... Steam-Electric Plant Operation Data
COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER..... PCB Transformer Registration Database
RADINFO..... Radiation Information Database
HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS..... Incident and Accident Data
CONSENT..... Superfund (CERCLA) Consent Decrees
INDIAN RESERV..... Indian Reservations
FUSRAP..... Formerly Utilized Sites Remedial Action Program
UMTRA..... Uranium Mill Tailings Sites
LEAD SMELTERS..... Lead Smelter Sites
US AIRS..... Aerometric Information Retrieval System Facility Subsystem
US MINES..... Mines Master Index File
ABANDONED MINES..... Abandoned Mines
DOCKET HWC..... Hazardous Waste Compliance Docket Listing
UXO..... Unexploded Ordnance Sites
FUELS PROGRAM..... EPA Fuels Program Registered Listing
CA BOND EXP. PLAN..... Bond Expenditure Plan

EXECUTIVE SUMMARY

Cortese.....	"Cortese" Hazardous Waste & Substances Sites List
DRYCLEANERS.....	Cleaner Facilities
EMI.....	Emissions Inventory Data
ENF.....	Enforcement Action Listing
Financial Assurance.....	Financial Assurance Information Listing
ICE.....	ICE
HIST CORTESE.....	Hazardous Waste & Substance Site List
HWP.....	EnviroStor Permitted Facilities Listing
HWT.....	Registered Hazardous Waste Transporter Database
MINES.....	Mines Site Location Listing
MWMP.....	Medical Waste Management Program Listing
PEST LIC.....	Pesticide Regulation Licenses Listing
PROC.....	Certified Processors Database
Notify 65.....	Proposition 65 Records
UIC.....	UIC Listing
WASTEWATER PITS.....	Oil Wastewater Pits Listing
WIP.....	Well Investigation Program Case List
MILITARY PRIV SITES.....	MILITARY PRIV SITES (GEOTRACKER)
NON-CASE INFO.....	NON-CASE INFO (GEOTRACKER)
PROD WATER PONDS.....	PROD WATER PONDS (GEOTRACKER)
UIC GEO.....	UIC GEO (GEOTRACKER)
SAMPLING POINT.....	SAMPLING POINT (GEOTRACKER)
OTHER OIL GAS.....	OTHER OIL & GAS (GEOTRACKER)
WELL STIM PROJ.....	Well Stimulation Project (GEOTRACKER)
PROJECT.....	PROJECT (GEOTRACKER)
WDR.....	Waste Discharge Requirements Listing

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP.....	EDR Proprietary Manufactured Gas Plants
EDR Hist Auto.....	EDR Exclusive Historical Auto Stations
EDR Hist Cleaner.....	EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF.....	Recovered Government Archive Solid Waste Facilities List
RGA LUST.....	Recovered Government Archive Leaking Underground Storage Tank

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.

EXECUTIVE SUMMARY

STANDARD ENVIRONMENTAL RECORDS

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies 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 07/30/2018 has revealed that there is 1 ENVIROSTOR site within approximately 1 mile of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
DALTON SPRAY SERVICE Facility Id: 44070013 Status: Refer: RWQCB	149 DALTON LANE	E 1/2 - 1 (0.954 mi.)	9	36

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Registered Storage Tanks

HIST UST: Historical UST Registered Database.

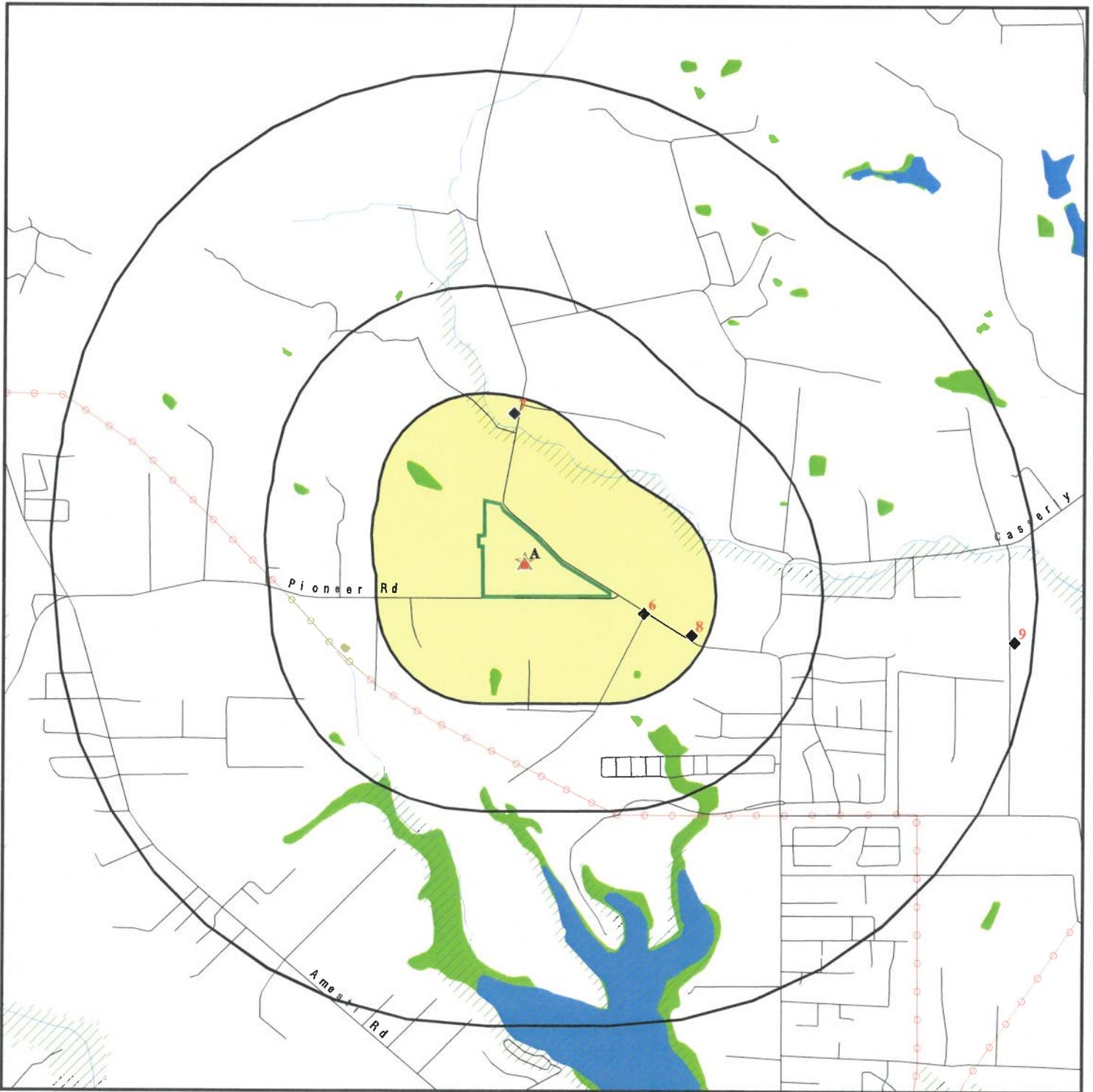
A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 3 HIST UST sites within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
KIM KIEWER TURKEY R Facility Id: 00000028737	959 GREEN VALLEY RD	ESE 0 - 1/8 (0.091 mi.)	6	34
PETER M SALATICH Facility Id: 00000051247	1145 GREEN VALLEY RD	N 1/8 - 1/4 (0.212 mi.)	7	35
MITCHELL LEONARDICH Facility Id: 00000021593	920 GREEN VALLEY ROA	ESE 1/8 - 1/4 (0.213 mi.)	8	35

EXECUTIVE SUMMARY

There were no unmapped sites in this report.

OVERVIEW MAP - 5452887.2S



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

100-year flood zone

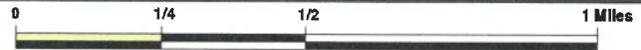
500-year flood zone

National Wetland Inventory

State Wetlands

Upgradient Area

Areas of Concern

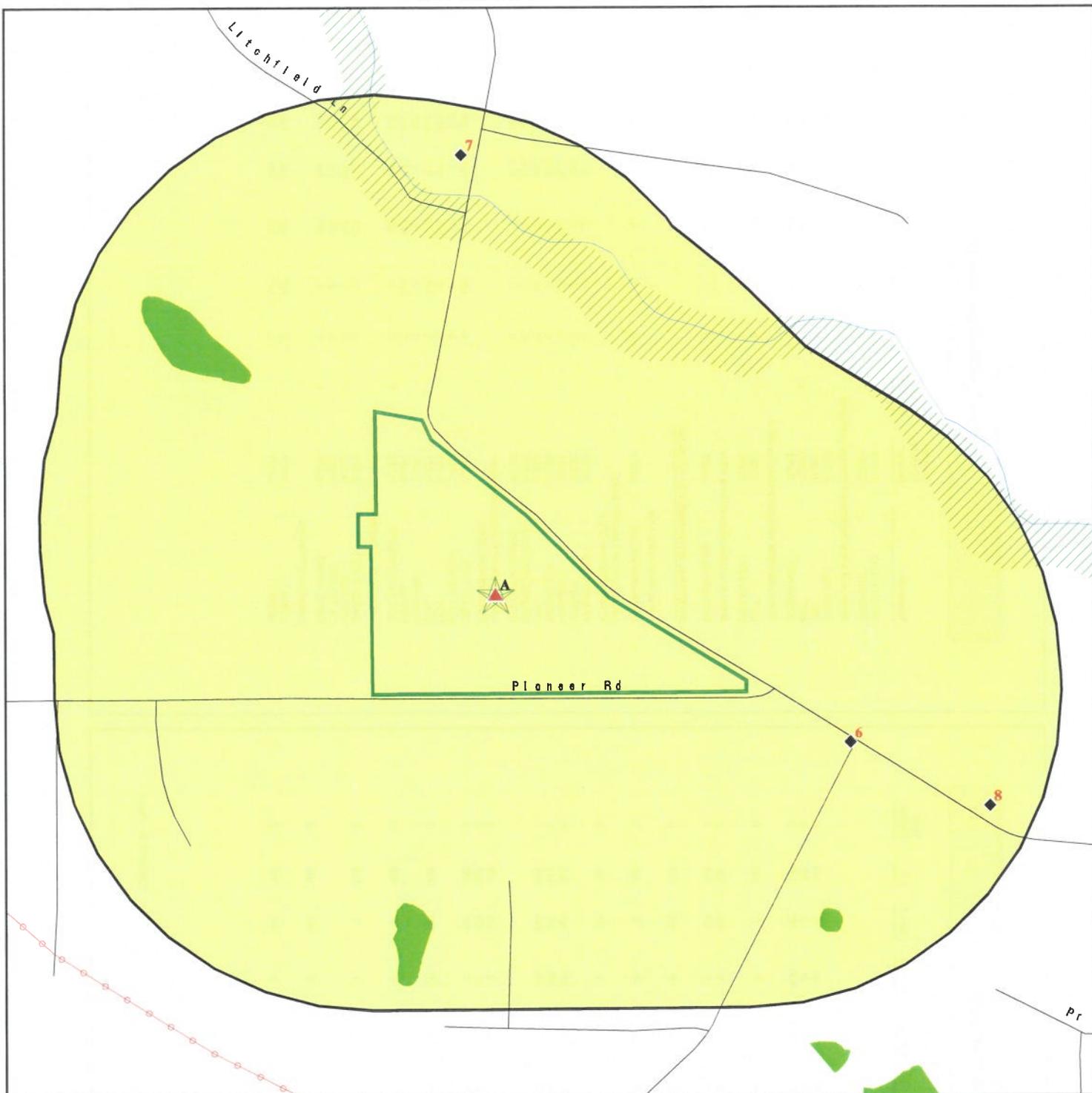


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: 2x848 Sun Land Garden ESA
 ADDRESS: 90 Pioneer Road
 Watsonville CA 95076
 LAT/LONG: 36.972392 / 121.775863

CLIENT: Weber, Hayes, & Associates
 CONTACT: Shaun Ersoy
 INQUIRY #: 5452887.2s
 DATE: October 15, 2018 9:37 am

DETAIL MAP - 5452887.2S



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

Indian Reservations BIA

Power transmission lines

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

Areas of Concern

0 1/16 1/8 1/4 Miles



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: 2x848 Sun Land Garden ESA
 ADDRESS: 90 Pioneer Road
 Watsonville CA 95076
 LAT/LONG: 36.972392 / 121.775863

CLIENT: Weber, Hayes, & Associates
 CONTACT: Shaun Ersoy
 INQUIRY #: 5452887.2s
 DATE: October 15, 2018 9:40 am

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
<i>Federal NPL site list</i>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
<i>Federal Delisted NPL site list</i>								
Delisted NPL	1.000		0	0	0	0	NR	0
<i>Federal CERCLIS list</i>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
<i>Federal CERCLIS NFRAP site list</i>								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
<i>Federal RCRA CORRACTS facilities list</i>								
CORRACTS	1.000		0	0	0	0	NR	0
<i>Federal RCRA non-CORRACTS TSD facilities list</i>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<i>Federal RCRA generators list</i>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
<i>Federal Institutional controls / engineering controls registries</i>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
<i>Federal ERNS list</i>								
ERNS	0.001		0	NR	NR	NR	NR	0
<i>State- and tribal - equivalent NPL</i>								
RESPONSE	1.000		0	0	0	0	NR	0
<i>State- and tribal - equivalent CERCLIS</i>								
ENVIROSTOR	1.000		0	0	0	1	NR	1
<i>State and tribal landfill and/or solid waste disposal site lists</i>								
SWF/LF	0.500		0	0	0	NR	NR	0
<i>State and tribal leaking storage tank lists</i>								
LUST	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
GPS-SLIC	0.500		0	0	0	NR	NR	0
<i>State and tribal registered storage tank lists</i>								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250	2	0	0	NR	NR	NR	2
INDIAN UST	0.250		0	0	NR	NR	NR	0
<i>State and tribal voluntary cleanup sites</i>								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
<i>State and tribal Brownfields sites</i>								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
<i>Local / Brownfield lists</i>								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
<i>Local Lists of Landfill / Solid Waste Disposal Sites</i>								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN CDI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
<i>Local Lists of Hazardous waste / Contaminated Sites</i>								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	0.001	1	0	0	NR	NR	NR	1
CERS HAZ WASTE	0.250		0	0	NR	NR	NR	0
<i>Local Lists of Registered Storage Tanks</i>								
SWEEPS UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250	2	1	2	NR	NR	NR	5
CA FID UST	0.250		0	0	NR	NR	NR	0
CERS TANKS	0.250	1	0	0	NR	NR	NR	1
<i>Local Land Records</i>								
LIENS	0.001		0	NR	NR	NR	NR	0
LIENS 2	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	NR	NR	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	NR	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COALASH DOE	0.001		0	NR	NR	NR	NR	0
COALASH EPA	0.500		0	NR	NR	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	NR	NR	NR	NR	0
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	NR	NR	NR	NR	0
UMTRA	0.500		0	NR	NR	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	NR	NR	NR	NR	0
ABANDONED MINES	0.001		0	NR	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
UYO	1.000		0	NR	NR	NR	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	NR	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	NR	NR	NR	NR	0
Corbase	0.500		0	NR	NR	NR	NR	0
CUPA Listings	0.250		0	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0
ICE	0.001	1	0	NR	NR	NR	NR	1
HIST CORTESE	0.001		0	NR	NR	NR	NR	0
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	0	0	NR	0
MINES	0.001		0	NR	NR	NR	NR	0
MWMP	0.250		0	NR	NR	NR	NR	0
NFDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001	1	0	NR	NR	NR	NR	1
PROC	0.500		0	NR	NR	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITTS	0.500		0	NR	NR	NR	NR	0
WDS	0.001	1	0	NR	NR	NR	NR	1
WIP	0.250		0	NR	NR	NR	NR	0
CERS	0.001	1	0	NR	NR	NR	NR	1
MILITARY PRIV SITES	0.001		0	NR	NR	NR	NR	0
NON-CASE INFO	0.001		0	NR	NR	NR	NR	0
PROD WATER PONDS	0.001		0	NR	NR	NR	NR	0
UIC GEO	0.001		0	NR	NR	NR	NR	0
CWQS	0.001		0	NR	NR	NR	NR	0
SAMPLING POINT	0.001	1	0	NR	NR	NR	NR	1
OTHER OIL GAS	0.001		0	NR	NR	NR	NR	0
WELL STIM PROJ	0.001		0	NR	NR	NR	NR	0
PROJECT	0.001		0	NR	NR	NR	NR	0
WDR	0.001		0	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
FGA LF	0.001		0	NR	NR	NR	NR	0
FGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		14	1	2	0	1	0	18

NOTES:
 TP = Target Property
 NR = Not Requested at this Search Distance
 Sites may be listed in more than one database

Map ID
Direction
Distance
Elevation

Site

MAP FINDINGS

Database(s)

EPR ID Number
EPA ID Number

A1
Target
Property

SUN LAND GARDEN PRODUCTS INC
90 PIONEER RD
WATSONVILLE, CA 95076

U001602380
N/A

Actual
231 ft.

Site 1 of 5 in cluster A

AST
HIST LST
NPDES
WDS
CERS HAZ WASTE
CERS TANKS
CERS
CWQS

AST: Certified Unified Program Agencies:

Owner: Not reported
Total Gallons: MELISSA BERGER
Not reported
CERSID: 10193671
Facility ID: FA0004490
Business Name: SUN LAND GARDEN PRODUCTS
Phone: (831) 724-8500
Fax: (831) 724-8443
Mailing Address: 90 PIONEER RD
Mailing Address City: WATSONVILLE
Mailing Address State: CA
Mailing Address Zip Code: 95076
Operator Name: MARTIN REYES
Operator Phone: (831) 724-8500
Owner Phone: (415) 852-4652
Owner Mail Address: 90 PIONEER RD
Owner State: CA
Owner Zip Code: 95076
Owner Country: United States
Property Owner Name: Not reported
Property Owner Phone: Not reported
Property Owner Mailing Address: Not reported
Property Owner City: Not reported
Property Owner State: Not reported
Property Owner Zip Code: Not reported
Property Owner Country: Not reported
EPAID: CAL000159226

HIST LST:

File Number: Not reported
URL: Not reported
Region: STATE
Facility ID: 0000030609
Facility Type: Other
Other Type: GARDEN PRODUCTS
Contact Name: Not reported
Telephone: 4087246500
Owner Name: SUN-LAND GARDEN PRODUCTS, INC.
Owner Address: 90 PINEER ROAD
Owner City/ST/Zip: WATSONVILLE, CA 95076
Total Tanks: 0001
Tank Num: 001
Container Num: 1
Year Installed: 1983
Tank Capacity: 00001000
Tank Used for: Not reported
Type of Fuel: UNLEADED

Map ID
Direction
Distance
Elevation

Site

MAP FINDINGS

Database(s)

EPR ID Number
EPA ID Number

SUN LAND GARDEN PRODUCTS INC (Continued)
Container Construction Thickness: Not reported
Leak Detection: None

U001602380

CUPA SANTA CRUZ:
Facility ID: FA0004490
Cross Street: GREEN VALLEY ROAD
Description: HAZARDOUS WASTE GENERATOR (HMMP STD FORM)

Facility ID: FA0004490
Cross Street: GREEN VALLEY ROAD
Description: HMMP STANDARD FORM FILING FEE

Facility ID: FA0004490
Cross Street: GREEN VALLEY ROAD
Description: HMMP STANDARD FORM QR 3

Facility ID: FA0004490
Cross Street: GREEN VALLEY ROAD
Description: HMMP STANDARD FORM QR 5

Facility ID: FA0004490
Cross Street: GREEN VALLEY ROAD
Description: ABOVEGROUND PETROLEUM STORAGE-SPCC FACILITY

NPDES:

Facility Status: Active
NPDES Number: CAS0000001
Region: 3
Agency Number: 0
Regulatory Measure ID: 186553
Place ID: 97-03-DWQ
Order Number: 3 441017406
Regulatory Measure Type: Enrollee
Program Type: Industrial
Adoption Date Of Regulatory Measure: Not reported
Effective Date Of Regulatory Measure: 07/31/2002
Termination Date Of Regulatory Measure: Not reported
Expiration Date Of Regulatory Measure: Not reported
Discharge Address: 90 Pioneer Rd
Discharge City: Sunland Garden Product Inc
Discharge State: Watsonville
Discharge Zip: California
Status: 95076
Status Date: Not reported
Operator Name: Not reported
Operator Address: Not reported
Operator City: Not reported
Operator State: Not reported
Operator Zip: Not reported
NPDES as of 03/2016:
NPDES Number: Not reported
Status: Not reported
Agency Number: Not reported
Region: 3

Map ID
Direction
Distance
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number

Database(s)

Site

SUN LAND GARDEN PRODUCTS INC (Continued)

U001602380

Regulatory Measure ID: 198593
Order Number: Not reported
Regulatory Measure Type: Industrial
Place ID: 3 441017406
WDID: Not reported
Program Type: Not reported
Adoption Date Of Regulatory Measure: Not reported
Effective Date Of Regulatory Measure: Not reported
Expiration Date Of Regulatory Measure: Not reported
Termination Date Of Regulatory Measure: Not reported
Discharge Name: Not reported
Discharge Address: Not reported
Discharge City: Not reported
Discharge State: Not reported
Discharge Zip: 05092008
Received Date: 07/31/2002
Processed Date: 07/31/2002
Status: Active
Status Date: 07/31/2002
Place Size: 21.7
Place Size Unit: Acres
Operator Name: Martin Reyes
Operator Title: Operations Manager
Operator Address: 831-724-8500
Operator City: 7132
Operator State: martin@sunlandgarden.com
Operator Zip: Sunland Garden Product Inc
90 Pioneer Rd
Watsonville
California
95076
Operator Contact: Martin Reyes
Operator Contact Title: Operations Manager
Operator Contact Phone: 831-724-8500
Operator Contact Phone Ext: 7132
Operator Contact Email: martin@sunlandgarden.com
Developer: Not reported
Developer Address: Not reported
Developer City: Not reported
Developer State: California
Developer Zip: Not reported
Developer Contact: Not reported
Developer Contact Title: Not reported
Developer Contact Phone: Not reported
Developer Contact Phone Ext: Not reported
Developer Contact Email: Not reported
Emergency Phone: 831-713-8199
Emergency Phone Ext: Not reported
Constyle Above Ground Ind: Not reported
Constyle Below Ground Ind: Not reported
Constyle Cable Line Ind: Not reported
Constyle Comm Line Ind: Not reported
Constyle Commercial Ind: Not reported
Constyle Electrical Line Ind: Not reported
Constyle Gas Line Ind: Not reported
Constyle Industrial Ind: Not reported
Constyle Other Description: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number

Database(s)

Site

SUN LAND GARDEN PRODUCTS INC (Continued)

U001602380

Constyle Recans Ind: Not reported
Constyle Residential Ind: Not reported
Constyle Transport Ind: Not reported
Constyle Utility Description: Not reported
Constyle Utility Ind: Not reported
Constyle Water Sewer Ind: N
Dlr Discharge Uewater Ind: Not reported
Receiving Water Name: Pinto Lake
Certifier: Martin Reyes
Operations Manager
Certification Date: 22-JUN-15
Primary Sic: 2879-Pesticides and Agricultural Chemicals, NEC
Secondary Sic: 2875-Fertilizers, Miding Only
Tertiary Sic: Not reported
NPDES Number: CAS000001
Status: Active
Agency Number: 0
Region: 3
Regulatory Measure ID: 198593
Order Number: 97-05-DWQ
Regulatory Measure Type: Enrollee
Place ID: 3 441017406
WDID: Industrial
Program Type: Not reported
Adoption Date Of Regulatory Measure: Not reported
Effective Date Of Regulatory Measure: 07/31/2002
Expiration Date Of Regulatory Measure: Not reported
Termination Date Of Regulatory Measure: Not reported
Discharge Name: Sunland Garden Product Inc
Discharge Address: 90 Pioneer Rd
Discharge City: Watsonville
Discharge State: California
Discharge Zip: 95076
Received Date: Not reported
Processed Date: Not reported
Status: Not reported
Status Date: Not reported
Place Size: Not reported
Place Size Unit: Not reported
Contact: Not reported
Contact Title: Not reported
Contact Phone: Not reported
Contact Phone Ext: Not reported
Contact Email: Not reported
Operator Name: Not reported
Operator Address: Not reported
Operator City: Not reported
Operator State: Not reported
Operator Zip: Not reported
Operator Contact: Not reported
Operator Contact Title: Not reported
Operator Contact Phone: Not reported
Operator Contact Phone Ext: Not reported
Operator Contact Email: Not reported
Developer: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number

Database(s)

Site

SUN LAND GARDEN PRODUCTS INC (Continued)

U001602390

Developer Address: Not reported
Developer City: Not reported
Developer State: Not reported
Developer Zip: Not reported
Developer Contact: Not reported
Constype Linear Utility Ind: Not reported
Emergency Phone: Not reported
Emergency Phone Ext: Not reported
Constype Above Ground Ind: Not reported
Constype Below Ground Ind: Not reported
Constype Cable Line Ind: Not reported
Constype Comm Line Ind: Not reported
Constype Commercial Ind: Not reported
Constype Electrical Line Ind: Not reported
Constype Gas Line Ind: Not reported
Constype Industrial Ind: Not reported
Constype Other Ind: Not reported
Constype Recons Ind: Not reported
Constype Residential Ind: Not reported
Constype Transport Ind: Not reported
Constype Utility Ind: Not reported
Constype Water Sewer Ind: Not reported
Dir Discharge Uswater Ind: Not reported
Receiving Water Name: Not reported
Confiler: Not reported
Confiler Title: Not reported
Certification Date: Not reported
Primary Sic: Not reported
Secondary Sic: Not reported
Tertiary Sic: Not reported

Facility Status: Not reported
NPDES Number: Not reported
Region: Not reported
Agency Number: Not reported
Regulatory Measure ID: Not reported
Place ID: Not reported
Order Number: 3 44017406
WDID: Industrial
Regulatory Measure Type: Not reported
Program Type: Not reported
Adoption Date Of Regulatory Measure: Not reported
Effective Date Of Regulatory Measure: Not reported
Termination Date Of Regulatory Measure: Not reported
Expiration Date Of Regulatory Measure: Not reported
Discharge Address: Not reported
Discharge Name: Not reported
Discharge City: Not reported
Discharge State: Not reported
Discharge Zip: Not reported
Status: Active
Status Date: 07/31/2002
Operator Name: Sunland Garden Product Inc

Map ID
Direction
Distance
Elevation

MAP FINDINGS

EDR ID Number
EPA ID Number

Database(s)

Site

SUN LAND GARDEN PRODUCTS INC (Continued)

U001602390

Operator Address: 90 Pioneer Rd
Operator City: Watsonville
Operator State: California
Operator Zip: 95076

NPDES as of 03/2018:
NPDES Number: Not reported
Status: Not reported
Agency Number: 3
Region: 186593
Regulatory Measure ID: Not reported
Order Number: Industrial
Regulatory Measure Type: Not reported
Place ID: 3 44017406
WDID: Not reported
Program Type: Not reported
Adoption Date Of Regulatory Measure: Not reported
Effective Date Of Regulatory Measure: Not reported
Expiration Date Of Regulatory Measure: Not reported
Termination Date Of Regulatory Measure: Not reported
Discharge Name: Not reported
Discharge Address: Not reported
Discharge City: Not reported
Discharge State: Not reported
Discharge Zip: Not reported
Received Date: 05/09/2008
Processed Date: 07/31/2002
Status: Active
Status Date: 07/31/2002
Place Size: 21.7
Place Size Unit: Acres
Contact: Martin Reyes
Contact Title: Operations Manager
Contact Phone: 831-724-6500
Contact Phone Ext: 7132
Contact Email: martin@sunlandgarden.com
Operator Name: Sunland Garden Product Inc
Operator Address: 90 Pioneer Rd
Operator City: Watsonville
Operator State: California
Operator Zip: 95076
Operator Contact: Martin Reyes
Operator Contact Title: Operations Manager
Operator Contact Phone: 831-724-6500
Operator Contact Phone Ext: 7132
Operator Contact Email: martin@sunlandgarden.com
Developer: Photo Business
Developer Address: Not reported
Developer City: Not reported
Developer State: California
Developer Zip: Not reported
Developer Contact: Not reported
Developer Contact Title: Not reported
Constype Linear Utility Ind: Not reported
Emergency Phone: 831-713-9199
Emergency Phone Ext: Not reported
Constype Above Ground Ind: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site
Database(s)
EDR ID Number
EPA ID Number

SUN LAND GARDEN PRODUCTS INC (Continued)

U001602380

Constype Below Ground Ind: Not reported
Constype Cable Line Ind: Not reported
Constype Comm Line Ind: Not reported
Constype Commercial Ind: Not reported
Constype Electrical Line Ind: Not reported
Constype Gas Line Ind: Not reported
Constype Industrial Ind: Not reported
Constype Other Description: Not reported
Constype Recons Ind: Not reported
Constype Residential Ind: Not reported
Constype Transport Ind: Not reported
Constype Utility Description: Not reported
Constype Utility Ind: Not reported
Dir Discharge Sewer Ind: Not reported
Dir Discharge Uswater Ind: Not reported
N
Receiving Water Name: Pinto Lake
Certifier: Merrin Reyes
Operations Manager
Certification Date: 22-JUN-15
Primary Sic: 2879-Pesticides and Agricultural Chemicals, NEC
Secondary Sic: 2875-Fertilizers, Mixing Only
Tertiary Sic: Not reported

NPDES Number: CAS000001
Status: Active
Agency Number: 0
Region: 3
Regulatory Measure ID: 186593
Order Number: 97-03-DWQ
Regulatory Measure Type: Enrollee
Place ID: Not reported
WDID: 3-441017406
Program Type: Industrial
Adoption Date Of Regulatory Measure: Not reported
Effective Date Of Regulatory Measure: 07/31/2002
Expiration Date Of Regulatory Measure: Not reported
Termination Date Of Regulatory Measure: Not reported
Discharge Name: Sunland Garden Product, Inc
Discharge Address: 90 Pioneer Rd
Discharge City: Watsonville
Discharge State: California
Discharge Zip: 95076
Received Date: Not reported
Processed Date: Not reported
Status: Not reported
Status Date: Not reported
Place Size: Not reported
Place Size Unit: Not reported
Contact: Not reported
Contact Title: Not reported
Contact Phone: Not reported
Contact Phone Ext: Not reported
Operator Name: Not reported
Operator Address: Not reported
Operator City: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site
Database(s)
EDR ID Number
EPA ID Number

SUN LAND GARDEN PRODUCTS INC (Continued)

U001602380

Operator State: Not reported
Operator Zip: Not reported
Operator Contact: Not reported
Operator Contact Title: Not reported
Operator Contact Phone: Not reported
Operator Contact Phone Ext: Not reported
Operator Contact Email: Not reported
Developer: Not reported
Developer Address: Not reported
Developer City: Not reported
Developer State: Not reported
Developer Zip: Not reported
Developer Contact: Not reported
Developer Contact Title: Not reported
Constype Linear Utility Ind: Not reported
Emergency Phone: Not reported
Emergency Phone Ext: Not reported
Constype Above Ground Ind: Not reported
Constype Below Ground Ind: Not reported
Constype Cable Line Ind: Not reported
Constype Comm Line Ind: Not reported
Constype Commercial Ind: Not reported
Constype Electrical Line Ind: Not reported
Constype Gas Line Ind: Not reported
Constype Industrial Ind: Not reported
Constype Other Description: Not reported
Constype Recons Ind: Not reported
Constype Residential Ind: Not reported
Constype Transport Ind: Not reported
Constype Utility Description: Not reported
Constype Utility Ind: Not reported
Constype Water Sewer Ind: Not reported
Dir Discharge Uswater Ind: Not reported
Receiving Water Name: Not reported
Certifier: Not reported
Certification Date: Not reported
Primary Sic: Not reported
Secondary Sic: Not reported
Tertiary Sic: Not reported

WDS: Central Coastal 441017406
Facility ID: Industrial - Facility that treats and/or disposes of liquid or
Facility Type: semisolid wastes from any servicing, producing, manufacturing or
processing operation of whatever nature, including mining, gravel
washing, geothermal operations, air conditioning, ship building and
repairing, oil production, storage and disposal operations, water
pumping
Facility Status: Active - Any facility with a continuous or seasonal discharge that is
under Waste Discharge Requirements
NPDES Number: CAS000001 The 1st 2 characters designate the state. The remaining 7
are assigned by the Regional Board
Subregion: 3

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site
EDR ID Number
EPA ID Number

Database(s)

SUN LAND GARDEN PRODUCTS INC (Continued)

U001602380

Facility Telephone: 8317249500
Facility Contact: BRIAN MINASIAN
Agency Name: SUNLAND GARDEN PROD INC
Agency Address: 90 Pioneer Rd
Agency City, St, Zip: Watsonville 950760928
Agency Contact: BRIAN MINASIAN
Agency Telephone: 8317249500
Agency Type: Private
SIC Code: 0
SIC Code 2: Not reported
Primary Waste Type: Not reported
Primary Waste: Not reported
Waste Type 2: Not reported
Waste 2: Not reported
Primary Waste Type: Not reported
Secondary Waste: Not reported
Secondary Waste Type: Not reported
Design Flow: 0
Baseline Flow: 0
Reclamation: Not reported
POTW: Not reported
Treat To Water: Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not. All nurds without a TTMQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.
Category C - Facilities having no waste treatment systems, such as cooling water dischargers or those who must comply through best management practices. Facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

CERS HAZ WASTE:

Site ID: 403130
CERS ID: 10183671
CERS Description: Hazardous Waste Generator

Violations:

Site ID: 403130
Site Name: SUNLAND GARDEN PRODUCTS
Violation Date: 02-02-2017
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2
Violation Description: Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.

Violation Notes:

The HMBP has not been electronically certified since 12/8/15.
Violation Division: Santa Cruz County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Site ID:

Site Name: SUNLAND GARDEN PRODUCTS
Violation Date: 07-03-2018
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95,

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site
EDR ID Number
EPA ID Number

Database(s)

SUN LAND GARDEN PRODUCTS INC (Continued)

U001602380

Section(s) 25508.2
Violation Description: Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.
Violation Notes: Returned to compliance on 07/03/2018. The operator has not reviewed and submitted the business information in CERS since March of 2017. Operator reviewed the business information in CERS and submitted the information at time of inspection.
Violation Division: Santa Cruz County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Evaluation:

Eval General Type: Compliance Evaluation Inspection
Eval Date: 03-02-2017
Violations Found: No
Violations: Routine done by local agency
Eval Notes: Not reported
Eval Division: Santa Cruz County Environmental Health
Eval Program: APSA
Eval Source: CERS

Eval General Type:

Eval Date: Compliance Evaluation Inspection
Eval Date: 03-02-2017
Violations Found: No
Violations: Routine done by local agency
Eval Notes: Not reported
Eval Division: Santa Cruz County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type:

Eval Date: Compliance Evaluation Inspection
Eval Date: 03-02-2017
Violations Found: Yes
Violations: Routine done by local agency
Eval Notes: Overall housekeeping is very good. SPCC was reviewed onsite and was complete. Good work.
Eval Division: Santa Cruz County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type:

Eval Date: Compliance Evaluation Inspection
Eval Date: 07-03-2018
Violations Found: No
Violations: Routine done by local agency
Eval Notes: On site today to observe the management of hazardous materials and wastes are stored property with secondary containment. All hazardous waste containers have the proper haz waste labels on them. The diesel generator on the west side of the property does not have the proper size secondary containment for the full capacity of the fuel tank. The operator only fills the tank 1/4 of its capacity however I suggest that you provide a secondary containment that will cover the full capacity of the tank.
Eval Division: Santa Cruz County Environmental Health
Eval Program: HW
Eval Source: CERS

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

EDR ID Number
EPA ID Number
Database(s)

SUN LAND GARDEN PRODUCTS INC (continued) U001602330

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-03-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: This SFCC Plan was reviewed in 2017.
Eval Division: Santa Cruz County Environmental Health
Eval Program: APSA
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-03-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: On site today to observe the management of hazardous materials and wastes, training and record keeping. All hazardous materials and wastes are stored properly with secondary containment. All hazardous waste containers have the proper haz waste labels on them. The diesel generator on the west side of the property does not have the proper size secondary containment for the full capacity of the fuel tank. The operator only fills the tank 1/4 of its capacity however I suggest that you provide a secondary containment that will cover the full capacity of the tank.
Eval Division: Santa Cruz County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-08-2015
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Santa Cruz County Environmental Health
Eval Program: APSA
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-08-2015
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Santa Cruz County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-08-2015
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Santa Cruz County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-08-2015
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Santa Cruz County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-08-2015
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Santa Cruz County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Enforcement Action:
Site ID: 403130
Site Name: SUN LAND GARDEN PRODUCTS
Site Address: 90 PIONEER RD

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

EDR ID Number
EPA ID Number
Database(s)

SUN LAND GARDEN PRODUCTS INC (continued) U001602330

Site City: WATSONVILLE
Site Zip: 95078
Enf Action Date: 03-02-2017
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Santa Cruz County Environmental Health
Enf Action Program: HMRRP
Enf Action Source: CERS

Site ID: 403130
Site Name: SUN LAND GARDEN PRODUCTS
Site Address: 90 PIONEER RD
Site City: WATSONVILLE
Site Zip: 95078
Enf Action Date: 07-03-2018
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Santa Cruz County Environmental Health
Enf Action Program: HMRRP
Enf Action Source: CERS

Coordinates:
Site ID: 403130
Facility Name: SUN LAND GARDEN PRODUCTS
Program ID: APSA
Enf Int Type Code: 10193871
Coord Name: Not reported
Ref Point Type Desc: Unknown
Latitude: 36.872383
Longitude: -121.775884

Affiliation:
Affiliation Type Desc: CUPA District
Entity Name: Santa Cruz County Environmental Health
Entity Title: Not reported
Affiliation Address: 701 Ocean Boulevard, Suite 312
Affiliation City: Santa Cruz
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 95060
Affiliation Phone: (831) 454-2022

Affiliation Type Desc: Document Preparer
Entity Name: MARTIN REYES
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

Affiliation Type Desc: Environmental Contact
Entity Name: MARTIN REYES

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site
Database(s)
EPA ID Number
EDR ID Number

SUN LAND GARDEN PRODUCTS INC (Continued) U001602380

Entity Title:
Affiliation Address:
Affiliation City:
Affiliation State:
Affiliation Country:
Affiliation Zip:
Affiliation Phone:

Entity Name:
Entity Title:
Affiliation Address:
Affiliation City:
Affiliation State:
Affiliation Country:
Affiliation Zip:
Affiliation Phone:

Entity Name:
Entity Title:
Affiliation Address:
Affiliation City:
Affiliation State:
Affiliation Country:
Affiliation Zip:
Affiliation Phone:

Entity Name:
Entity Title:
Affiliation Address:
Affiliation City:
Affiliation State:
Affiliation Country:
Affiliation Zip:
Affiliation Phone:

Entity Name:
Entity Title:
Affiliation Address:
Affiliation City:
Affiliation State:
Affiliation Country:
Affiliation Zip:
Affiliation Phone:

Entity Name:
Entity Title:
Affiliation Address:
Affiliation City:
Affiliation State:
Affiliation Country:
Affiliation Zip:
Affiliation Phone:

Entity Name:
Entity Title:
Affiliation Address:
Affiliation City:
Affiliation State:
Affiliation Country:
Affiliation Zip:
Affiliation Phone:

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site
Database(s)
EPA ID Number
EDR ID Number

SUN LAND GARDEN PRODUCTS INC (Continued) U001602380

Entity Name:
Entity Title:
Affiliation Address:
Affiliation City:
Affiliation State:
Affiliation Country:
Affiliation Zip:
Affiliation Phone:

Entity Name:
Entity Title:
Affiliation Address:
Affiliation City:
Affiliation State:
Affiliation Country:
Affiliation Zip:
Affiliation Phone:

Entity Name:
Entity Title:
Affiliation Address:
Affiliation City:
Affiliation State:
Affiliation Country:
Affiliation Zip:
Affiliation Phone:

Entity Name:
Entity Title:
Affiliation Address:
Affiliation City:
Affiliation State:
Affiliation Country:
Affiliation Zip:
Affiliation Phone:

Entity Name:
Entity Title:
Affiliation Address:
Affiliation City:
Affiliation State:
Affiliation Country:
Affiliation Zip:
Affiliation Phone:

Entity Name:
Entity Title:
Affiliation Address:
Affiliation City:
Affiliation State:
Affiliation Country:
Affiliation Zip:
Affiliation Phone:

Entity Name:
Entity Title:
Affiliation Address:
Affiliation City:
Affiliation State:
Affiliation Country:
Affiliation Zip:
Affiliation Phone:

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site
Database(s)
EPA ID Number
EPA ID Number

SUN LAND GARDEN PRODUCTS INC (Continued) U001602330

Eval Type: Routine done by local agency
Eval Notes: Overall housekeeping is very good. SPCC was reviewed onsite and was complete. Good work.
Eval Division: Santa Cruz County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-03-2018
Violations Found: No
Eval Notes: Routine done by local agency
On site today to observe the management of hazardous materials and waste, training and record keeping. All hazardous materials and wastes are stored properly with secondary containment. All hazardous waste containers have the proper haz waste labels on them. The diesel generator on the west side of the property does not have the proper size secondary containment for the full capacity of the fuel tank. The operator only fills the tank 1/4 of its capacity however I suggest that you provide a secondary containment that will cover the full capacity of the tank.

Eval Division: Santa Cruz County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-03-2018
Violations Found: No
Eval Notes: Routine done by local agency
The SPCC Plan was reviewed in 2017.
Eval Division: Santa Cruz County Environmental Health
Eval Program: APSA
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 07-03-2018
Violations Found: Yes
Eval Notes: Routine done by local agency
On site today to observe the management of hazardous materials and waste, training and record keeping. All hazardous materials and wastes are stored properly with secondary containment. All hazardous waste containers have the proper haz waste labels on them. The diesel generator on the west side of the property does not have the proper size secondary containment for the full capacity of the fuel tank. The operator only fills the tank 1/4 of its capacity however I suggest that you provide a secondary containment that will cover the full capacity of the tank.

Eval Division: Santa Cruz County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-08-2015
Violations Found: No
Eval Notes: Routine done by local agency
Eval Division: Santa Cruz County Environmental Health
Eval Program: APSA

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site
Database(s)
EPA ID Number
EPA ID Number

SUN LAND GARDEN PRODUCTS INC (Continued) U001602330

Eval Source: CERS
Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-08-2015
Violations Found: No
Eval Notes: Routine done by local agency
Santa Cruz County Environmental Health
Eval Program: HW
Eval Source: CERS

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-08-2015
Violations Found: No
Eval Notes: Routine done by local agency
CERS Assistance
Santa Cruz County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Enforcement Action:
Site ID: 403130
Site Name: SUN LAND GARDEN PRODUCTS
Site Address: 90 PIONEER RD
Site City: WATSONVILLE
Site Zip: 95076
Enf Action Date: 03-02-2017
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Santa Cruz County Environmental Health
Enf Action Program: HMRRP
Enf Action Source: CERS

Site ID: 403130
Site Name: SUN LAND GARDEN PRODUCTS
Site Address: 90 PIONEER RD
Site City: WATSONVILLE
Site Zip: 95076
Enf Action Date: 07-03-2018
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Santa Cruz County Environmental Health
Enf Action Program: HMRRP
Enf Action Source: CERS

Coordinates:
Site ID: 403130
Facility Name: SUN LAND GARDEN PRODUCTS
Env Int Type Code: APSA
Program ID: 10183871
Coord Name: Not reported
Ref Point Type Desc: Unknown
Latitude: 36.872383
Longitude: -121.775864

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site
Database(s)
EPA ID Number
EPA ID Number

U001602380
U001602380

SUN LAND GARDEN PRODUCTS INC (Continued)

Affiliation: CUJA District
Affiliation Type Desc: Santa Cruz County Environmental Health
Entity Name: Not reported
Entity Title: 701 Ocean Boulevard, Suite 312
Affiliation Address: Santa Cruz
Affiliation City: CA
Affiliation State: Not reported
Affiliation County: 85060
Affiliation Zip: (851) 454-2022
Affiliation Phone:

Affiliation Type Desc: Document Preparer
Entity Name: MARTIN REYES
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation County: Not reported
Affiliation Zip: Not reported
Affiliation Phone:

Affiliation Type Desc: Environmental Contact
Entity Name: MARTIN REYES
Entity Title: Not reported
Affiliation Address: 90 PIONEER ROAD
Affiliation City: WATSONVILLE
Affiliation State: CA
Affiliation County: Not reported
Affiliation Zip: 95078
Affiliation Phone: (831) 724-6500

Affiliation Type Desc: Facility Mailing Address
Entity Name: Not reported
Entity Title: Mailing Address
Affiliation Address: 90 PIONEER RD
Affiliation City: WATSONVILLE
Affiliation State: CA
Affiliation County: Not reported
Affiliation Zip: 95078
Affiliation Phone: Not reported

Affiliation Type Desc: Identification Signer
Entity Name: MARTIN REYES
Entity Title: OPERATIONS MANAGER
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation County: Not reported
Affiliation Zip: Not reported
Affiliation Phone:

Affiliation Type Desc: Legal Owner
Entity Name: MELISSA BERGER
Entity Title: Not reported
Affiliation Address: 90 PIONEER RD
Affiliation City: WATSONVILLE
Affiliation State: CA

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site
Database(s)
EPA ID Number
EPA ID Number

U001602380
U001602380

SUN LAND GARDEN PRODUCTS INC (Continued)

Affiliation Country: United States
Affiliation Zip: 95078
Affiliation Phone: (419) 962-4462
Affiliation Type Desc: Operator
Entity Name: MARTIN REYES
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation County: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (831) 724-6500

Affiliation Type Desc: Parent Corporation
Entity Name: SUN LAND GARDEN PRODUCTS
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation County: Not reported
Affiliation Zip: Not reported
Affiliation Phone: Not reported

CERS TANKS:
Site ID: 403130
CERS ID: 10183871
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 403130
Site Name: SUN LAND GARDEN PRODUCTS
Violation Date: 03-02-2017
Violation Description: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2
Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.
Violation Notes: The HMBP has not been electronically certified since 12/8/15.
Violation Division: Santa Cruz County Environmental Health
Violation Program: HMRRP
Violation Source: CERS

Site ID: 403130
Site Name: SUN LAND GARDEN PRODUCTS
Violation Date: 07-03-2018
Violation Description: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2
Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.

Violation Notes: Returned to compliance on 07/03/2018. The operator has not reviewed and submitted the business information in CERS since March of 2017. Operator reviewed the business information in CERS and submitted the information at time of inspection.
Violation Division: Santa Cruz County Environmental Health

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site
Database(s)
EPA ID Number
EPA ID Number

MAP FINDINGS

Database(s)
EPA ID Number
EPA ID Number

SUN LAND GARDEN PRODUCTS INC (Continued)

403130

SUN LAND GARDEN PRODUCTS

U001602380

Site Name: SUN LAND GARDEN PRODUCTS
Site Address: 90 PIONEER RD
Site City: WATSONVILLE
Site State: CA
Site Zip: 95076
Site Elevation: 95076
Err Action Date: 07-03-2018
Err Action Type: Notice of Violation (Unified Program)
Err Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Err Action Notes: Not reported
Err Action Division: Santa Cruz County Environmental Health
Err Action Program: HMRRP
Err Action Source: CERS

Coordinates:

Site ID: 403130
Facility Name: SUN LAND GARDEN PRODUCTS
Env Int Type Code: APSA
Program ID: 10193871
Coord Name: Unknown
Ref Point Type Desc: 36.872383
Latitude: -121.775864
Longitude:

Affiliation:

Affiliation Type Desc: QJPA District
Entity Name: Santa Cruz County Environmental Health
Entity Title: Not reported
Address: 701 Ocean Boulevard, Suite 312
City: Santa Cruz
State: CA
Zip: 95060
Phone: (831) 454-2022

Affiliation Type Desc:

Entity Name: Document Preparer
Entity Title: MARTIN REYES
Address: Not reported
City: Not reported
State: Not reported
Country: Not reported
Zip: Not reported
Phone: Not reported

Affiliation Type Desc:

Entity Name: Environmental Contact
Entity Title: MARTIN REYES
Address: Not reported
City: 90 PIONEER ROAD
State: WATSONVILLE
Country: CA
Zip: Not reported
Phone: (831) 724-6500

Affiliation Type Desc:

Entity Name: Facility Mailing Address
Address: Mailing Address

SUN LAND GARDEN PRODUCTS INC (Continued)

Entity Title: Not reported
Address: 90 PIONEER RD
City: WATSONVILLE
State: CA
Country: CA
Zip: Not reported
Phone: 95076
Identification Signer: Not reported
Entity Name: MARTIN REYES
Entity Title: OPERATIONS MANAGER
Address: Not reported
City: Not reported
State: Not reported
Country: Not reported
Zip: Not reported
Phone: Not reported

Affiliation Type Desc:

Entity Name: Legal Owner
Entity Title: MELISSA BERGER
Address: Not reported
City: 90 PIONEER RD
State: WATSONVILLE
Country: CA
Zip: United States
Phone: 85076
Address: (416) 862-4462

Affiliation Type Desc:

Entity Name: Operator
Entity Title: MARTIN REYES
Address: Not reported
City: Not reported
State: Not reported
Country: Not reported
Zip: Not reported
Phone: (831) 724-8500

Affiliation Type Desc:

Entity Name: Parent Corporation
Entity Title: SUN LAND GARDEN PRODUCTS
Address: Not reported
City: Not reported
State: Not reported
Country: Not reported
Zip: Not reported
Phone: Not reported

CIVICS:

Agency: Sunland Garden Product, Inc
Address: 90 Pioneer Rd, Watsonville, CA 95076
Project Type: Industrial - Pesticides and Agricultural Chemicals, NEC
SICNAICS: Multiple
Region: 3
Program: INDSTW
Regulatory Measure Status: Active

Map ID
Direction
Distance
Elevation

Site

MAP FINDINGS

Database(s)

EDR ID Number
EPA ID Number

SUN LAND GARDEN PRODUCTS INC (Continued)

U091602330

Regulatory Measure Type: Storm water Industrial
Order Number: 2014-0057-DWQ
WID: 3-44017406
NPDES Number: CAS000001
Adoption Date: Not reported
Effective Date: 07/31/2002
Termination Date: Not reported
Expiration/Review Date: Not reported
Design Flow: Not reported
Major/Minor: Not reported
Complexity: Not reported
TTWQ: Not reported
Enforcement Actions within 5 years: 5
Violations within 5 years: 1
Latitude: 36.97214
Longitude: -121.77654

A2
Target
Property

SUN-LAND GARDEN PRODUCTS INC
90 PIONEER ROAD
WATSONVILLE, CA 95076

HIST UST \$118415830
N/A

Site 2 of 5 in cluster A

Actual:
231 TL

HIST UST:
File Number: 0002DCED
URL: <http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002DCED.pdf>
Region: Not reported
Facility ID: Not reported
Facility Type: Not reported
Other Type: Not reported
Contact Name: Not reported
Telephone: Not reported
Owner Name: Not reported
Owner Address: Not reported
Owner City,St,Zip: Not reported
Total Tanks: Not reported

Tank Num: Not reported
Container Num: Not reported
Year Installed: Not reported
Tank Capacity: Not reported
Tank Used for: Not reported
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Not reported

Tank Num: Not reported
Container Num: Not reported
Year Installed: Not reported
Tank Capacity: Not reported
Tank Used for: Not reported
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Not reported

Click here for Geo Tracker PDF:

Map ID
Direction
Distance
Elevation

Site

MAP FINDINGS

Database(s)

EDR ID Number
EPA ID Number

A3
Target
Property

SUN-LAND GARDEN PRODUCTS INC
90 PIONEER RD.
WATSONVILLE, CA 95076

HAZNET \$113084623
N/A

Site 3 of 5 in cluster A

Actual:
231 TL

HAZNET:
envid: S113084623
Year: 2012
GEPAID: CAL000158326
Contact: MARTIN REYES/OPTNS MANAGER
Telephone: 8317246500
Mailing Name: Not reported
Mailing Address: 90 PIONEER RD
Mailing City,St,Zip: WATSONVILLE, CA 950760888
Gen County: Santa Cruz
TSD EPA ID: CAD980887418
TSD County: Alameda
Waste Category: Not reported
Disposal Method: Storage, Bulking, And/OR Transfer Off Site--No Treatment/Recovery (H010-H129) Or: (H131-H135)
Tons: 0.15
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Santa Cruz

envid: S113084623
Year: 2012
GEPAID: CAL000158326
Contact: MARTIN REYES/OPTNS MANAGER
Telephone: 8317246500
Mailing Name: Not reported
Mailing Address: 90 PIONEER RD
Mailing City, St,Zip: WATSONVILLE, CA 950760888
Gen County: Santa Cruz
TSD EPA ID: CAD980887418
TSD County: Alameda
Waste Category: Not reported
Disposal Method: Storage, Bulking, And/OR Transfer Off Site--No Treatment/Recovery (H010-H129) Or: (H131-H135)

Tons: Not reported
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Santa Cruz

envid: S113084623
Year: 2011
GEPAID: CAL000158326
Contact: MARTIN REYES/OPTNS MANAGER
Telephone: 8317246500
Mailing Name: Not reported
Mailing Address: 90 PIONEER RD
Mailing City,St,Zip: WATSONVILLE, CA 950760888
Gen County: Not reported
TSD EPA ID: CAD980887418
TSD County: Not reported
Waste Category: Unspecified oil-containing waste
Disposal Method: Storage, Bulking, And/OR Transfer Off Site--No Treatment/Recovery (H010-H129) Or: (H131-H135)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Database(s)
EPA ID Number

102330477

SUN-LAND GARDEN PRODUCTS INC (Continued)

Tons: 0.075
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Santa Cruz
envid: S113084823
Year: 2011
GEPaid: CAL000159326
Contact: MARTIN REYES/OPTNS MANAGER
Telephone: 8317246500
Mailing Name: Not reported
Mailing Address: 90 PIONEER RD
Mailing City, St, Zip: WATSONVILLE, CA 950760898
Gen County: Not reported
TSD EPA ID: CAD808857418
TSD County: Not reported
Waste Category: Unspecified oil-containing waste
Waste Category: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Recovery
Disposal Method: (H010-H126) Or (H131-H135)
Tons: 0.075
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Santa Cruz
envid: S113084823
Year: 2005
GEPaid: CAL000159326
Contact: DAVID VAN WINGERDEN/PROD MGR
Telephone: 8317246500
Mailing Name: Not reported
Mailing Address: 90 PIONEER RD
Mailing City, St, Zip: WATSONVILLE, CA 950760898
Gen County: Not reported
TSD EPA ID: CAT09033981
TSD County: Not reported
Waste Category: Other organic solids
Disposal Method: Not reported
Tons: 0.1
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Santa Cruz

Click this hyperlink while viewing on your computer to access 7 additional CA_HAZNET record(s) in the EDR Site Report.

A4
Target
Property
SUN LAND GARDEN PRODUCTS INC
90 PIONEER RD
WATSONVILLE, CA 95076

Site 4 of 5 in cluster A

Actual:
231 TL

FINDS
ECHO

102330477
N/A

Registry ID: 110065175580

Environmental Interest/Information System
US National Pollutant Discharge Elimination System (NPDES) module of
the Compliance Information System (CIS) tracks surface water permits

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Database(s)
EPA ID Number

102330477

SUN LAND GARDEN PRODUCTS INC (Continued)

issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO: 102330477
Registry ID: 110065175580
DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110065175580>

A5
Target
Property
SUNLAND GARDEN PRODUCTS INC
90 PIONEER
WATSONVILLE, CA

Site 5 of 5 in cluster A

Actual:
231 TL

AST
AST
A100337283
N/A

Owner: Certified Unified Program Agencies: Santa Cruz
BRIAN MINASIAN
Total Gallons: 5,010
CERSID: Not reported
Facility ID: Not reported
Business Name: Not reported
Phone: Not reported
Fax: Not reported
Mailing Address: Not reported
Mailing Address City: Not reported
Mailing Address State: Not reported
Mailing Address Zip Code: Not reported
Operator Name: Not reported
Operator Phone: Not reported
Owner Mail Address: Not reported
Owner State: Not reported
Owner Zip Code: Not reported
Owner Country: Not reported
Property Owner Name: Not reported
Property Owner Phone: Not reported
Property Owner Mailing Address: Not reported
Property Owner City: Not reported
Property Owner State: Not reported
Property Owner Zip Code: Not reported
Property Owner Country: Not reported
EPAID: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site EDR ID Number
Database(s) EPA ID Number

6
ESE
< 1/8
0.091 mi.
442 ft.

KIM KLEWER TURKEY RANCH
959 GREEN VALLEY RD
WATSONVILLE, CA 95076

HIST LIST
U001602268
N/A

HIST UST:
File Number: 00020BF8
URL: <http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00020BF8.pdf>
Region: STATE
Facility ID: 00000028737
Other: Other
Facility Type: FARM
Other Type: KIM KLEWER
Contact Name: KIM KLEWER
Telephone: 4087222886
Owner Name: KIM KLEWER
Owner Address: 959 GREEN VALLEY RD,
WATSONVILLE, CA 95076
Owner City, St, Zip: WATSONVILLE, CA 95076
Total Tanks: 0002

Tank Num: 001
Container Num: 1
Year Installed: 1980
Tank Capacity: 00000500
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: Not reported
Leak Detection: Visual

Tank Num: 002
Container Num: 2
Year Installed: Not reported
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Container Construction Thickness: Not reported
Leak Detection: Visual

Tank Num: 002
Container Num: 2
Year Installed: Not reported
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Container Construction Thickness: Not reported
Leak Detection: Visual

Click here for Geo Tracker PDF:

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site EDR ID Number
Database(s) EPA ID Number

7
North
1/8-1/4
0.212 mi.
1116 ft.

PETER M SALATICH
1145 GREEN VALLEY RD
WATSONVILLE, CA 95076

HIST LIST
U001602336
N/A

HIST UST:
File Number: 00020C65
URL: <http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00020C65.pdf>
Region: STATE
Facility ID: 00000051247
Other: Other
Facility Type: FARMING
Other Type: PETER M. SALATICH
Contact Name: PETER M. SALATICH
Telephone: 4087243018
Owner Name: PETER M. SALATICH
Owner Address: 1145 GREEN VALLEY RD,
WATSONVILLE, CA 95076
Owner City, St, Zip: WATSONVILLE, CA 95076
Total Tanks: 0001

Tank Num: 001
Container Num: 1
Year Installed: 1974
Tank Capacity: 00000200
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 001
Container Num: 1
Year Installed: 1974
Tank Capacity: 00000200
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Click here for Geo Tracker PDF:

8
ESE
1/8-1/4
0.213 mi.
1126 ft.

MITCHELL LEONARDICH RANCH
920 GREEN VALLEY ROAD
WATSONVILLE, CA 95076

HIST LIST
U001602204
N/A

HIST UST:
File Number: 00020C27
URL: <http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00020C27.pdf>
Region: STATE
Facility ID: 00000021593
Other: Other
Facility Type: FARM
Other Type: MITCHELL LEONARDICH
Contact Name: MITCHELL LEONARDICH
Telephone: 4087247514
Owner Name: MITCHELL LEONARDICH
Owner Address: 920 GREEN VALLEY ROAD
WATSONVILLE, CA 95076
Owner City, St, Zip: WATSONVILLE, CA 95076
Total Tanks: 0001

Click here for Geo Tracker PDF:

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site Database(e) EDR ID Number EPA ID Number

MITCHELL LEONARDICH RANCH (Continued) U001602294

Tank Num: 001
Container Num: 1
Year Installed: 1970
Tank Capacity: 00000329
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Container Construction Thickness: Not reported
Leak Detection: None
Tank Num: 001
Container Num: 1
Year Installed: 1970
Tank Capacity: 00000329
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Container Construction Thickness: Not reported
Leak Detection: None

Click here for Geo Tracker PDF:

DALTON SPRAY SERVICE
148 DALTON LANE
WATSONVILLE, CA 95076

ENVIROSTOR S102860960
N/A

9
East
1/2-1
0.954 mi.
5035 ft.
Relative:
Lower
Actual:
144 ft.

ENVIROSTOR:
Facility ID: 44070013
Status: Refer: RWQCB
Site Code: 08/18/1989
Site Type: Not reported
Site Type Detailed: Historical
Acres: * Historical
NPL: Not reported
Regulatory Agencies: NO
Lead Agency: NONE SPECIFIED
Program Manager: NONE SPECIFIED
Supervisor: Referred - Not Assigned
Division Branch: Cleanup Berkeley
Assembly: 30
Senate: 17
Special Program: * Rural County Survey Program
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 36.56889
Longitude: -121.7531
APN: 051-012-17
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: 051-012-17
Alias Type: APN
Alias Name: 44070013
Alias Type: Envirostor ID Number

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site Database(e) EDR ID Number EPA ID Number

DALTON SPRAY SERVICE (Continued) S102860960

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Cleanup
Completed Date: 08/18/1989
Comments: FACILITY IDENTIFIED SANTA CRUZ COUNTY AGRICULTURAL COMMISSION STRUCTURAL PCO. INSPECTION REPORT DATED 4/22/82 REFERENCED TANK LEAKS. SITE SCREENING DONE RWQCB LEAD SITE
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 08/18/1989
Comments: Not reported
Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

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: Provide 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.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

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: 07/17/2018
 Date Data Arrived at EDR: 08/09/2018
 Date Made Active in Reports: 09/07/2018
 Number of Days to Update: 28
 Source: EPA
 Telephone: N/A
 Last EDR Contact: 10/04/2018
 Next Scheduled EDR Contact: 01/14/2019
 Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:
 EPA's Environmental Photographic Interpretation Center (EPIC)
 Telephone: 202-564-7333
 EPA Region 1
 Telephone: 617-818-1143
 EPA Region 3
 Telephone: 215-814-5418
 EPA Region 4
 Telephone: 404-562-8033
 EPA Region 5
 Telephone: 312-886-6886
 EPA Region 10
 Telephone: 208-555-8665
 EPA Region 6
 Telephone: 214-655-6659
 EPA Region 7
 Telephone: 813-551-7247
 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: 07/17/2018
 Date Data Arrived at EDR: 08/09/2018
 Date Made Active in Reports: 09/07/2018
 Number of Days to Update: 29
 Source: EPA
 Telephone: N/A
 Last EDR Contact: 10/04/2018
 Next Scheduled EDR Contact: 01/14/2019
 Data Release Frequency: Quarterly

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.

Count: 0 records
 City _____ Site Name _____ Site Address _____ Zip _____ Database(s) _____

NO SITES FOUND

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 202-364-4287
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

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: 07/17/2018
Date Data Arrived at EDR: 06/09/2018
Date Made Active in Reports: 09/07/2018
Number of Days to Update: 29

Source: EPA
Telephone: N/A
Last EDR Contact: 10/04/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information Listing
A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 92

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 07/06/2018
Next Scheduled EDR Contact: 10/15/2018
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. This list 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). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 07/17/2018
Date Data Arrived at EDR: 08/09/2018
Date Made Active in Reports: 09/07/2018
Number of Days to Update: 29

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 10/04/2018
Next Scheduled EDR Contact: 10/29/2018
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS-ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived. If site conditions change and/or new information becomes available, Archived sites have been removed and archived from the inventory of SEMS 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 the 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. The 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 potential NPL site.

Date of Government Version: 07/17/2018
Date Data Arrived at EDR: 06/09/2018
Date Made Active in Reports: 09/07/2018
Number of Days to Update: 29
Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 10/04/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report
CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.
Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 66
Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 09/19/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, 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: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 66
Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/19/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LOG: 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: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 66
Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/19/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 86
Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/19/2018
Next Scheduled EDR Contact: 01/07/2019
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: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 86
Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/19/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

Federal Institutional controls / engineering controls registries

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: 05/14/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: Department of the Navy
Telephone: 843-820-7328
Last EDR Contact: 07/16/2018
Next Scheduled EDR Contact: 11/26/2018
Data Release Frequency: Varies

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 affect human health.

Date of Government Version: 07/31/2018
Date Data Arrived at EDR: 06/28/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 17
Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 06/28/2018
Next Scheduled EDR Contact: 12/10/2018
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: 07/31/2018
Date Data Arrived at EDR: 06/28/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 17
Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 06/28/2018
Next Scheduled EDR Contact: 12/10/2018
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal ERNS list

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: 06/18/2018
Date Data Arrived at EDR: 06/27/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 79
Source: National Response Center, United States Coast Guard
Telephone: 202-287-2180
Last EDR Contact: 09/25/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

State- and tribal- equivalent NPL

RESPONSE: State Response Sites

These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 07/30/2018
Date Data Arrived at EDR: 07/31/2018
Date Made Active in Reports: 09/07/2018
Number of Days to Update: 38
Source: Department of Toxic Substances Control
Telephone: 916-322-3400
Last EDR Contact: 07/31/2018
Next Scheduled EDR Contact: 11/12/2018
Data Release Frequency: Quarterly

State- and tribal- equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies 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 CALSWIS, 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: 07/30/2018
Date Data Arrived at EDR: 07/31/2018
Date Made Active in Reports: 09/07/2018
Number of Days to Update: 38
Source: Department of Toxic Substances Control
Telephone: 916-322-3400
Last EDR Contact: 07/31/2018
Next Scheduled EDR Contact: 11/12/2018
Data Release Frequency: Quarterly

Date of Government Version: 07/30/2018
Date Data Arrived at EDR: 07/31/2018
Date Made Active in Reports: 09/07/2018
Number of Days to Update: 38
Source: Department of Toxic Substances Control
Telephone: 916-322-3400
Last EDR Contact: 07/31/2018
Next Scheduled EDR Contact: 11/12/2018
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 08/09/2018
Date Data Arrived at EDR: 09/10/2018
Date Made Active in Reports: 09/24/2018
Number of Days to Update: 14
Source: Department of Resources Recycling and Recovery
Telephone: 916-341-5320
Last EDR Contact: 08/10/2018
Next Scheduled EDR Contact: 11/26/2018
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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 Data Arrived at EDR: 02/01/2001
Date Made Active in Reports: 03/28/2001
Number of Days to Update: 28

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations: Imperial, Riverside, San Diego, Santa Barbara counties.
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 02/26/2004
Number of Days to Update: 27

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)
Leaking Underground Storage Tank (LUST) Sites included in GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.
Date of Government Version: 09/10/2018
Date Data Arrived at EDR: 09/12/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 26

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

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: 06/28/2005
Number of Days to Update: 22

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

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations: Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calaveras, 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, Yuba counties.
Date of Government Version: 04/10/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 07/31/2008
Number of Days to Update: 9

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: 08/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

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

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

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: 03/29/2005
Number of Days to Update: 41

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.
Date of Government Version: 04/12/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Arizona, California, New Mexico and Nevada
Date of Government Version: 04/10/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4795
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-5710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

Source: 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.
Telephone: 909-762-4498
Last EDR Contact: 09/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Varies

Source: EPA Region 10
Telephone: 209-555-2857
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

Source: Environmental Protection Agency
Telephone: 415-872-3372
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R6: 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: 04/25/2018
Date Data Arrived at EDR: 05/19/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 8
Telephone: 303-312-9271
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
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: 04/24/2018
Date Data Arrived at EDR: 05/19/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/01/2018
Date Data Arrived at EDR: 05/19/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 8
Telephone: 214-666-6597
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 05/09/2018
Date Data Arrived at EDR: 05/19/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 4
Telephone: 404-562-8877
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

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: 04/13/2018
Date Data Arrived at EDR: 05/19/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/12/2018
Date Data Arrived at EDR: 05/19/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER) Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/10/2018
Date Data Arrived at EDR: 09/12/2018
Date Made Active in Reports: 10/09/2018
Number of Days to Update: 27
Source: State Water Resources Control Board
Telephone: 866-486-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 12/24/2018
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
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: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
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: 05/19/2006
Date Data Arrived at EDR: 05/19/2006
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: 805-546-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
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: 213-576-8600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
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: 09/12/2011
Next Scheduled EDR Contact: 12/29/2011
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, Victrolville Branch
Telephone: 619-241-6593
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/29/2011
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
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: 11/28/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
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: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
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 (8)
Telephone: 858-467-2680
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017
Date Data Arrived at EDR: 05/20/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 138

Source: FEMA
Telephone: 202-646-5787
Last EDR Contact: 10/10/2018
Next Scheduled EDR Contact: 01/21/2019
Data Release Frequency: Varies

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 09/10/2018
Date Data Arrived at EDR: 09/12/2018
Date Made Active in Reports: 10/03/2018
Number of Days to Update: 21

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 09/12/2018
Next Scheduled EDR Contact: 12/24/2018
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases

UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Details and Approved Orders.

Date of Government Version: 09/10/2018
Date Data Arrived at EDR: 09/12/2018
Date Made Active in Reports: 10/03/2018
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 09/12/2018
Next Scheduled EDR Contact: 12/24/2018
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)

Military ust sites

Date of Government Version: 09/10/2018
Date Data Arrived at EDR: 09/12/2018
Date Made Active in Reports: 10/09/2018
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 868-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 12/24/2018
Data Release Frequency: Varies

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2018
Date Data Arrived at EDR: 07/12/2018
Date Made Active in Reports: 09/19/2018
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 09/17/2018
Next Scheduled EDR Contact: 12/31/2018
Data Release Frequency: Quarterly

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/13/2016
Date Data Arrived at EDR: 05/19/2016
Date Made Active in Reports: 07/20/2016
Number of Days to Update: 63

Source: EPA, Region 1
Telephone: 617-816-1313
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/10/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 9
Telephone: 415-872-3368
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, Missouri, North Carolina, South Carolina, Tennessee and Tribal Nations).

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 05/08/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 4
Telephone: 404-652-9424
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/12/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/24/2018
Date Data Arrived at EDR: 05/19/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/12/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 5
Telephone: 312-886-5138
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Colorado, Montana, North Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/25/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 6
Telephone: 303-312-5437
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 85 Tribes).

Date of Government Version: 04/01/2018
Date Data Arrived at EDR: 05/19/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 8
Telephone: 214-665-7591
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2018
Number of Days to Update: 142

Source: EPA Region 1
Telephone: 617-916-1102
Last EDR Contact: 09/24/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat, low priority properties with either confirmed or unconfirmed releases and the project proponents have requested that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 07/30/2018
Date Data Arrived at EDR: 07/31/2018
Date Made Active in Reports: 09/07/2018
Number of Days to Update: 38

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 07/31/2018
Next Scheduled EDR Contact: 11/12/2018
Data Release Frequency: Quarterly

INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfields Sites Listing

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 06/25/2016
Date Data Arrived at EDR: 06/27/2016
Date Made Active in Reports: 09/06/2016
Number of Days to Update: 40

Source: State Water Resources Control Board
Telephone: 916-333-7905
Last EDR Contact: 09/25/2016
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvigorating these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfields sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/16/2018
Date Data Arrived at EDR: 06/20/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 96

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/18/2018
Next Scheduled EDR Contact: 12/31/2018
Data Release Frequency: Semi-Annually

Local Lists of Landfills / Solid Waste Disposal Sites

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

WMUDS/SWAT: Waste Management Unit Databases
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 Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interrelated 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

SWRCY: Recycler Databases

A listing of recycling facilities in California.

Date of Government Version: 08/11/2018
Date Data Arrived at EDR: 06/13/2018
Date Made Active in Reports: 08/06/2018
Number of Days to Update: 54

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 05/28/2018
Date Data Arrived at EDR: 05/30/2018
Date Made Active in Reports: 07/17/2018
Number of Days to Update: 48

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: 01/26/2008
Number of Days to Update: 52

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: 01/12/2009
Date Data Arrived at EDR: 05/07/2008
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

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: 09/30/1995
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

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 06/09/2014
Date Made Active in Reports: 01/28/2015
Next Scheduled EDR Contact: 11/12/2018
Data Release Frequency: Varies

Source: Department of Health & Human Services, Indian Health Services

Telephone: 301-443-1452
Last EDR Contact: 06/03/2018
Next Scheduled EDR Contact: 11/12/2018
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST ODL: National Clendestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clendestine Laboratory Register.

Date of Government Version: 05/18/2018
Date Data Arrived at EDR: 06/20/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 86

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/28/2018
Next Scheduled EDR Contact: 12/10/2018
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1998, 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: 06/09/2005
Date Data Arrived at EDR: 06/03/2006
Date Made Active in Reports: 06/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
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: 07/30/2018
Date Data Arrived at EDR: 07/31/2018
Date Made Active in Reports: 09/07/2018
Number of Days to Update: 38

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 07/31/2018
Next Scheduled EDR Contact: 11/12/2018
Data Release Frequency: Quarterly

CDL: Clendestine 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: 12/31/2017
Date Data Arrived at EDR: 06/12/2018
Date Made Active in Reports: 08/06/2018
Number of Days to Update: 55

Source: Department of Toxic Substances Control
Telephone: 916-255-8504
Last EDR Contact: 10/05/2018
Next Scheduled EDR Contact: 01/21/2019
Data Release Frequency: Varies

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: 07/07/1995
Date Data Arrived at EDR: 06/30/1995
Date Made Active in Reports: 08/28/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

US 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: 05/16/2018
Date Data Arrived at EDR: 06/20/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 86
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/28/2018
Next Scheduled EDR Contact: 12/10/2018
Data Release Frequency: Quarterly

GERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 07/23/2018
Date Data Arrived at EDR: 07/25/2018
Date Made Active in Reports: 09/05/2018
Number of Days to Update: 42
Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 07/25/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

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: 09/11/2005
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

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 03/28/2018
Date Data Arrived at EDR: 05/25/2018
Date Made Active in Reports: 07/10/2018
Number of Days to Update: 46
Source: Department of Public Health
Telephone: 707-465-4468
Last EDR Contact: 10/09/2018
Next Scheduled EDR Contact: 12/10/2018
Data Release Frequency: Annually

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

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/11/2018
Date Data Arrived at EDR: 09/12/2018
Date Made Active in Reports: 10/11/2018
Number of Days to Update: 29
Source: San Francisco County Department of Public Health
Telephone: 415-253-3886
Last EDR Contact: 08/01/2018
Next Scheduled EDR Contact: 11/19/2018
Data Release Frequency: Varies

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: 08/05/1995
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: 12/28/1888
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 07/23/2018
Date Data Arrived at EDR: 07/25/2018
Date Made Active in Reports: 09/05/2018
Number of Days to Update: 42
Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 07/25/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Quarterly

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 08/29/2018
Date Data Arrived at EDR: 09/30/2018
Date Made Active in Reports: 10/01/2018
Number of Days to Update: 32
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/29/2018
Next Scheduled EDR Contact: 12/17/2018
Data Release Frequency: Varies

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: 07/17/2018
Date Data Arrived at EDR: 08/09/2018
Date Made Active in Reports: 10/09/2018
Number of Days to Update: 57
Source: Environmental Protection Agency
Telephone: 202-864-6023
Last EDR Contact: 10/04/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Site Mitigation and Brownfields Reuse Program Facility Sites with Dead Restrictions & Hazardous Waste Management Program Facility Sites with Dead / 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 dead restrictions that are active. Some sites have multiple dead restrictions. The DTSC Hazardous Waste Management Program (HWMMP) 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 HWMMP 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 dead notice, dead restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 09/04/2018
Date Data Arrived at EDR: 09/05/2018
Date Made Active in Reports: 10/02/2018
Number of Days to Update: 27
Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 09/05/2018
Next Scheduled EDR Contact: 12/17/2018
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Incident Reporting System
HMIRS contains information on reported hazardous material spill incidents reported to DOT.
California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).
Date of Government Version: 03/26/2018
Date Data Arrived at EDR: 03/27/2018
Date Made Active in Reports: 06/08/2018
Number of Days to Update: 73
Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 06/25/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 04/06/2018
Date Data Arrived at EDR: 04/24/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 51
Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)
Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/10/2018
Date Data Arrived at EDR: 09/12/2018
Date Made Active in Reports: 10/09/2018
Number of Days to Update: 26
Source: State Water Quality Control Board
Telephone: 868-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 12/24/2018
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)
Military sites (consisting of Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/10/2018
Date Data Arrived at EDR: 09/12/2018
Date Made Active in Reports: 10/09/2018
Number of Days to Update: 27
Source: State Water Resources Control Board
Telephone: 868-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 12/24/2018
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SPILLS 90: SPILLS90 data from FirstSearch
Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50
Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated
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: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 86
Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 09/19/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites
The listing includes locations of Formerly Used Defense Sites properties where the U.S. Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015
Date Data Arrived at EDR: 07/09/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97
Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 09/24/2018
Next Scheduled EDR Contact: 12/03/2018
Data Release Frequency: Varies

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: 11/10/2008
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62
Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 10/12/2018
Next Scheduled EDR Contact: 01/21/2019
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administered lands of the United States. Lands included are administered by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2008
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339
Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 10/12/2018
Next Scheduled EDR Contact: 01/21/2019
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1988, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

US FINASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/27/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 100

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 09/25/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 09/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 09/03/2018
Next Scheduled EDR Contact: 11/19/2018
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/09/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-306-4044
Last EDR Contact: 09/10/2018
Next Scheduled EDR Contact: 11/19/2018
Data Release Frequency: Varies

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: 12/31/2016
Date Data Arrived at EDR: 06/21/2017
Date Made Active in Reports: 07/05/2018
Number of Days to Update: 199

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/21/2018
Next Scheduled EDR Contact: 12/31/2018
Data Release Frequency: Every 4 Years

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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 01/10/2018
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 2

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 08/24/2018
Next Scheduled EDR Contact: 12/03/2018
Data Release Frequency: Annually

SETTS: 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: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Annually

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: 07/17/2018
Date Data Arrived at EDR: 08/09/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 57

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 10/04/2018
Next Scheduled EDR Contact: 12/17/2018
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(i) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 06/01/2018
Date Data Arrived at EDR: 06/22/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 07/20/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administrative 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 administrative 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: 06/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3

Source: EPA

Telephone: 202-564-6023
Last EDR Contact: 10/04/2018
Next Scheduled EDR Contact: 11/19/2018
Data Release Frequency: Quarterly

PADES: PCB Activity Database System

PCB Activity Database: PADES identifies generators, transporters, commercial stores and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 05/01/2017

Date Data Arrived at EDR: 06/09/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 126

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 10/11/2018
Next Scheduled EDR Contact: 01/21/2019
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: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 76

Source: Environmental Protection Agency
Telephone: 202-564-3501
Last EDR Contact: 10/09/2018
Next Scheduled EDR Contact: 01/21/2019
Data Release Frequency: Quarterly

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: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
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: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

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: 08/20/2016
Date Data Arrived at EDR: 08/09/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 43

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 09/28/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 09/07/2018
Next Scheduled EDR Contact: 12/17/2018
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 09/04/2018
Next Scheduled EDR Contact: 12/17/2018
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 05/24/2017
Date Data Arrived at EDR: 11/03/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 07/27/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

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: 07/02/2018
Date Data Arrived at EDR: 07/05/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-543-9775
Last EDR Contact: 10/03/2018
Next Scheduled EDR Contact: 01/14/2019
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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety: Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 08/19/2012
Number of Days to Update: 42

Source: Department of Transportation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 08/09/2018
Next Scheduled EDR Contact: 11/12/2018
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: 06/30/2018
Date Data Arrived at EDR: 07/17/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 80

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 10/01/2018
Next Scheduled EDR Contact: 12/31/2018
Data Release Frequency: Varies

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: 12/31/2015
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-6346
Last EDR Contact: 08/24/2018
Next Scheduled EDR Contact: 12/03/2018
Data Release Frequency: Biennially

INDIAN RESERVE: 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: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 10/09/2018
Next Scheduled EDR Contact: 01/21/2019
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017
Date Data Arrived at EDR: 08/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 09/11/2018
Next Scheduled EDR Contact: 11/19/2018
Data Release Frequency: Varies

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.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/23/2017
Date Data Arrived at EDR: 10/11/2017
Date Made Active in Reports: 11/09/2017
Number of Days to Update: 23

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 08/20/2018
Next Scheduled EDR Contact: 12/03/2018
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 07/17/2018
Date Data Arrived at EDR: 08/09/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 10/04/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1831 and 1864. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2008
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2498
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2486
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US 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: 08/01/2018
Date Data Arrived at EDR: 08/29/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 37

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 08/29/2018
Next Scheduled EDR Contact: 12/10/2018
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or manganese) and nonferrous (nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/05/2005
 Date Data Arrived at EDR: 02/29/2008
 Date Made Active in Reports: 04/18/2008
 Number of Days to Update: 49

Source: USGS
 Telephone: 703-648-7709
 Last EDR Contact: 08/31/2018
 Next Scheduled EDR Contact: 12/10/2018
 Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
 Date Data Arrived at EDR: 06/08/2011
 Date Made Active in Reports: 09/13/2011
 Number of Days to Update: 97

Source: USGS
 Telephone: 703-648-7709
 Last EDR Contact: 06/31/2018
 Next Scheduled EDR Contact: 12/10/2018
 Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 08/10/2018
 Date Data Arrived at EDR: 09/11/2018
 Date Made Active in Reports: 08/14/2018
 Number of Days to Update: 3

Source: Department of Interior
 Telephone: 202-205-2909
 Last EDR Contact: 08/10/2018
 Next Scheduled EDR Contact: 12/24/2018
 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), AIFS (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), FHS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PAUS (PCB Activity Data System).

Date of Government Version: 08/07/2018
 Date Data Arrived at EDR: 08/05/2018
 Date Made Active in Reports: 10/05/2018
 Number of Days to Update: 30

Source: EPA
 Telephone: (415) 947-8000
 Last EDR Contact: 08/18/2018
 Next Scheduled EDR Contact: 12/17/2018
 Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 09/30/2017
 Date Data Arrived at EDR: 06/19/2018
 Date Made Active in Reports: 09/14/2018
 Number of Days to Update: 87

Source: Department of Defense
 Telephone: 703-704-1564
 Last EDR Contact: 07/13/2018
 Next Scheduled EDR Contact: 10/29/2018
 Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 08/02/2018
 Date Data Arrived at EDR: 09/05/2018
 Date Made Active in Reports: 08/14/2018
 Number of Days to Update: 9

Source: Environmental Protection Agency
 Telephone: 202-564-2280
 Last EDR Contact: 08/05/2018
 Next Scheduled EDR Contact: 12/17/2018
 Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018
 Date Data Arrived at EDR: 07/26/2018
 Date Made Active in Reports: 10/05/2018
 Number of Days to Update: 71

Source: Environmental Protection Agency
 Telephone: 202-564-0527
 Last EDR Contact: 08/31/2018
 Next Scheduled EDR Contact: 12/10/2018
 Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 08/22/2018
 Date Data Arrived at EDR: 08/22/2018
 Date Made Active in Reports: 10/05/2018
 Number of Days to Update: 44

Source: EPA
 Telephone: 800-385-6164
 Last EDR Contact: 08/22/2018
 Next Scheduled EDR Contact: 12/03/2018
 Data Release Frequency: Quarterly

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

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 (SWFLS), and the Department of Toxic Substances Control (Cat-Sites).

Date of Government Version: 08/25/2018
 Date Data Arrived at EDR: 08/22/2018
 Date Made Active in Reports: 09/06/2018
 Number of Days to Update: 40

Source: CAL EPA/Office of Emergency Information
 Telephone: 916-223-3400
 Last EDR Contact: 08/25/2018
 Next Scheduled EDR Contact: 01/07/2019
 Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing

List of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 04/03/2018
 Date Data Arrived at EDR: 05/07/2018
 Date Made Active in Reports: 06/15/2018
 Number of Days to Update: 39

Source: Livermore-Pleasanton Fire Department
 Telephone: 925-454-2381
 Last EDR Contact: 08/24/2018
 Next Scheduled EDR Contact: 11/28/2018
 Data Release Frequency: Varies

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 09/11/2018
 Date Data Arrived at EDR: 09/12/2018
 Date Made Active in Reports: 09/19/2018
 Number of Days to Update: 7

Source: San Francisco County Department of Environmental Health
 Telephone: 415-252-3988
 Last EDR Contact: 08/01/2018
 Next Scheduled EDR Contact: 11/19/2018
 Data Release Frequency: Varies

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 laundries; laundry and garment services.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/20/2018
Date Made Active in Reports: 06/06/2018
Number of Days to Update: 47

Source: Department of Toxic Substances Control
Telephone: 916-327-4498
Last EDR Contact: 06/28/2018
Next Scheduled EDR Contact: 12/17/2018
Data Release Frequency: Annually

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the South Coast Air Quality Management District
Date of Government Version: 08/24/2018
Date Data Arrived at EDR: 09/30/2018
Date Made Active in Reports: 10/01/2018
Number of Days to Update: 32

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 10/05/2018
Next Scheduled EDR Contact: 12/10/2018
Data Release Frequency: Varies

DRYCLEAN AVAQM: Antelope Valley Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the Antelope Valley Air Quality Management District.
Date of Government Version: 06/25/2018
Date Data Arrived at EDR: 06/28/2018
Date Made Active in Reports: 09/09/2018
Number of Days to Update: 39

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 10/01/2018
Next Scheduled EDR Contact: 12/17/2018
Data Release Frequency: Varies

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 06/20/2018
Date Made Active in Reports: 09/09/2018
Number of Days to Update: 47

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 09/21/2018
Next Scheduled EDR Contact: 12/31/2018
Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 08/01/2018
Date Data Arrived at EDR: 08/02/2018
Date Made Active in Reports: 09/07/2018
Number of Days to Update: 36

Source: State Water Resources Control Board
Telephone: 916-445-8978
Last EDR Contact: 08/01/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance Information

Date of Government Version: 07/17/2018
Date Data Arrived at EDR: 07/24/2018
Date Made Active in Reports: 09/10/2018
Number of Days to Update: 48

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 07/17/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 08/14/2018
Date Data Arrived at EDR: 09/19/2018
Date Made Active in Reports: 09/10/2018
Number of Days to Update: 25

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 08/07/2018
Next Scheduled EDR Contact: 11/26/2018
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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. This database begins with calendar year 1993.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 07/12/2017
Date Made Active in Reports: 10/17/2017
Number of Days to Update: 97

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 10/10/2018
Next Scheduled EDR Contact: 01/21/2019
Data Release Frequency: Annually

ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in EnviroStor.

Date of Government Version: 08/20/2018
Date Data Arrived at EDR: 06/21/2018
Date Made Active in Reports: 09/19/2018
Number of Days to Update: 20

Source: Department of Toxic Substances Control
Telephone: 877-786-9427
Last EDR Contact: 08/21/2018
Next Scheduled EDR Contact: 12/03/2018
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWFLS), and the Department of Toxic Substances Control (CALSTES). This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/06/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HMP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action (cleanups) tracked in EnviroStor.

Date of Government Version: 08/20/2018
Date Data Arrived at EDR: 08/21/2018
Date Made Active in Reports: 09/10/2018
Number of Days to Update: 20

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/21/2018
Next Scheduled EDR Contact: 12/03/2018
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 07/09/2018
Date Data Arrived at EDR: 07/11/2018
Date Made Active in Reports: 08/24/2018
Number of Days to Update: 44

Source: Department of Toxic Substances Control
Telephone: 916-448-7145
Last EDR Contact: 10/10/2018
Next Scheduled EDR Contact: 01/21/2019
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 09/10/2018
Date Data Arrived at EDR: 09/12/2018
Date Made Active in Reports: 10/09/2018
Number of Days to Update: 27

Source: Department of Conservation
Telephone: 916-322-1060
Last EDR Contact: 09/12/2018
Next Scheduled EDR Contact: 12/24/2018
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (OTF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Source: Department of Public Health
Telephone: 916-555-1784
Date Data Arrived at EDR: 08/05/2018
Date Made Active in Reports: 10/03/2018
Number of Days to Update: 28
Next Scheduled EDR Contact: 12/17/2018
Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Source: State Water Resources Control Board
Telephone: 916-445-9379
Date Data Arrived at EDR: 08/10/2018
Date Made Active in Reports: 09/10/2018
Number of Days to Update: 31
Next Scheduled EDR Contact: 11/28/2018
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Date Data Arrived at EDR: 08/05/2018
Date Made Active in Reports: 10/03/2018
Number of Days to Update: 28
Next Scheduled EDR Contact: 12/17/2018
Data Release Frequency: Quarterly

PROC: Certified Processors Database

A listing of certified processors.

Source: Department of Conservation
Telephone: 916-523-3536
Date Data Arrived at EDR: 08/13/2018
Date Made Active in Reports: 08/06/2018
Number of Days to Update: 54
Next Scheduled EDR Contact: 12/24/2018
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records

A listing of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Source: State Water Resources Control Board
Telephone: 916-445-3846
Date Data Arrived at EDR: 08/20/2018
Date Made Active in Reports: 08/06/2018
Number of Days to Update: 47
Next Scheduled EDR Contact: 12/31/2018
Data Release Frequency: No Update Planned

LIC: LIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Source: Department of Conservation
Telephone: 916-445-2408
Date Data Arrived at EDR: 06/13/2018
Date Made Active in Reports: 07/17/2018
Number of Days to Update: 34
Next Scheduled EDR Contact: 12/24/2018
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

WASTEWATER PITS: Oil Wastewater Pits Listing

Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Date Data Arrived at EDR: 07/11/2018
Date Made Active in Reports: 08/13/2018
Number of Days to Update: 64
Next Scheduled EDR Contact: 01/21/2019
Data Release Frequency: Varies

WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Source: State Water Resources Control Board
Telephone: 916-341-5227
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/28/2007
Number of Days to Update: 9
Next Scheduled EDR Contact: 12/03/2018
Data Release Frequency: Quarterly

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6728
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20080 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Source: State Water Resources Control Board
Telephone: 916-341-5810
Date Data Arrived at EDR: 09/12/2018
Date Made Active in Reports: 10/09/2018
Number of Days to Update: 27
Next Scheduled EDR Contact: 12/24/2018
Data Release Frequency: Quarterly

WELL STIM PROJ.: Well Stimulation Project (GEOTRACKER)

Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Source: State Water Resources Control Board
Telephone: 866-480-1028
Date Data Arrived at EDR: 09/12/2018
Date Made Active in Reports: 10/09/2018
Number of Days to Update: 27
Next Scheduled EDR Contact: 12/24/2018
Data Release Frequency: Varies

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)

Military privatized sites

Source: State Water Resources Control Board
Telephone: 866-480-1028
Date Data Arrived at EDR: 09/12/2018
Date Made Active in Reports: 10/09/2018
Number of Days to Update: 27
Next Scheduled EDR Contact: 12/24/2018
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 09/10/2018
Date Data Arrived at EDR: 08/12/2018
Last EDR Contact: 06/12/2018
Date Made Active in Reports: 10/09/2018
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 12/24/2018
Data Release Frequency: Varies

CERS: CAIEPA Regulated Site Portal Data

The CAIEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 07/23/2018
Date Data Arrived at EDR: 07/25/2018
Last EDR Contact: 06/05/2018
Number of Days to Update: 42

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 07/25/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)

Underground control injection sites

Date of Government Version: 09/10/2018
Date Data Arrived at EDR: 09/12/2018
Last EDR Contact: 12/12/2018
Date Made Active in Reports: 10/09/2018
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 12/24/2018
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 09/10/2018
Date Data Arrived at EDR: 09/12/2018
Last EDR Contact: 12/12/2018
Date Made Active in Reports: 10/09/2018
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 12/24/2018
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 09/10/2018
Date Data Arrived at EDR: 09/12/2018
Last EDR Contact: 12/12/2018
Date Made Active in Reports: 10/09/2018
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 12/24/2018
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)

Projects sites

Date of Government Version: 09/10/2018
Date Data Arrived at EDR: 09/12/2018
Last EDR Contact: 12/12/2018
Date Made Active in Reports: 10/09/2018
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 12/24/2018
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/10/2018
Date Data Arrived at EDR: 09/12/2018
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 12/24/2018
Data Release Frequency: Varies

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 12/24/2018
Data Release Frequency: Varies

CIVICS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about pieces of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 09/04/2018
Date Data Arrived at EDR: 09/05/2018
Date Made Active in Reports: 10/02/2018
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 866-794-4877
Last EDR Contact: 09/05/2018
Next Scheduled EDR Contact: 12/17/2018
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: 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 (city 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

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

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: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromet, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

REGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
 Date Data Arrived at EDR: 07/01/2013
 Date Made Active in Reports: 07/13/2014
 Number of Days to Update: 198

Source: Department of Resources Recycling and Recovery
 Telephone: N/A
 Last EDR Contact: 06/07/2012
 Next Scheduled EDR Contact: N/A
 Data Release Frequency: Varies

REGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
 Date Data Arrived at EDR: 07/01/2013
 Date Made Active in Reports: 12/30/2013
 Number of Days to Update: 182

Source: State Water Resources Control Board
 Telephone: N/A
 Last EDR Contact: 06/07/2012
 Next Scheduled EDR Contact: N/A
 Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: 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: 08/03/2018
 Date Data Arrived at EDR: 08/06/2018
 Date Made Active in Reports: 08/05/2018
 Number of Days to Update: 30

Source: Alameda County Environmental Health Services
 Telephone: 510-567-6700
 Last EDR Contact: 10/05/2018
 Next Scheduled EDR Contact: 01/21/2019
 Data Release Frequency: Semi-Annually

LUST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 07/06/2018
 Date Data Arrived at EDR: 07/10/2018
 Date Made Active in Reports: 08/11/2018
 Number of Days to Update: 63

Source: Alameda County Environmental Health Services
 Telephone: 510-567-6700
 Last EDR Contact: 10/05/2018
 Next Scheduled EDR Contact: 04/24/2047
 Data Release Frequency: Semi-Annually

AMADOR COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA AMADOR: CUPA Facility List
 Cupa Facility List

Date of Government Version: 07/01/2018
 Date Data Arrived at EDR: 07/24/2018
 Date Made Active in Reports: 08/20/2018
 Number of Days to Update: 27

Source: Amador County Environmental Health
 Telephone: 209-223-6439
 Last EDR Contact: 08/28/2018
 Next Scheduled EDR Contact: 12/17/2018
 Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
 Cupa facility list.

Date of Government Version: 04/21/2017
 Date Data Arrived at EDR: 04/25/2017
 Date Made Active in Reports: 08/08/2017
 Number of Days to Update: 105

Source: Public Health Department
 Telephone: 530-538-7149
 Last EDR Contact: 10/05/2018
 Next Scheduled EDR Contact: 01/21/2019
 Data Release Frequency: No Updates Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
 Cupa Facility Listing

Date of Government Version: 08/02/2018
 Date Data Arrived at EDR: 08/06/2018
 Date Made Active in Reports: 08/20/2018
 Number of Days to Update: 14

Source: Calveras County Environmental Health
 Telephone: 209-754-8398
 Last EDR Contact: 09/24/2018
 Next Scheduled EDR Contact: 01/07/2019
 Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
 Cupa facility list.

Date of Government Version: 05/23/2018
 Date Data Arrived at EDR: 05/24/2018
 Date Made Active in Reports: 07/13/2018
 Number of Days to Update: 50

Source: Health & Human Services
 Telephone: 530-456-0386
 Last EDR Contact: 08/17/2018
 Next Scheduled EDR Contact: 11/19/2018
 Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Silo List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 08/20/2018
 Date Data Arrived at EDR: 08/21/2018
 Date Made Active in Reports: 09/11/2018
 Number of Days to Update: 21

Source: Contra Costa Health Services Department
 Telephone: 925-846-2288
 Last EDR Contact: 07/30/2018
 Next Scheduled EDR Contact: 11/12/2018
 Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA DEL NORTE: CUPA Facility List

Cupa facility list

Date of Government Version: 04/27/2018
Date Data Arrived at EDR: 05/02/2018
Date Made Active in Reports: 06/15/2018
Number of Days to Update: 44

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0428
Last EDR Contact: 07/24/2018
Next Scheduled EDR Contact: 11/12/2018
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List

CUPA facility list

Date of Government Version: 09/04/2018
Date Data Arrived at EDR: 09/05/2018
Date Made Active in Reports: 09/19/2018
Number of Days to Update: 13

Source: El Dorado County Environmental Management Department
Telephone: 530-521-8623
Last EDR Contact: 07/30/2018
Next Scheduled EDR Contact: 11/12/2018
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: 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: 07/11/2018
Date Data Arrived at EDR: 07/17/2018
Date Made Active in Reports: 09/30/2018
Number of Days to Update: 44

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 10/01/2019
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List

Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 46

Source: Glenn County Air Pollution Control District
Telephone: 530-834-5500
Last EDR Contact: 07/17/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List

CUPA facility list

Date of Government Version: 07/11/2018
Date Data Arrived at EDR: 07/13/2018
Date Made Active in Reports: 08/22/2018
Number of Days to Update: 40

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 08/20/2018
Next Scheduled EDR Contact: 12/03/2018
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA IMPERIAL: CUPA Facility List

Cupa facility list

Date of Government Version: 07/17/2018
Date Data Arrived at EDR: 07/24/2018
Date Made Active in Reports: 09/05/2018
Number of Days to Update: 43

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 07/17/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List

Cupa facility list

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-875-0238
Last EDR Contact: 10/01/2018
Next Scheduled EDR Contact: 12/03/2018
Data Release Frequency: Varies

KERN COUNTY:

UST KERN: Underground Storage Tank Sites & Tank Listing

Kern County Sites and Tanks Listing

Date of Government Version: 07/20/2018
Date Data Arrived at EDR: 07/25/2018
Date Made Active in Reports: 09/12/2018
Number of Days to Update: 49

Source: Kern County Environmental Health Services Department
Telephone: 661-862-9700
Last EDR Contact: 07/20/2018
Next Scheduled EDR Contact: 11/19/2018
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List

Cupa facility list

Date of Government Version: 08/23/2018
Date Data Arrived at EDR: 08/24/2018
Date Made Active in Reports: 09/19/2018
Number of Days to Update: 25

Source: Kings County Department of Public Health
Telephone: 559-864-1411
Last EDR Contact: 08/17/2018
Next Scheduled EDR Contact: 12/03/2018
Data Release Frequency: Varies

A listing of sites included in the county's Certified Unified Program Agency database, California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

LAKE COUNTY:

CUPA LAKE: CUPA Facility List

Cupa facility list

Date of Government Version: 08/08/2018
Date Data Arrived at EDR: 08/09/2018
Date Made Active in Reports: 08/22/2018
Number of Days to Update: 13

Source: Lake County Environmental Health
Telephone: 707-283-1164
Last EDR Contact: 07/16/2018
Next Scheduled EDR Contact: 10/29/2018
Data Release Frequency: Varies

LASSEN COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA LASSEN: CUPA Facility List

Cupa facility list
 Date of Government Version: 07/27/2018
 Date Data Arrived at EDR: 09/09/2018
 Date Made Active in Reports: 09/05/2018
 Number of Days to Update: 30
 Source: Lassen County Environmental Health
 Telephone: 530-251-8528
 Last EDR Contact: 08/01/2018
 Next Scheduled EDR Contact: 11/05/2018
 Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCNCCERN: 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.

Source: EPA Region 9
 Telephone: 415-972-3178
 Date of Government Version: 03/30/2009
 Date Data Arrived at EDR: 03/31/2009
 Date Made Active in Reports: 10/23/2009
 Number of Days to Update: 206
 Next Scheduled EDR Contact: 08/17/2018
 Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Source: Department of Public Works
 Telephone: 928-458-3517
 Date of Government Version: 07/02/2018
 Date Data Arrived at EDR: 07/13/2018
 Date Made Active in Reports: 09/10/2018
 Number of Days to Update: 59
 Next Scheduled EDR Contact: 01/21/2019
 Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities

Solid Waste Facilities in Los Angeles County.
 Source: La County Department of Public Works
 Telephone: 818-458-5185
 Date of Government Version: 07/16/2018
 Date Data Arrived at EDR: 07/16/2018
 Date Made Active in Reports: 06/26/2018
 Number of Days to Update: 37
 Next Scheduled EDR Contact: 10/29/2018
 Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.
 Source: Engineering & Construction Division
 Telephone: 213-473-7889
 Date of Government Version: 01/01/2018
 Date Data Arrived at EDR: 05/01/2018
 Date Made Active in Reports: 05/14/2018
 Number of Days to Update: 13
 Next Scheduled EDR Contact: 10/29/2018
 Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List

Industrial sites that have had some sort of spill or complaint.
 Source: Community Health Services
 Telephone: 323-890-7806
 Date of Government Version: 04/01/2018
 Date Data Arrived at EDR: 04/17/2018
 Date Made Active in Reports: 06/19/2018
 Number of Days to Update: 63
 Next Scheduled EDR Contact: 10/29/2018
 Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/21/2017
 Date Data Arrived at EDR: 04/19/2017
 Date Made Active in Reports: 05/10/2017
 Number of Days to Update: 21
 Source: City of El Segundo Fire Department
 Telephone: 310-524-2238
 Last EDR Contact: 07/11/2018
 Next Scheduled EDR Contact: 10/29/2018
 Data Release Frequency: Semi-Annually

UST LONG BEACH: City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/09/2017
 Date Data Arrived at EDR: 03/10/2017
 Date Made Active in Reports: 03/03/2017
 Number of Days to Update: 54
 Source: City of Long Beach Fire Department
 Telephone: 562-570-5555
 Last EDR Contact: 07/17/2018
 Next Scheduled EDR Contact: 11/05/2018
 Data Release Frequency: Annually

UST TORRANCE: City of Torrance Underground Storage Tank

Underground storage tank sites located in the city of Torrance.

Date of Government Version: 01/04/2018
 Date Data Arrived at EDR: 01/05/2018
 Date Made Active in Reports: 01/16/2018
 Number of Days to Update: 13
 Source: City of Torrance Fire Department
 Telephone: 310-616-2973
 Last EDR Contact: 10/05/2018
 Next Scheduled EDR Contact: 01/21/2019
 Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database, California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Source: Madera County Environmental Health
 Telephone: 559-675-7823
 Date of Government Version: 08/30/2018
 Date Data Arrived at EDR: 09/04/2018
 Date Made Active in Reports: 08/19/2018
 Number of Days to Update: 15
 Next Scheduled EDR Contact: 08/17/2018
 Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites

Currently permitted USTs in Marin County.
 Date of Government Version: 07/11/2018
 Date Data Arrived at EDR: 07/17/2018
 Date Made Active in Reports: 09/12/2018
 Number of Days to Update: 57
 Source: Public Works Department Waste Management
 Telephone: 415-473-6947
 Last EDR Contact: 10/01/2018
 Next Scheduled EDR Contact: 01/14/2019
 Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List

CUPA facility list.
 Date of Government Version: 08/29/2018
 Date Data Arrived at EDR: 09/31/2018
 Date Made Active in Reports: 09/19/2018
 Number of Days to Update: 19
 Source: Merced County Environmental Health
 Telephone: 209-381-1094
 Last EDR Contact: 06/28/2018
 Next Scheduled EDR Contact: 12/03/2018
 Data Release Frequency: Varies

MONO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA MONCO: CUPA Facility List

CUPA Facility List

Date of Government Version: 07/19/2018
Date Data Arrived at EDR: 09/04/2018
Date Made Active in Reports: 09/19/2018
Number of Days to Update: 15

Source: Mono County Health Department
Telephone: 760-932-5590
Last EDR Contact: 08/24/2018
Next Scheduled EDR Contact: 12/10/2018
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 07/30/2018
Date Data Arrived at EDR: 06/02/2018
Date Made Active in Reports: 09/05/2018
Number of Days to Update: 34

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 10/01/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4299
Last EDR Contact: 08/24/2018
Next Scheduled EDR Contact: 12/10/2018
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites

Underground storage tank sites located in Napa county.

Date of Government Version: 08/27/2018
Date Data Arrived at EDR: 08/28/2018
Date Made Active in Reports: 10/03/2018
Number of Days to Update: 36

Source: Napa County Department of Environmental Management
Telephone: 707-253-4299
Last EDR Contact: 08/24/2018
Next Scheduled EDR Contact: 12/10/2018
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List

CUPA Facility List

Date of Government Version: 07/31/2018
Date Data Arrived at EDR: 06/02/2018
Date Made Active in Reports: 09/05/2018
Number of Days to Update: 34

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 07/24/2018
Next Scheduled EDR Contact: 11/12/2018
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups

Patroleum and non-petroleum spills.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/13/2018
Date Data Arrived at EDR: 08/09/2018
Date Made Active in Reports: 09/10/2018
Number of Days to Update: 33

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/07/2018
Next Scheduled EDR Contact: 11/19/2018
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups

Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 07/13/2018
Date Data Arrived at EDR: 08/09/2018
Date Made Active in Reports: 09/10/2018
Number of Days to Update: 33

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/03/2018
Next Scheduled EDR Contact: 11/19/2018
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities

Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 07/13/2018
Date Data Arrived at EDR: 08/09/2018
Date Made Active in Reports: 09/12/2018
Number of Days to Update: 37

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/06/2018
Next Scheduled EDR Contact: 11/19/2018
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 09/04/2018
Date Data Arrived at EDR: 09/06/2018
Date Made Active in Reports: 10/03/2018
Number of Days to Update: 27

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 09/29/2018
Next Scheduled EDR Contact: 12/17/2018
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List

Plumas County CUPA Program facilities.

Date of Government Version: 07/19/2018
Date Data Arrived at EDR: 07/25/2018
Date Made Active in Reports: 09/05/2018
Number of Days to Update: 42

Source: Plumas County Environmental Health
Telephone: 530-263-6355
Last EDR Contact: 07/17/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 07/09/2018
Date Data Arrived at EDR: 07/13/2018
Date Made Active in Reports: 08/24/2018
Number of Days to Update: 42

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/17/2018
Next Scheduled EDR Contact: 12/31/2018
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST RIVERSIDE: Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 07/09/2018
Date Data Arrived at EDR: 07/13/2018
Last EDR Contact: 08/17/2018
Next Scheduled EDR Contact: 12/31/2018
Number of Days to Update: 61
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Source: Sacramento County Environmental Management
Telephone: 916-375-8406
Last EDR Contact: 10/02/2018
Next Scheduled EDR Contact: 01/14/2019
Number of Days to Update: 41
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Source: Sacramento County Environmental Management
Telephone: 916-375-8406
Last EDR Contact: 10/02/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List

Cupa facility list

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 08/01/2018
Next Scheduled EDR Contact: 11/19/2018
Number of Days to Update: 27
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 07/24/2018
Next Scheduled EDR Contact: 11/19/2018
Number of Days to Update: 41
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HES9 - 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 HES9 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.)

Source: Hazardous Materials Management Division
Telephone: 619-336-2286
Last EDR Contact: 09/09/2018
Next Scheduled EDR Contact: 12/17/2018
Number of Days to Update: 41
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.
Date of Government Version: 04/18/2018
Date Data Arrived at EDR: 04/24/2018
Date Made Active in Reports: 09/19/2018
Number of Days to Update: 56
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints, however, some of them could be LOP cases.

Source: Department of Health Services
Telephone: 619-336-2209
Last EDR Contact: 07/17/2018
Next Scheduled EDR Contact: 11/05/2018
Number of Days to Update: 31
Data Release Frequency: Varies

SAN DIEGO CO SAM: 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.

Source: San Diego County Department of Environmental Health
Telephone: 619-336-2371
Last EDR Contact: 08/28/2018
Next Scheduled EDR Contact: 12/17/2018
Number of Days to Update: 24
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

LUST SAN FRANCISCO: Local Overalls Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 08/01/2018
Next Scheduled EDR Contact: 11/19/2018
Number of Days to Update: 10
Data Release Frequency: Quarterly

UST SAN FRANCISCO: Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/17/2018
Date Data Arrived at EDR: 09/18/2018
Date Made Active in Reports: 10/03/2018
Number of Days to Update: 15

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 08/01/2018
Next Scheduled EDR Contact: 11/19/2018
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.
Source: Environmental Health Department
Telephone: N/A
Date of Government Version: 09/22/2018
Date Data Arrived at EDR: 09/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Date of Government Version: 09/17/2018
Date Data Arrived at EDR: 09/17/2018
Date Made Active in Reports: 12/31/2018
Next Scheduled EDR Contact: 12/31/2018
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 09/20/2018
Date Data Arrived at EDR: 08/21/2018
Date Made Active in Reports: 09/07/2018
Number of Days to Update: 17

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5586
Last EDR Contact: 08/17/2018
Next Scheduled EDR Contact: 12/03/2018
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Date of Government Version: 06/12/2018
Date Data Arrived at EDR: 06/15/2018
Date Made Active in Reports: 06/05/2018
Number of Days to Update: 52

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Date of Government Version: 12/24/2018
Date Data Arrived at EDR: 12/24/2018
Date Made Active in Reports: 12/24/2018
Next Scheduled EDR Contact: 12/24/2018
Data Release Frequency: Annually

LUST SAN MATEO:

Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Date of Government Version: 06/12/2018
Date Data Arrived at EDR: 06/15/2018
Date Made Active in Reports: 06/05/2018
Number of Days to Update: 59

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Date of Government Version: 12/24/2018
Date Data Arrived at EDR: 12/24/2018
Date Made Active in Reports: 12/24/2018
Next Scheduled EDR Contact: 12/24/2018
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.
Source: Santa Barbara County Public Health Department
Telephone: 805-666-8167
Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-666-8167
Date of Government Version: 12/03/2018
Date Data Arrived at EDR: 12/03/2018
Date Made Active in Reports: 12/03/2018
Next Scheduled EDR Contact: 12/03/2018
Data Release Frequency: Varies

SANTA CLARA COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list.

Date of Government Version: 06/17/2018
Date Data Arrived at EDR: 06/22/2018
Date Made Active in Reports: 06/07/2018
Number of Days to Update: 16

Source: Department of Environmental Health
Telephone: 408-916-1973
Last EDR Contact: 08/17/2018
Next Scheduled EDR Contact: 12/03/2018
Data Release Frequency: Varies

HIST LUST SANTA CLARA:

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: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA:

LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.
Source: Department of Environmental Health
Telephone: 408-916-3417
Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/19/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-916-3417
Date of Government Version: 11/19/2018
Date Data Arrived at EDR: 11/19/2018
Date Made Active in Reports: 11/19/2018
Next Scheduled EDR Contact: 11/19/2018
Data Release Frequency: Annually

SAN JOSE HAZMAT:

Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 08/01/2018
Date Data Arrived at EDR: 08/06/2018
Date Made Active in Reports: 08/11/2018
Number of Days to Update: 36

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 08/01/2018
Next Scheduled EDR Contact: 11/19/2018
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 08/17/2018
Next Scheduled EDR Contact: 12/03/2018
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 06/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 08/17/2018
Next Scheduled EDR Contact: 12/03/2018
Data Release Frequency: Varies

SOLANO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.
Date of Government Version: 06/04/2018
Date Data Arrived at EDR: 06/08/2018
Date Made Active in Reports: 07/18/2018
Number of Days to Update: 40
Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 08/28/2018
Next Scheduled EDR Contact: 12/17/2018
Data Release Frequency: Quarterly

LUST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.
Date of Government Version: 06/04/2018
Date Data Arrived at EDR: 06/12/2018
Date Made Active in Reports: 07/12/2018
Number of Days to Update: 30
Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 08/28/2018
Next Scheduled EDR Contact: 12/17/2018
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 06/19/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/17/2018
Number of Days to Update: 21
Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 09/24/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.
Date of Government Version: 07/03/2018
Date Data Arrived at EDR: 07/10/2018
Date Made Active in Reports: 08/24/2018
Number of Days to Update: 45
Source: Department of Health Services
Telephone: 707-565-6668
Last EDR Contact: 09/24/2018
Next Scheduled EDR Contact: 01/07/2019
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: Cupa Facility List
Cupa facility list

Date of Government Version: 08/14/2018
Date Data Arrived at EDR: 08/16/2018
Date Made Active in Reports: 08/24/2018
Number of Days to Update: 8
Source: Stanislaus County Department of Environmental Protection
Telephone: 209-525-6751
Last EDR Contact: 07/16/2018
Next Scheduled EDR Contact: 10/29/2018
Data Release Frequency: Varies

SUTTER COUNTY:

LUST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 06/04/2018
Date Data Arrived at EDR: 06/08/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 33
Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 09/17/2018
Next Scheduled EDR Contact: 12/17/2018
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 07/17/2018
Date Data Arrived at EDR: 08/02/2018
Date Made Active in Reports: 09/07/2018
Number of Days to Update: 36
Source: Tehama County Department of Environmental Health
Telephone: 530-572-8020
Last EDR Contact: 08/01/2018
Next Scheduled EDR Contact: 11/18/2018
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 07/17/2018
Date Data Arrived at EDR: 07/24/2018
Date Made Active in Reports: 09/07/2018
Number of Days to Update: 45
Source: Department of Toxic Substances Control
Telephone: 760-552-0381
Last EDR Contact: 07/17/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

TUJARE COUNTY:

CUPA TUJARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 09/13/2018
Date Data Arrived at EDR: 09/14/2018
Date Made Active in Reports: 09/19/2018
Number of Days to Update: 5
Source: Tulare County Environmental Health Services Division
Telephone: 559-924-7400
Last EDR Contact: 09/13/2018
Next Scheduled EDR Contact: 11/19/2018
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61
Source: Division of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 07/17/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: 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: 07/02/2018
Date Data Arrived at EDR: 07/28/2018
Date Made Active in Reports: 09/05/2018
Number of Days to Update: 41
Source: Ventura County Environmental Health Division
Telephone: 805-654-2815
Last EDR Contact: 07/23/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-854-2813
Last EDR Contact: 10/01/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Annually

LUST VENTURA: Listing of Underground Tank Cleanup Sites Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-854-2813
Last EDR Contact: 08/07/2018
Next Scheduled EDR Contact: 11/26/2018
Data Release Frequency: Quarterly

MED WASTE VENTURA: Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 07/02/2018
Date Data Arrived at EDR: 07/26/2018
Date Made Active in Reports: 06/24/2018
Number of Days to Update: 29

Source: Ventura County Resource Management Agency
Telephone: 805-854-2813
Last EDR Contact: 07/23/2018
Next Scheduled EDR Contact: 11/05/2018
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 09/04/2016
Date Data Arrived at EDR: 09/12/2016
Date Made Active in Reports: 10/04/2016
Number of Days to Update: 22

Source: Environmental Health Division
Telephone: 805-854-2813
Last EDR Contact: 09/12/2018
Next Scheduled EDR Contact: 12/24/2018
Data Release Frequency: Quarterly

YOLO COUNTY:

USTYOLO: Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 06/20/2018
Date Data Arrived at EDR: 07/03/2018
Date Made Active in Reports: 07/12/2018
Number of Days to Update: 9

Source: Yolo County Department of Health
Telephone: 530-868-8846
Last EDR Contact: 10/01/2018
Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 05/10/2018
Date Data Arrived at EDR: 05/15/2018
Date Made Active in Reports: 06/15/2018
Number of Days to Update: 31

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Next Scheduled EDR Contact: 08/07/2018
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 06/10/2018
Date Data Arrived at EDR: 06/10/2018
Date Made Active in Reports: 06/10/2018
Number of Days to Update: 31

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 08/09/2018
Next Scheduled EDR Contact: 11/26/2018
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 07/13/2018
Date Made Active in Reports: 06/07/2018
Number of Days to Update: 19

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 10/09/2018
Next Scheduled EDR Contact: 01/21/2019
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: 07/01/2018
Date Data Arrived at EDR: 08/01/2018
Date Made Active in Reports: 06/31/2018
Number of Days to Update: 30

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 08/01/2018
Next Scheduled EDR Contact: 11/12/2018
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 07/25/2017
Date Made Active in Reports: 09/25/2017
Number of Days to Update: 62

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 07/12/2018
Next Scheduled EDR Contact: 10/29/2018
Data Release Frequency: Annually

RI MANIFEST: Manifest Information

Hazardous waste manifest information

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 02/23/2018
Date Made Active in Reports: 04/09/2018
Number of Days to Update: 45

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 09/21/2018
Next Scheduled EDR Contact: 12/03/2018
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 08/15/2018
Date Made Active in Reports: 07/09/2018
Number of Days to Update: 24

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/06/2018
Next Scheduled EDR Contact: 12/24/2018
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Oil/Gas Pipelines

Source: PennWell Corporation
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). 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.

Electric Power Transmission Line Data

Source: PennWell Corporation
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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: 312-260-5991

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: 410-786-9000

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: 301-594-5248

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: 918-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-335-2627

Date of Government Version: 2003, 2015

NMI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife

Telephone: 918-445-0411

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK® - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

2X848 SUN LAND GARDEN ESA
90 PIONEER ROAD
WATSONVILLE, CA 95076

TARGET PROPERTY COORDINATES

Latitude (North): 36.972392 - 36° 58' 20.61"
Longitude (West): 121.775863 - 121° 46' 33.11"
Universal Transverse Mercator: Zone 10
UTM X (Meters): 608863.2
UTM Y (Meters): 4092306.8
Elevation: 231 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map: 5620250 WATSONVILLE WEST, CA
Version/Date: 2012

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).

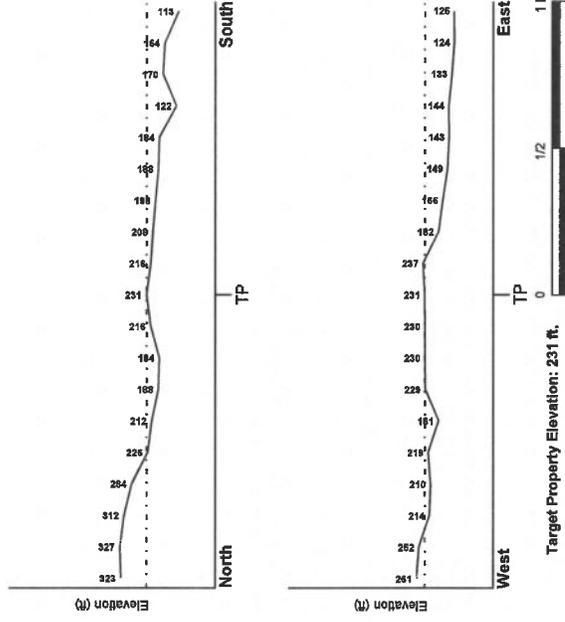
TOPOGRAPHIC INFORMATION

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 ENE

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

Flood Plain Panel at Target Property

06087C0382E FEMA Source Type
FEMA FIRM Flood data

Additional Panels in search area:

06087C0381E FEMA Source Type
FEMA FIRM Flood data
06087C0383E FEMA FIRM Flood data
06087C0384E FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property
WATSONVILLE WEST
YES - refer to the Overview Map and Detail Map

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 Miles.

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: Not Reported
LOCATION FROM TP: _____
GENERAL DIRECTION: GROUNDWATER FLOW

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

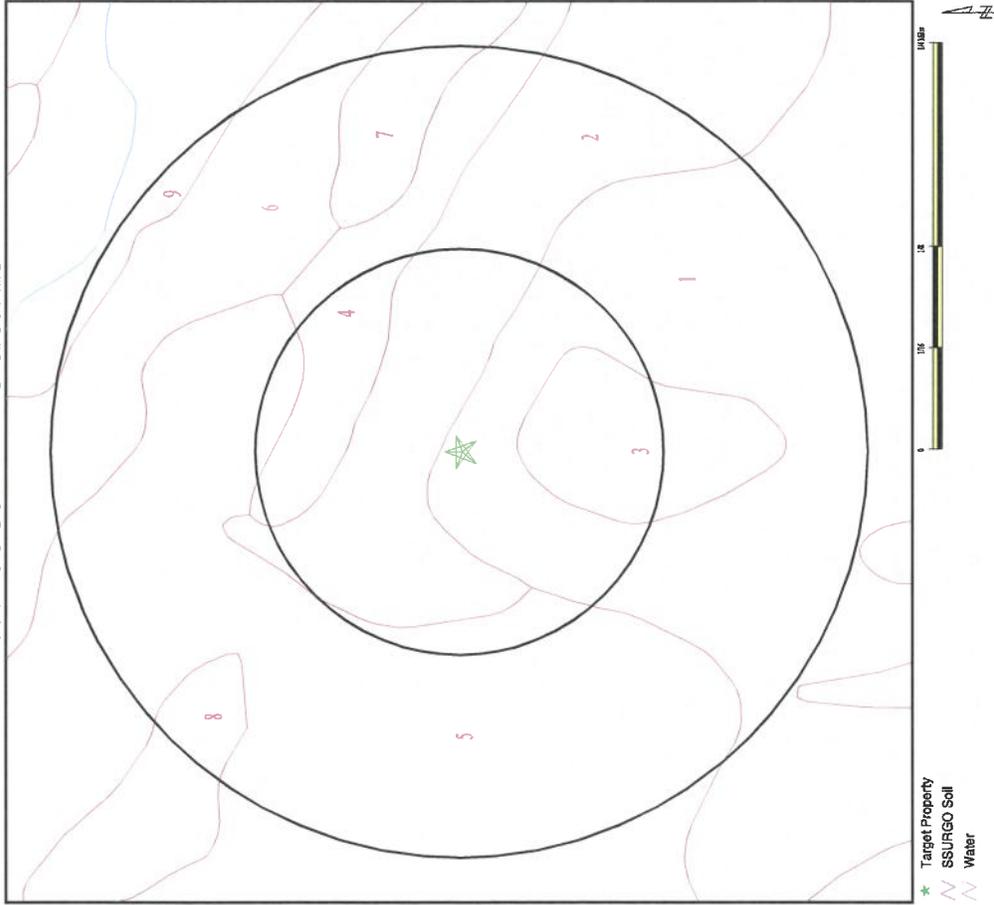
Era: Cenozoic
System: Quaternary
Series: Quaternary
Code: Q (denoted above as Era, System & Series)
Category: Stratified Sequence

GEOLOGIC AGE IDENTIFICATION

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Amdt 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 (1984).

* EDR's Site-Specific Hydrogeological Data gathered by CDSCO, LLC, in Watsonville, CA, is not a report. All of the information and contents presented are those of the other EPA reports, which were compiled under a Government Information Request pursuant to Authority: Freedom of Information Act, 5 U.S.C. 552 (b) (7) (C).

SSURGO SOIL MAP - 5452887.2S



SITE NAME: 2x648 Sun Land Garden ESA
ADDRESS: 90 Pioneer Road
 Watsonville CA 95076
LAT/LONG: 36.972392 / 121.775663

CLIENT: Webber, Hayes, & Associates
CONTACT: Shaun Erroy
INQUIRY #: 5452887.2S
DATE: October 15, 2018 8:40 am

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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: WATSONVILLE
Soil Surface Texture: loam
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: Somewhat poorly drained
Hydric Status: Partially hydric
Corrosion Potential - Uncoated Steel: High
Depth to Bedrock Min: > 0 inches
Depth to Waterable Min: > 114 inches

Layer	Boundary		Soil Layer Information			Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil Classification		
1	0 inches	18 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 1.4 Min: 0.42	Max: 8.4 Min: 5.6
2	18 inches	38 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 1.4 Min: 0.42	Max: 8.4 Min: 5.6
3	38 inches	62 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 1.4 Min: 0.42	Max: 8.4 Min: 5.6

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 2
 Soil Component Name: PINTO
 Soil Surface Texture: 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: Moderately well drained
 Hydric Status: Partially hydric
 Corrosion Potential - Uncoated Steel: High
 Depth to Bedrock Min: > 0 inches
 Depth to Waterable Min: > 0 inches

Layer	Boundary		Soil Layer Information				Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower	Soil Texture Class	AASHTO Group	Classification	Unified Soil		
1	0 inches	20 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200). Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay		Max: 1.4 Min: 0.42	Max: 7.3 Min: 5.1
2	20 inches	51 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200). Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay		Max: 1.4 Min: 0.42	Max: 7.3 Min: 5.1
3	51 inches	64 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200). Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay		Max: 1.4 Min: 0.42	Max: 7.3 Min: 5.1

Soil Map ID: 3
 Soil Component Name: WATSONVILLE
 Soil Surface Texture: loam
 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: Somewhat poorly drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Partially hydric
 Corrosion Potential - Uncoated Steel: High
 Depth to Bedrock Min: > 0 inches
 Depth to Waterable Min: > 114 inches

Layer	Boundary		Soil Layer Information				Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower	Soil Texture Class	AASHTO Group	Classification	Unified Soil		
1	0 inches	18 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200). Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay		Max: 1.4 Min: 0.42	Max: 8.4 Min: 5.6
2	18 inches	38 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200). Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay		Max: 1.4 Min: 0.42	Max: 8.4 Min: 5.6
3	38 inches	62 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200). Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay		Max: 1.4 Min: 0.42	Max: 8.4 Min: 5.6

Soil Map ID: 4
 Soil Component Name: PINTO
 Soil Surface Texture: 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: Moderately well drained
 Hydric Status: Partially hydric
 Corrosion Potential - Uncoated Steel: High
 Depth to Bedrock Min: > 0 inches
 Depth to Waterable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	AASHTO Group	Classification	Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower					
1	0 inches	20 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 1.4 Min: 0.42	Max: 7.3 Min: 5.1
2	20 inches	51 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 1.4 Min: 0.42	Max: 7.3 Min: 5.1
3	51 inches	84 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 1.4 Min: 0.42	Max: 7.3 Min: 5.1

Soil Map ID: 5

Soil Component Name: PINTO

Soil Surface Texture: 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: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Waterable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	AASHTO Group	Classification	Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower					
1	0 inches	20 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 1.4 Min: 0.42	Max: 7.3 Min: 5.1
2	20 inches	51 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 1.4 Min: 0.42	Max: 7.3 Min: 5.1
3	51 inches	84 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 1.4 Min: 0.42	Max: 7.3 Min: 5.1

Soil Map ID: 6

Soil Component Name: SOQUEL

Soil Surface Texture: loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Waterable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	20 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 4 Min: 1.4	Max: 7.3 Min: 5.6
2	20 inches	37 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay.	Max: 4 Min: 1.4	Max: 7.3 Min: 5.6
3	37 inches	51 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay.	Max: 4 Min: 1.4	Max: 7.3 Min: 5.6
4	51 inches	61 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 4 Min: 1.4	Max: 7.3 Min: 5.6

Soil Map ID: 7

Soil Component Name: ELKHORN

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Partially hydric
 Corrosion Potential - Uncoated Steel: Moderate
 Depth to Bedrock Min: > 0 inches
 Depth to Waterable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	20 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 7.8 Min: 5.6
2	20 inches	61 inches	sandy clay loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4 Min: 1.4	Max: 7.8 Min: 5.6

Soil Map ID: 8

Soil Component Name: WATSONVILLE

Soil Surface Texture: loam

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: Somewhat poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Waterable Min: > 114 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	AASHTO Group	Classification	Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower					
1	0 inches	18 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200). Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 1.4 Min: 0.42	Max: 8.4 Min: 5.6
2	18 inches	38 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200). Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 1.4 Min: 0.42	Max: 8.4 Min: 5.6
3	38 inches	62 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200). Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 1.4 Min: 0.42	Max: 8.4 Min: 5.6

Soil Map ID: 9

Soil Component Name: BAYWOOD VARIANT

Soil Surface Texture: loamy sand

Hydrologic Group: Class B/D - Drained/undrained hydrology class of soils that can be drained and are classified.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Waterable Min: > 92 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	AASHTO Group	Classification	Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower					
1	0 inches	9 inches	loamy sand	Granular materials (35 pct. or less passing No. 200). Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 7.3 Min: 5.6
2	9 inches	38 inches	loamy sand	Granular materials (35 pct. or less passing No. 200). Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 7.3 Min: 5.6
3	38 inches	55 inches	clay loam	Granular materials (35 pct. or less passing No. 200). Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 7.3 Min: 5.6
4	55 inches	70 inches	sandy loam	Granular materials (35 pct. or less passing No. 200). Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 7.3 Min: 5.6

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 0.001 miles
 State Database: 1,000

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	USGS40000180072	1/8 - 1/4 Mile West
2	USGS40000180106	1/2 - 1 Mile ENE
3	USGS40000179989	1/2 - 1 Mile SE
4	USGS40000180142	1/2 - 1 Mile NNE

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.

STATE DATABASE WELL INFORMATION

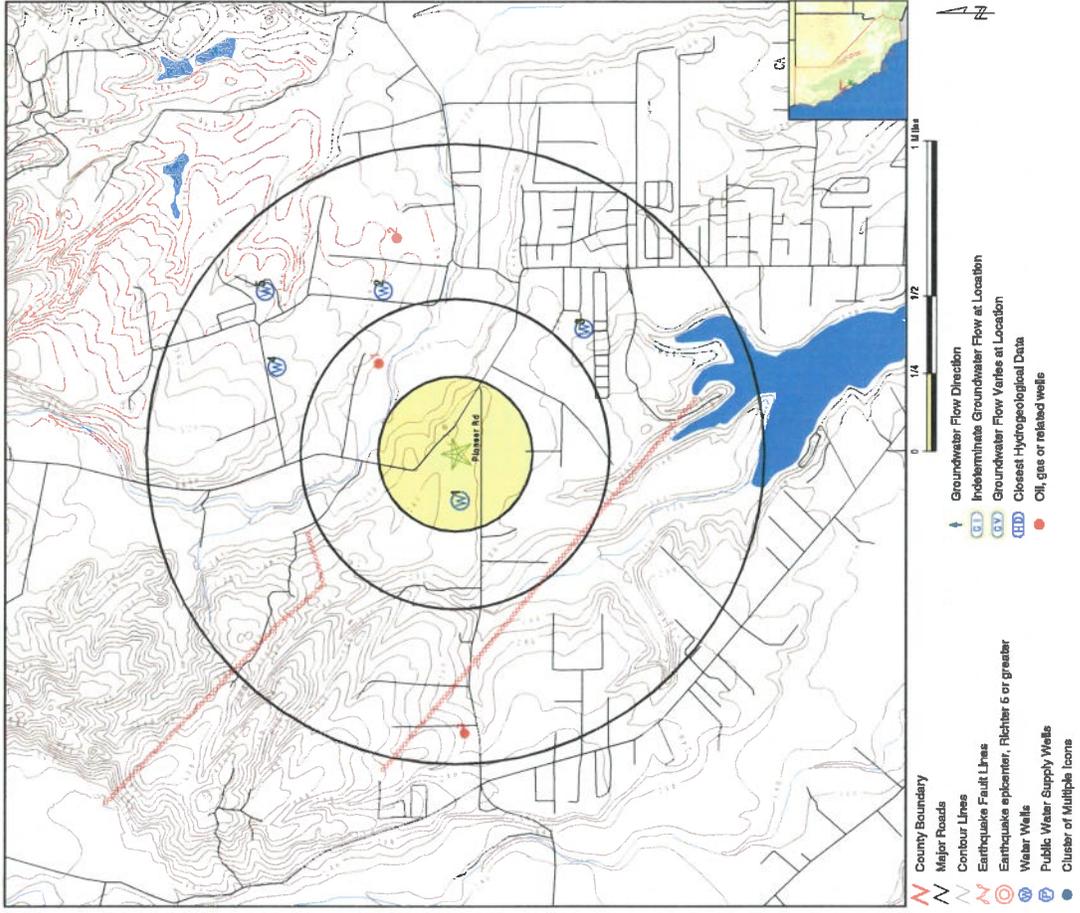
MAP ID	WELL ID	LOCATION FROM TP
5	10569	1/2 - 1 Mile NE

OTHER STATE DATABASE INFORMATION

STATE OIL/GAS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	CAOG31000257772	1/4 - 1/2 Mile NE
2	CAOG31000251643	1/2 - 1 Mile ENE
3	CAOG31000254504	1/2 - 1 Mile West

PHYSICAL SETTING SOURCE MAP - 5452887.2S



SITE NAME: 2x648 Sun Land Garden ESA
ADDRESS: 90 Pioneer Road
 Watsonville CA 96076
LAT/LONG: 36.9723952 / 121.775663

CLIENT: Weber, Hayes, & Associates
CONTACT: Shaun Ersoy
INQUIRY #: 5452887.2S
DATE: October 15, 2018 9:40 am
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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID	Direction	Distance	Elevation	Database	EDR ID Number
1	West	1/8 - 1/4 Mile	Lower	FED USGS	USGS40000180072
Organization ID:	USGS-CA	Organization Name:	USGS California Water Science Center	Well:	1806002
Monitor Location:	0118002E17P001M	HUC:	Not Reported	Drainage Area Units:	Not Reported
Description:	Not Reported	Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Drainage Area:	Not Reported	Contrib Drainage Area:	California Coastal Basin aquifers	Aquifer Type:	Not Reported
Contrib Drainage Area:	California Coastal Basin aquifers	Aquifer Type:	Not Reported	Well Depth:	200
Formation Type:	Aransas Red Sand	Well Depth:	200	Well Hole Depth:	Not Reported
Construction Date:	19560101	Well Hole Depth:	Not Reported		
Well Depth Units:	ft				
Well Hole Depth Units:	Not Reported				
Ground water levels/Number of Measurements:	48	Level reading date:	1983-08-16	Level reading date:	1983-08-16
Feet below surface:	124.83	Feet to sea level:	Not Reported	Feet to sea level:	Not Reported
Note:	Not Reported				
Level reading date:	1983-05-08	Feet below surface:	130.88	Level reading date:	1979-11-21
Feet to sea level:	Not Reported	Note:	Not Reported	Feet to sea level:	Not Reported
Level reading date:	1982-08-09	Feet below surface:	121.82	Level reading date:	1979-10-18
Feet to sea level:	Not Reported	Note:	Not Reported	Feet to sea level:	Not Reported
Level reading date:	1982-03-12	Feet below surface:	121.41	Level reading date:	1979-09-18
Feet to sea level:	Not Reported	Note:	Not Reported	Feet to sea level:	Not Reported
Level reading date:	1981-08-11	Feet below surface:	125.83	Level reading date:	1979-08-15
Feet to sea level:	Not Reported	Note:	The site had been pumped recently.	Feet to sea level:	Not Reported
Level reading date:	1981-04-24	Feet below surface:	121.58	Level reading date:	1979-07-18
Feet to sea level:	Not Reported	Note:	Not Reported	Feet to sea level:	Not Reported
Level reading date:	1981-02-18	Feet below surface:	121.48	Level reading date:	1979-05-19
Feet to sea level:	Not Reported	Note:	Not Reported	Feet to sea level:	Not Reported
Level reading date:	1981-02-19	Feet below surface:	122.04	Level reading date:	1979-05-22
Feet to sea level:	Not Reported	Note:	Not Reported	Feet to sea level:	Not Reported
Level reading date:	1981-01-15	Feet below surface:	122.21	Level reading date:	1979-04-17
Feet to sea level:	Not Reported	Note:	Not Reported	Feet to sea level:	Not Reported
Level reading date:	1980-12-22	Feet below surface:	122.50	Level reading date:	1979-03-13
Feet to sea level:	Not Reported	Note:	Not Reported	Feet to sea level:	Not Reported
Level reading date:	1980-11-14	Feet below surface:	123.02	Level reading date:	1979-02-12
Feet to sea level:	Not Reported	Note:	Not Reported	Feet to sea level:	Not Reported
Level reading date:	1980-10-15	Feet below surface:	123.09	Level reading date:	1979-01-11
Feet to sea level:	Not Reported	Note:	Not Reported	Feet to sea level:	Not Reported
Level reading date:	1980-09-23	Feet below surface:	130.00	Level reading date:	1978-12-12
Feet to sea level:	Not Reported	Note:	Not Reported	Feet to sea level:	Not Reported
Level reading date:	1980-08-14	Feet below surface:	129.91	Level reading date:	1978-11-21
Feet to sea level:	Not Reported	Note:	Not Reported	Feet to sea level:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date:	1980-07-15	Feet below surface:	126.08	Level reading date:	1980-07-15	Feet below surface:	126.08
Feet to sea level:	Not Reported	Note:	The site had been pumped recently.	Feet to sea level:	Not Reported	Note:	The site had been pumped recently.
Level reading date:	1980-06-17	Feet below surface:	120.81	Level reading date:	1980-06-17	Feet below surface:	120.81
Feet to sea level:	Not Reported	Note:	Not Reported	Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-05-14	Feet below surface:	121.08	Level reading date:	1980-05-14	Feet below surface:	121.08
Feet to sea level:	Not Reported	Note:	Not Reported	Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-04-17	Feet below surface:	121.54	Level reading date:	1980-04-17	Feet below surface:	121.54
Feet to sea level:	Not Reported	Note:	Not Reported	Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-03-19	Feet below surface:	121.70	Level reading date:	1980-03-19	Feet below surface:	121.70
Feet to sea level:	Not Reported	Note:	Not Reported	Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-02-19	Feet below surface:	121.62	Level reading date:	1980-02-19	Feet below surface:	121.62
Feet to sea level:	Not Reported	Note:	Not Reported	Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1980-01-17	Feet below surface:	122.27	Level reading date:	1980-01-17	Feet below surface:	122.27
Feet to sea level:	Not Reported	Note:	Not Reported	Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-12-18	Feet below surface:	122.47	Level reading date:	1979-12-18	Feet below surface:	122.47
Feet to sea level:	Not Reported	Note:	Not Reported	Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-11-21	Feet below surface:	123.73	Level reading date:	1979-11-21	Feet below surface:	123.73
Feet to sea level:	Not Reported	Note:	Not Reported	Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-10-18	Feet below surface:	123.17	Level reading date:	1979-10-18	Feet below surface:	123.17
Feet to sea level:	Not Reported	Note:	Not Reported	Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-09-18	Feet below surface:	123.68	Level reading date:	1979-09-18	Feet below surface:	123.68
Feet to sea level:	Not Reported	Note:	Not Reported	Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-08-15	Feet below surface:	122.14	Level reading date:	1979-08-15	Feet below surface:	122.14
Feet to sea level:	Not Reported	Note:	Not Reported	Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-07-18	Feet below surface:	124.2	Level reading date:	1979-07-18	Feet below surface:	124.2
Feet to sea level:	Not Reported	Note:	Not Reported	Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-05-19	Feet below surface:	129.4	Level reading date:	1979-05-19	Feet below surface:	129.4
Feet to sea level:	Not Reported	Note:	Not Reported	Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-05-22	Feet below surface:	121.6	Level reading date:	1979-05-22	Feet below surface:	121.6
Feet to sea level:	Not Reported	Note:	Not Reported	Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-04-17	Feet below surface:	121.1	Level reading date:	1979-04-17	Feet below surface:	121.1
Feet to sea level:	Not Reported	Note:	Not Reported	Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-03-13	Feet below surface:	128.3	Level reading date:	1979-03-13	Feet below surface:	128.3
Feet to sea level:	Not Reported	Note:	Not Reported	Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-02-12	Feet below surface:	125.3	Level reading date:	1979-02-12	Feet below surface:	125.3
Feet to sea level:	Not Reported	Note:	Not Reported	Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1979-01-11	Feet below surface:	125.4	Level reading date:	1979-01-11	Feet below surface:	125.4
Feet to sea level:	Not Reported	Note:	Not Reported	Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-12-12	Feet below surface:	122	Level reading date:	1978-12-12	Feet below surface:	122
Feet to sea level:	Not Reported	Note:	Not Reported	Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-11-21	Feet below surface:	122	Level reading date:	1978-11-21	Feet below surface:	122
Feet to sea level:	Not Reported	Note:	Not Reported	Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date: Feet to sea level:	1978-10-10 Not Reported	Feet below surface: Note:	133.7 Not Reported
Level reading date: Feet to sea level:	1978-09-14 Not Reported	Feet below surface: Note:	122.3 Not Reported
Level reading date: Feet to sea level:	1978-09-07 Not Reported	Feet below surface: Note:	122.5 Not Reported
Level reading date: Feet to sea level:	1978-04-12 Not Reported	Feet below surface: Note:	120.3 Not Reported
Level reading date: Feet to sea level:	1977-10-24 Not Reported	Feet below surface: Note:	123.8 Not Reported
Level reading date: Feet to sea level:	1977-08-17 Not Reported	Feet below surface: Note:	121.8 Not Reported
Level reading date: Feet to sea level:	1977-04-19 Not Reported	Feet below surface: Note:	119.9 Not Reported
Level reading date: Feet to sea level:	1975-04-16 Not Reported	Feet below surface: Note:	116 Not Reported
Level reading date: Feet to sea level:	1972-12-03 Not Reported	Feet below surface: Note:	122 Not Reported
Level reading date: Feet to sea level:	1971-12-01 Not Reported	Feet below surface: Note:	122.00 Not Reported
Level reading date: Feet to sea level:	1971-12 Not Reported	Feet below surface: Note:	122.9 Not Reported
Level reading date: Feet to sea level:	1970-12-01 Not Reported	Feet below surface: Note:	124.7 Not Reported
Level reading date: Feet to sea level:	1970-01-07 Not Reported	Feet below surface: Note:	123.2 Not Reported

FED USGS USGS40000180106

Organization ID: USGS-CA
 Organization Name: USGS California Water Science Center
 Monitor Location: 011S002E17J001M
 Description: Well
 Drainage Area: Not Reported
 Contrib Drainage Area: Not Reported
 Aquifer: California Coastal Basin aquifers
 Formation Type: Not Reported
 Construction Date: 19580612
 Well Depth: 250
 Well Hole Depth: Not Reported

Ground water levels, Number of Measurements: 24
 Feet below surface: 63.54
 Note: Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date: Feet to sea level:	1983-03-08 Not Reported	Feet below surface: Note:	33.38 Not Reported
Level reading date: Feet to sea level:	1982-06-09 Not Reported	Feet below surface: Note:	82.4 Not Reported
Level reading date: Feet to sea level:	1982-03-12 Not Reported	Feet below surface: Note:	43.29 Not Reported
Level reading date: Feet to sea level:	1981-09-09 Not Reported	Feet below surface: Note:	64.78 The site had been pumped recently.
Level reading date: Feet to sea level:	1981-04-24 Not Reported	Feet below surface: Note:	50.39 Not Reported
Level reading date: Feet to sea level:	1980-11-12 Not Reported	Feet below surface: Note:	73.82 The site had been pumped recently.
Level reading date: Feet to sea level:	1980-08-14 Not Reported	Feet below surface: Note:	70.37
Level reading date: Feet to sea level:	1980-04-17 Not Reported	Feet below surface: Note:	42.47 Not Reported
Level reading date: Feet to sea level:	1979-11-21 Not Reported	Feet below surface: Note:	67.22 Not Reported
Level reading date: Feet to sea level:	1979-08-15 Not Reported	Feet below surface: Note:	58.74 Not Reported
Level reading date: Feet to sea level:	1979-04-17 Not Reported	Feet below surface: Note:	52.6 Not Reported
Level reading date: Feet to sea level:	1978-11-21 Not Reported	Feet below surface: Note:	69.5 Not Reported
Level reading date: Feet to sea level:	1978-09-08 Not Reported	Feet below surface: Note:	73.6 Not Reported
Level reading date: Feet to sea level:	1978-04-19 Not Reported	Feet below surface: Note:	37 Not Reported
Level reading date: Feet to sea level:	1977-10-24 Not Reported	Feet below surface: Note:	85.5 Not Reported
Level reading date: Feet to sea level:	1977-04-19 Not Reported	Feet below surface: Note:	72.6 Not Reported
Level reading date: Feet to sea level:	1975-04-16 Not Reported	Feet below surface: Note:	56 Not Reported
Level reading date: Feet to sea level:	1974-11-19 Not Reported	Feet below surface: Note:	0.00
Level reading date: Feet to sea level:	1972-12-03 Not Reported	Feet below surface: Note:	59.4 Not Reported
Level reading date: Feet to sea level:	1971-12 Not Reported	Feet below surface: Note:	55.5 Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date: Feet to sea level:	1970-12-02 Not Reported	Level reading date: Feet to sea level:	42 Not Reported
Level reading date: Feet to sea level:	1970-01-13 Not Reported	Level reading date: Feet to sea level:	40.7 Not Reported
Level reading date: Feet to sea level:	1959-01-01 Not Reported	Level reading date: Feet to sea level:	55.00 Not Reported

FED USGS USGS40000179889

Organization ID: Organization Name: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units:	USGS-CA USGS California Water Sciences Center 011S002E17B001M Well 18060002 Not Reported Not Reported California Coastal Basin aquifers Tarsate Deposits Not Reported Not Reported
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Ground water levels, Number of Measurements: Feet below surface: Note:	24 8.71 Not Reported
Level reading date: Feet to sea level: Note:	1983-03-10 Not Reported Not Reported
Level reading date: Feet to sea level: Note:	1982-10-19 Not Reported Not Reported
Level reading date: Feet to sea level: Note:	1982-08-09 Not Reported Not Reported
Level reading date: Feet to sea level: Note:	1982-03-12 Not Reported Not Reported
Level reading date: Feet to sea level: Note:	1981-06-13 Not Reported Not Reported
Level reading date: Feet to sea level: Note:	1981-04-24 Not Reported Not Reported
Level reading date: Feet to sea level: Note:	1980-11-12 Not Reported Not Reported
Level reading date: Feet to sea level: Note:	1980-08-15 Not Reported Not Reported
Level reading date: Feet to sea level: Note:	1980-04-18 Not Reported Not Reported
Level reading date: Feet to sea level: Note:	1979-11-21 Not Reported Not Reported

The site had been pumped recently.
The site had been pumped recently.
The site had been pumped recently.

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date: Feet to sea level:	1979-08-23 Not Reported	Level reading date: Feet to sea level:	11.54 Not Reported
Level reading date: Feet to sea level:	1979-04-18 Not Reported	Level reading date: Feet to sea level:	10 Not Reported
Level reading date: Feet to sea level:	1978-11-21 Not Reported	Level reading date: Feet to sea level:	13.1 Not Reported
Level reading date: Feet to sea level:	1978-08-08 Not Reported	Level reading date: Feet to sea level:	12.3 Not Reported
Level reading date: Feet to sea level:	1978-04-19 Not Reported	Level reading date: Feet to sea level:	59.5 Not Reported
Level reading date: Feet to sea level:	1977-10-31 Not Reported	Level reading date: Feet to sea level:	17.6 Not Reported
Level reading date: Feet to sea level:	1977-04-19 Not Reported	Level reading date: Feet to sea level:	16.9 Not Reported
Level reading date: Feet to sea level:	1975-04-16 Not Reported	Level reading date: Feet to sea level:	10 Not Reported
Level reading date: Feet to sea level:	1974-11-08 Not Reported	Level reading date: Feet to sea level:	12.2 Not Reported
Level reading date: Feet to sea level:	1972-12-03 Not Reported	Level reading date: Feet to sea level:	15.5 Not Reported
Level reading date: Feet to sea level:	1970-12-03 Not Reported	Level reading date: Feet to sea level:	15.00 Not Reported
Level reading date: Feet to sea level:	1970-12-02 Not Reported	Level reading date: Feet to sea level:	15 Not Reported
Level reading date: Feet to sea level:	1970-01-13 Not Reported	Level reading date: Feet to sea level:	13.8 Not Reported

4
NNE
1/2 - 1 Mile
Higher
FED USGS USGS40000180142

Organization ID: Organization Name: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units:	USGS-CA USGS California Water Sciences Center 011S002E17B001M Well 18060002 Not Reported Not Reported California Coastal Basin aquifers Not Reported Not Reported Not Reported Not Reported
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Ground water levels, Number of Measurements: Feet below surface: Note:	32 220.9 Not Reported
Level reading date: Feet to sea level:	1981-03-20 Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date: Feet to sea level:	1981-02-19 Not Reported	Feet below surface: Note:	220.24 The site had been pumped recently.
Level reading date: Feet to sea level:	1981-01-15 Not Reported	Feet below surface: Note:	217.8 Not Reported
Level reading date: Feet to sea level:	1980-12-22 Not Reported	Feet below surface: Note:	217 Not Reported
Level reading date: Feet to sea level:	1980-11-14 Not Reported	Feet below surface: Note:	220.35 The site had been pumped recently.
Level reading date: Feet to sea level:	1980-10-15 Not Reported	Feet below surface: Note:	226.8 Not Reported
Level reading date: Feet to sea level:	1980-09-23 Not Reported	Feet below surface: Note:	222.43 Not Reported
Level reading date: Feet to sea level:	1980-08-14 Not Reported	Feet below surface: Note:	223.02 Not Reported
Level reading date: Feet to sea level:	1980-07-15 Not Reported	Feet below surface: Note:	231.1 Not Reported
Level reading date: Feet to sea level:	1980-06-17 Not Reported	Feet below surface: Note:	224.75 Not Reported
Level reading date: Feet to sea level:	1980-05-14 Not Reported	Feet below surface: Note:	219.3 Not Reported
Level reading date: Feet to sea level:	1980-04-17 Not Reported	Feet below surface: Note:	219.79 The site had been pumped recently.
Level reading date: Feet to sea level:	1980-03-18 Not Reported	Feet below surface: Note:	216.59 Not Reported
Level reading date: Feet to sea level:	1980-02-19 Not Reported	Feet below surface: Note:	213.06 The site had been pumped recently.
Level reading date: Feet to sea level:	1980-01-17 Not Reported	Feet below surface: Note:	212.25 Not Reported
Level reading date: Feet to sea level:	1978-12-18 Not Reported	Feet below surface: Note:	218.07 Not Reported
Level reading date: Feet to sea level:	1978-11-21 Not Reported	Feet below surface: Note:	218.29 The site had been pumped recently.
Level reading date: Feet to sea level:	1978-10-18 Not Reported	Feet below surface: Note:	220.89 Not Reported
Level reading date: Feet to sea level:	1978-09-18 Not Reported	Feet below surface: Note:	218.16 Not Reported
Level reading date: Feet to sea level:	1978-08-15 Not Reported	Feet below surface: Note:	218.86 Not Reported
Level reading date: Feet to sea level:	1978-07-18 Not Reported	Feet below surface: Note:	219.8 Not Reported
Level reading date: Feet to sea level:	1978-06-21 Not Reported	Feet below surface: Note:	209.2 Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Level reading date: Feet to sea level:	1979-05-22 Not Reported	Feet below surface: Note:	164.8 Not Reported
Level reading date: Feet to sea level:	1979-04-17 Not Reported	Feet below surface: Note:	187.8 Not Reported
Level reading date: Feet to sea level:	1979-03-14 Not Reported	Feet below surface: Note:	187.3 Not Reported
Level reading date: Feet to sea level:	1979-02-13 Not Reported	Feet below surface: Note:	209.4 Not Reported
Level reading date: Feet to sea level:	1979-01-11 Not Reported	Feet below surface: Note:	198.7 Not Reported
Level reading date: Feet to sea level:	1978-12-12 Not Reported	Feet below surface: Note:	209.7 Not Reported
Level reading date: Feet to sea level:	1978-11-21 Not Reported	Feet below surface: Note:	218.9 Not Reported
Level reading date: Feet to sea level:	1978-10-10 Not Reported	Feet below surface: Note:	228.1 The site had been pumped recently.
Level reading date: Feet to sea level:	1978-09-14 Not Reported	Feet below surface: Note:	219.9 Not Reported
Level reading date: Feet to sea level:	1978-08-08 Not Reported	Feet below surface: Note:	220.9 Not Reported

5 NE 1/2 - 1 Mile Lower

CA WELLS 10689

Seq:	10589	Prim sta c:	11S10ZE-17A02 M
Flds no:	440075-4001	County:	44
System no:	4400754	User id:	44C
Source name:	WELL_01	Water type:	G
Latitude:	365853.0	Station by:	WEL/AMBTJUN/INTAKE
Longitude:	3	Longitude:	1214555.0
Precision:	3	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported	Comment 7:	Not Reported
System no:	4400754	System name:	MONTEVISTA CHRISTIAN SCHOOL
Hiname:	Not Reported	Address:	Not Reported
City:	Not Reported	State:	Not Reported
Zip:	Not Reported	Zip ext:	Not Reported
Prop serv:	0	Connection:	0
Area serv:	Not Reported	Findng:	1.06
Sample date:	28-DEC-17	Report units:	PCIL
Chemical:	GROSS ALPHA MD&S	Findng:	2.1
Dir:	0	Report units:	MGIL
Sample date:	28-DEC-17	Findng:	2.1
Chemical:	NITRATE (AS N)	Report units:	MGIL
Dir:	0.4	Report units:	MGIL

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample date: Chemical: Dir:	28-DEC-17 NITRATE + NITRITE (AS N) 0.4	Finding: Report units:	2.1 MG/L
Sample date: Chemical: Dir:	28-DEC-17 GROSS ALPHA COUNTING ERROR 0.	Finding: Report units:	0.191 PC/L
Sample date: Chemical: Dir:	28-DEC-14 NITRATE (AS NO3) 2.	Finding: Report units:	22 MG/L
Sample date: Chemical: Dir:	04-DEC-13 SODIUM CHLORIDE 0.	Finding: Report units:	27 MG/L
Sample date: Chemical: Dir:	04-DEC-13 CHLORIDE 0.	Finding: Report units:	17 MG/L
Sample date: Chemical: Dir:	04-DEC-13 SULFATE 0.5	Finding: Report units:	32 MG/L
Sample date: Chemical: Dir:	04-DEC-13 FLUORIDE (F) (NATURAL-SOURCE) 0.1	Finding: Report units:	0.14 MG/L
Sample date: Chemical: Dir:	04-DEC-13 IRON 100.	Finding: Report units:	140 UG/L
Sample date: Chemical: Dir:	04-DEC-13 TOTAL DISSOLVED SOLIDS 0.	Finding: Report units:	280 MG/L
Sample date: Chemical: Dir:	04-DEC-13 TURBIDITY, LABORATORY 0.1	Finding: Report units:	0.92 NTU
Sample date: Chemical: Dir:	04-DEC-13 MAGNESIUM 0.	Finding: Report units:	25 MG/L
Sample date: Chemical: Dir:	04-DEC-13 CALCIUM 0.	Finding: Report units:	35 MG/L
Sample date: Chemical: Dir:	04-DEC-13 HARDNESS (TOTAL) AS CaCO3 0.	Finding: Report units:	190 MG/L
Sample date: Chemical: Dir:	04-DEC-13 BICARBONATE ALKALINITY 0.	Finding: Report units:	220 MG/L
Sample date: Chemical: Dir:	04-DEC-13 ALKALINITY (TOTAL) AS CaCO3 0.	Finding: Report units:	180 MG/L
Sample date: Chemical:	04-DEC-13 PH, LABORATORY	Finding: Report units:	7.3 Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Dir:	0.	Finding: Report units:	470. US
Sample date: Chemical: Dir:	04-DEC-13 SPECIFIC CONDUCTANCE 0.	Finding: Report units:	2.1 MG/L
Sample date: Chemical: Dir:	04-DEC-13 POTASSIUM 0.	Finding: Report units:	3000. MG/L
Sample date: Chemical: Dir:	14-NOV-12 NITRATE + NITRITE (AS N) 0.4	Finding: Report units:	

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID: Direction Distance Database EDR ID Number

1 NE 1/4 - 1/2 Mile
 Districtnu: 3
 Blmwell: Y
 Dyrhole: Rump Oil Corporation
 Operatoma: Any Field
 Fieldname: 17
 Section: 02E
 Range: Not Reported
 Elevation: hud
 Gissourcec: Leonardich
 Leasename: N
 Epawell: N
 Confidenti: 0
 Welldeptha: Not Reported
 Abandonedd: Not Directionally drilled
 Directions: CAOG1100025772
 Site id:

OIL_GAS CAOG1100025772
 Achnumber: 08720001
 Redrillcan: Not Reported
 Wellstatus: P
 Countyname: Santa Cruz
 Areamame: Any Area
 Township: 11S
 Basemeridi: MD
 Locationde: Not Reported
 Wellnumber: 65-17
 N: N
 Spuddate: Not Reported
 Redrillfoo: 0
 Completion: Not Reported
 Gissymbol: PDH

Epawell: N
 Confidenti: N
 Welldeptha: 0
 Abandonedd: Not Reported
 Directions: Not Directionally drilled
 Site id: CAOG11000254504

Hydraulic: N
 Spuddate: Not Reported
 Redrillfoo: 0
 Completion: Not Reported
 Gissymbol: PDH

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

2 NE 1/2 - 1 Mile
 Districtnu: 3
 Blmwell: N
 Dyrhole: Y
 Operatoma: Cala-Cruz Oil Corp.
 Fieldname: Any Field
 Section: 16
 Range: 02E
 Elevation: Not Reported
 Gissourcec: hud
 Leasename: Not Reported
 Epawell: N
 Confidenti: N
 Welldeptha: 0
 Abandonedd: Not Reported
 Directions: Not Directionally drilled
 Site id: CAOG11000251643

OIL_GAS CAOG11000251643
 Achnumber: 08700004
 Redrillcan: Not Reported
 Wellstatus: P
 Countyname: Santa Cruz
 Areamame: Any Area
 Township: 11N
 Basemeridi: MD
 Locationde: Not Reported
 Wellnumber: 2
 N: N
 Spuddate: Not Reported
 Redrillfoo: 0
 Completion: Not Reported
 Gissymbol: PDH

3 West 1/2 - 1 Mile
 Districtnu: 3
 Blmwell: N
 Dyrhole: Y
 Operatoma: Frank Mealik
 Fieldname: Any Field
 Section: 18
 Range: 02E
 Elevation: Not Reported
 Gissourcec: hud
 Leasename: Not Reported

OIL_GAS CAOG11000254504
 Achnumber: 08700018
 Redrillcan: Not Reported
 Wellstatus: P
 Countyname: Santa Cruz
 Areamame: Any Area
 Township: 11S
 Basemeridi: MD
 Locationde: Not Reported
 Wellnumber: 1

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
95076	226	1

Federal EPA Radon Zone for SANTA CRUZ 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 SANTA CRUZ COUNTY, CA

Number of sites tested: 9

Area	Average Activity	% <= 4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1,100 pCi/L	89%	11%	0%
Living Area - 2nd Floor	1,500 pCi/L	100%	0%	0%
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 Geological Survey
 EDR entered 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.

Current USGS 7.5 Minute Topographic Map
 Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA
 Telephone: 877-335-2827
 Date of Government Version: 2003, 2015

NMI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
 Source: Department of Fish and Wildlife
 Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW[®] 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. Sawick, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.H. Balkman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
 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 Service (NRCS)
 Telephone: 800-672-5559
 SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:93,300. 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, township and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PMS: 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.

PMS 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 1985. Prior to August 1985, 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: 916-851-9848

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2318

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
Oil and Gas well locations in the state.

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, 800-457-6956

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 States 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

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APPENDIX D

*Related Reports, Closure Letters
and Regulatory Correspondence*

-
Spill Prevention Countermeasure & Contingency (SPCC) Plan
(2017)

**Spill Prevention Control and
Countermeasure Plan
(SPCC)**



Sun Land Garden Products

90 Pioneer Road

Watsonville, CA 95076

February 20, 2017

Table of Content

Item	Section
Oil Storage Containers and Secondary Containment.....	1
Inspections, Testing, Recordkeeping and Personal Training Logs.....	2
Security & Oil Discharge Emergency Procedures & Contacts.....	3
NRC Notification Procedure.....	4
Facility Maps & EPA 40 CFR 112.....	5

Tier I Qualified Facility SPCC Plan

This template constitutes the SPCC Plan for the facility, when completed and signed by the owner or operator of a facility that meets the applicability criteria in §112.3(g)(1). This template addresses the requirements of 40 CFR part 112. Maintain a complete copy of the Plan at the facility if the facility is normally attended at least four hours per day, or for a facility attended fewer than four hours per day, at the nearest field office. When making operational changes at a facility that are necessary to comply with the rule requirements, the owner/operator should follow state and local requirements (such as for permitting, design and construction) and obtain professional assistance, as appropriate.

Facility Description

Facility Name Sun Land Garden Products
 Facility Address 90 Pioneer Road
 City Watsonville State CA ZIP 95076
 County Santa Cruz Tel. Number (831) 724-6500
 Owner or Operator Name Martin Reyes
 Owner or Operator Address 1310 Primavera Street #108
 City Salinas State CA ZIP 93901
 County Monterey Tel. Number (831) 713-8199

I. Self-Certification Statement (§112.6(a)(1))

The owner or operator of a facility certifies that each of the following is true in order to utilize this template to comply with the SPCC requirements:

Martin Reyes certify that the following is accurate:

1. I am familiar with the applicable requirements of 40 CFR part 112;
2. I have visited and examined the facility;
3. This Plan was prepared in accordance with accepted and sound industry practices and standards;
4. Procedures for required inspections and testing have been established in accordance with industry inspection and testing standards or recommended practices;
5. I will fully implement the Plan;
6. This facility meets the following qualification criteria (under §112.3(g)(1)):
 - a. The aggregate aboveground oil storage capacity of the facility is 10,000 U.S. gallons or less; and
 - b. The facility has had no single discharge as described in §112.1(b) exceeding 1,000 U.S. gallons and no two discharges as described in §112.1(b) each exceeding 42 U.S. gallons within any twelve month period in the three years prior to the SPCC Plan self-certification date, or since becoming subject to 40 CFR part 112 if the facility has been in operation for less than three years (not including oil discharges as described in §112.1(b) that are the result of natural disasters, acts of war, or terrorism); and
 - c. There is no individual oil storage container at the facility with an aboveground capacity greater than 5,000 U.S. gallons.
7. This Plan does not deviate from any requirement of 40 CFR part 112 as allowed by §112.7(a)(2) (environmental equivalence) and §112.7(d) (impracticability of secondary containment) or include any measures pursuant to §112.9(c)(6) for produced water containers and any associated piping;
8. This Plan and individual(s) responsible for implementing this Plan have the full approval of management and I have committed the necessary resources to fully implement this Plan.

I also understand my other obligations relating to the storage of oil at this facility, including, among others:

1. To report any oil discharge to navigable waters or adjoining shorelines to the appropriate authorities. Notification information is included in this Plan.
2. To review and amend this Plan whenever there is a material change at the facility that affects the potential for an oil discharge, and at least once every five years. Reviews and amendments are recorded in an attached log [See Five Year Review Log and Technical Amendment Log in Attachments 1.1 and 1.2.]
3. Optional use of a contingency plan. A contingency plan:
 - a. May be used in lieu of secondary containment for qualified oil-filled operational equipment, in accordance with the requirements under §112.7(k), and;
 - b. Must be prepared for flowlines and/or intra-facility gathering lines which do not have secondary containment at an oil production facility, and;
 - c. Must include an established and documented inspection or monitoring program; must follow the provisions of 40 CFR part 109; and must include a written commitment of manpower, equipment and materials to expeditiously remove any quantity of oil discharged that may be harmful. If applicable, a copy of the contingency plan and any additional documentation will be attached to this Plan as Attachment 2.

I certify that I have satisfied the requirement to prepare and implement a Plan under §112.3 and all of the requirements under §112.6(a). I certify that the information contained in this Plan is true.

Signature 
 Name Marvin Reyes

Title: Director - Sun Land operations
 Date: 02/20/2017

II. Record of Plan Review and Amendments

Five Year Review (§112.5(b)):

Complete a review and evaluation of this SPCC Plan at least once every five years. As a result of the review, amend this Plan within six months to include more effective prevention and control measures for the facility, if applicable. Implement any SPCC Plan amendment as soon as possible, but no later than six months following Plan amendment. Document completion of the review and evaluation, and complete the Five Year Review Log in Attachment 1.1. If the facility no longer meets Tier I qualified facility eligibility, the owner or operator must revise the Plan to meet Tier II qualified facility requirements, or complete a full PE certified Plan.

Table G-1 Technical Amendments (§§112.5(a), (c) and 112.6(a)(2))

This SPCC Plan will be amended when there is a change in the facility design, construction, operation, or maintenance that materially affects the potential for a discharge to navigable waters or adjoining shorelines. Examples include adding or removing containers, reconstruction, replacement, or installation of piping systems, changes to secondary containment systems, changes in product stored at this facility, or revisions to standard operating procedures.	<input type="checkbox"/>
Any technical amendments to this Plan will be re-certified in accordance with Section I of this Plan template. [§112.6(a)(2)] [See Technical Amendment Log in Attachment 1.2]	<input type="checkbox"/>

ATTACHMENT 1 – Five Year Review and Technical Amendment Logs

ATTACHMENT 1.1 – Five Year Review Log

I have completed a review and evaluation of the SPCC Plan for this facility, and will/will not amend this Plan as a result.

Table G-13 Review and Evaluation of SPCC Plan for Facility

Review Date	Plan Amendment		Name and signature of person authorized to review this Plan
	Will Amend	Will Not Amend	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	

Table G-4 below identifies the tanks and containers at the facility with the potential for an oil discharge; the mode of failure; the flow direction and potential quantity of the discharge; and the secondary containment method and containment capacity that is provided.

Table G-4 Containers with Potential for an Oil Discharge						
Area	Type of failure (discharge scenario)	Potential discharge volume (gallons)	Direction of flow for uncontained discharge ^c	Secondary containment method ^a	Secondary containment capacity (gallons)	
Bulk Storage Containers and Mobile/Portable Containers^b						
Northern Yard	Leak, spill	1,500		Retaining walls	1,700	
Mechanics Shop	Leak, spill	715		Retaining walls	715	
South-West Yard	Leak, spill	1,000		Retaining walls	1,800	
Western Yard	Leak, spill	117		Retaining walls		
Oil-filled Operational Equipment (e.g., hydraulic equipment, transformers)^d						
Piping, Valves, etc.						
Product Transfer Areas (location where oil is loaded to or from a container, pipe or other piece of equipment.)						
Other Oil-Handling Areas or Oil-Filled Equipment (e.g. flow-through process vessels at an oil production facility)						

^a Use one of the following methods of secondary containment or its equivalent: (1) Dikes, berms, or retaining walls sufficiently impervious to contain oil; (2) Curbing; (3) Culverting, gutters, or other drainage systems; (4) Weirs, booms, or other barriers; (5) Spill diversion ponds; (6) Retention ponds; or (7) Sorbent materials.
^b For storage tanks and bulk storage containers, the secondary containment capacity must be at least the capacity of the largest container plus additional capacity to contain rainfall or other precipitation.
^c For oil-filled operational equipment: Document in the table above if alternative measures to secondary containment (as described in §112.7(k)) are implemented at the facility.



90 Pioneer Road
Watsonville, CA 95076
(831) 724-6500 Phone
(831) 724-9443 Fax
www.sunlandgarden.com

Hazardous Materials Spills

In the event of a small hazardous material spill, use the provided spill kit and ensure the following:

- Assess the toxicity, flammability, or other properties of material.
- For flammables, remove or turn off ignition sources such as motors, pumps, machines.
- Determine if there is an immediate health threat to you or your neighbors. If so, alert neighbors, isolate the area and call for help.
- If spill is minor, safely begin cleanup using following steps:
 - Wear protective gloves and safety glasses
 - Use socks from the kit to contain spill
 - Clean spill using absorbent pads and/or pillows
 - Storage and dispose of any material used to clean spill.
- Notify Director of Sun Land Operations of the spill and of material to restock.
 - Director of Sun Land Operations: Martin Reyes @ (831) 713-8199

You should NOT clean up a spill if the following is applicable and contact Director of Sun Land Operations:

- You lack the necessary protection or equipment to do the job safely
- The spill is too large to contain
- The spilled material is highly toxic

Note: If an emergency, call 911



90 Pioneer Road
Watsonville, CA 95076
(831) 724-6500 Phone
(831) 724-9443 Fax
www.sunlandgarden.com

Derrames Peligrosos

En el caso de un pequeño derrame material peligroso, asegurar lo siguiente:

- Evaluar la toxicidad, inflamabilidad y otras propiedades del material.
- Para productos inflamables, apagar fuentes de ignición tales como motores y máquinas.
- Determinar si existe un peligro a la salud a usted o a sus vecinos. Si es así, alerta vecinos, aislar la zona y pedir ayuda.
- Si el derrame es menor, comenzar con seguridad la limpieza utilizando las siguientes medidas:
 - Usa guantes protectores y gafas de seguridad
 - Usa calcetines del kit para contener el derrame
 - Limpia derrames usando toalla absorbente o almohadillas
 - Disponer de cualquier material utilizado para limpiar derrames.
- Notificar al Director de Sun Land del derrame y del material a reponer.
 - Director de Sun Land: Martin Reyes @ (831) 713-8199

NO debe limpiar un derrame si lo siguiente es aplicable y contacto Director de Sun Land terrestres:

- Te falta la protección necesaria o el equipo para hacer el trabajo con seguridad
- Es demasiado grande como para contener el derrame
- El material derramado es altamente tóxico

Nota: Si una emergencia, llame al 911

3. Inspections, Testing, Recordkeeping and Personnel Training (§§112.7(e) and (f), 112.8(c)(6) and (d)(4), 112.9(c)(3), 112.12(c)(6) and (d)(4)):

Table G-5 Inspections, Testing, Recordkeeping and Personnel Training

Is an inspection and/or testing program implemented for all aboveground bulk storage containers and piping at this facility. [§§112.8(c)(6) and (d)(4), 112.9(c)(3), 112.12(c)(6) and (d)(4)]

The following is a description of the inspection and/or testing program (e.g. reference to industry standard utilized, scope, frequency, method of inspection or test, and person conducting the inspection) for all aboveground bulk storage containers and piping at this facility:

The following tasks are to be done on a MONTHLY basis:

- 1) Visually inspect tanks by checking for:
 - a) Cracks or physical damage
 - b) Leaking or unusual moisture
 - c) Excessive rust or corrosion/deterioration

- 2) Clean excessive dirt or other debris while alert for:
 - a) Physical damage or leaks
 - b) Structural weaknesses or instability

- 3) If any small damages, leaks or any other potential dangers are detected, **NOTIFY** Director of Sun Land and designated oil handlers for further analysis or corrective maintenance.

<u>Title</u>	<u>Name</u>	<u>Contact Information</u>
Director of Sun Land	Martin Reyes	(831) 713-8199 or 2-Way Radio
Mechanic	Abel Espinosa	2-Way Radio
Maintenance	Fernando Alvarado	2-Way Radio

Inspections, tests, and records are conducted in accordance with written procedures developed for the facility. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph. [§112.7(e)]

A record of the inspections and tests are kept at the facility or with the SPCC Plan for a period of three years. [§112.7(e)] [See Inspection Log and Schedule in Attachment 3.1]

Inspections and tests are signed by the appropriate supervisor or inspector. [§112.7(e)]

Personnel, training, and discharge prevention procedures [§112.7(f)]

Oil-handling personnel are trained in the operation and maintenance of equipment to prevent discharges; discharge procedure protocols; applicable pollution control laws, rules, and regulations; general facility operations; and, the contents of the facility SPCC Plan. [§112.7(f)]

A person who reports to facility management is designated and accountable for discharge prevention. [§112.7(f)]

Name/Title: Abel Espinosa/Mechanic & Fernando Alvarado/Maintenance

Discharge prevention briefings are conducted for oil-handling personnel annually to assure adequate understanding of the SPCC Plan for that facility. Such briefings highlight and describe past reportable discharges or failures, malfunctioning components, and any recently developed precautionary measures. [§112.7(f)]

[See Oil-handling Personnel Training and Briefing Log in Attachment 3.4]

ATTACHMENT 3.2 – Bulk Storage Container Inspection Schedule – onshore facilities (excluding production):

To comply with integrity inspection requirement for bulk storage containers, inspect/test each shop-built aboveground bulk storage container on a regular schedule in accordance with a recognized container inspection standard based on the minimum requirements in the following table.

Table G-17 Bulk Storage Container Inspection Schedule

Container Size and Design Specification	Inspection requirement
Portable containers (including drums, totes, and intermodal bulk containers (IBC))	Visually inspect monthly for signs of deterioration, discharges or accumulation of oil inside diked areas
55 to 1,100 gallons with sized secondary containment	Visually inspect monthly for signs of deterioration, discharges or accumulation of oil inside diked areas plus any annual inspection elements per industry inspection standards
1,101 to 5,000 gallons with sized secondary containment and a means of leak detection ^a	
1,101 to 5,000 gallons with sized secondary containment and no method of leak detection ^a	Visually inspect monthly for signs of deterioration, discharges or accumulation of oil inside diked areas, plus any annual inspection elements and other specific integrity tests that may be required per industry inspection standards

^a Examples of leak detection include, but are not limited to, double-walled tanks and elevated containers where a leak can be visually identified.



OIL TANK INSPECTION PROCEDURES

The following tasks are to be done on a MONTLY basis:

- 1) Visually inspect tanks by checking for:
 - Cracks or physical damage
 - Leaking or unusual moisture
 - Excessive rust or corrosion/deterioration
- 2) Visually inspect hoses and connections by checking for:
 - Cracks or physical damage
 - Leaking or unusual moisture
 - Excessive wear and tear
- 3) Clean excessive dirt or other debris while alert for:
 - Physical damage or leaks
 - Structural weaknesses or instability
- 4) If excess water has accumulated in secondary containment, notify Director of Sun Land for appropriate procedures and supervision.
- 5) If any small damages, leaks or any other potential dangers are detected, NOTIFY Director of Sun Land and designated oil handlers for further analysis or corrective maintenance.

<u>Title</u>	<u>Name</u>	<u>Contact Information</u>
Director of Sun Land	Martin Reyes	(831) 713-8199 or 2-Way Radio
Mechanic	Abel Espinosa	(831) 970-0257 or 2-Way Radio
Maintenance	Fernando Alvarado	(323) 762-4420 or 2-Way Radio

Comments: _____



PROCEDIMIENTOS DE INSPECCIÓN DE TANQUE DE ACEITE

Las tareas siguientes deben realizarse en forma MENSUAL:

- 1) Inspección visualmente de los tanques:
 - Grietas o daños físicos
 - Filtraciones o humedad raro
 - Oxidación excesiva o corrosión
- 2) Inspección de las mangueras y conexiones comprobando:
 - Grietas o daños físicos
 - Filtraciones o humedad inusual
 - Desgaste excesivo
- 3) Limpiar suciedad excesiva mientras alerta para:
 - Daños físicos o fugas
 - Debilidades estructurales o inestabilidad
- 4) Si el exceso de agua se ha acumulado en contención secundaria, notifica al Director de Sun Land por procedimientos adecuados y supervisión.
- 5) Si miras pequeños daños, fugas o cualquier otro peligro potencial, **NOTIFICA** el Director de Sun Land para más análisis o correctivo mantenimiento.

<u>Título</u>	<u>Nombre</u>	<u>Información de contacto</u>
Director de Sun Land	Martin Reyes	(831) 713-8199 o 2-Way Radio
Mecánico	Abel Espinosa	(831) 970-0257 o 2-Way Radio
Mantenimiento	Fernando Alvarado	(323) 762-4420 o 2-Way Radio

Comentarios: _____

ATTACHMENT 3 – Inspections, Dike Drainage and Personnel Training Logs

ATTACHMENT 3.1 – Inspection Log and Schedule

April 1, 2017

Table G-16 Inspection Log and Schedule
This log is intended to document compliance with §§112.5(a)(3)(e), 112.5(c)(6), 112.5(d)(4), 112.5(f)(2), 112.5(f)(3), 112.9(d)(1), 112.9(d)(4), 112.12(c)(6), and 112.12(d)(4), as applicable.

Date of Inspection	Container / Piping / Equipment	Describe Scope (or cite Industry Standard)	Observations	Name/ Signature of Inspector	Records maintained separately ^a
	500 Gal Gasoline		Mild Rusting Good stability, no leaks, good hoses	Martin Reyes M.R.	<input type="checkbox"/>
	1,000 Gal Diesel		Clean, good stability, no leaks, good hoses	Martin Reyes M.R.	<input type="checkbox"/>
	2,000 Gal Diesel		Clean, no leaks, good hoses, structurally sound	Martin Reyes M.R.	<input type="checkbox"/>
	117 Gal Diesel		Mild Rusting, No leaks, → adds secondary containment size	Martin Reyes M.R.	<input type="checkbox"/>
	Mechanic shop oil/hydraulic		Clean containers → A hose in motor oil container is not properly clamped. so small leak is present	Martin Reyes M.R.	<input type="checkbox"/>

^a Indicate in the table above if records of facility inspections are maintained separately at this facility.

Facility Name: _____

ATTACHMENT 3 – Inspections, Dike Drainage and Personnel Training Logs

ATTACHMENT 3.1 – Inspection Log and Schedule

Table G-16 Inspection Log and Schedule

This log is intended to document compliance with §§12 B.a(3)(a), 12 B.c(5), 12 B.(f)(4), 12 B.(f)(3), 12 B.(f)(1), 12 B.(f)(4), 12.12 (a), (b), and 12.12(c)(4) as applicable

Date of Inspection	Container / Piping / Equipment	Describe Scope (or cite Industry Standard)	Observations	Name/ Signature of Inspector	Records maintained separately ^a
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>

^a Indicate in the table above if records of facility inspections are maintained separately at this facility.

Facility Name: _____

ATTACHMENT 3 – Inspections, Dike Drainage and Personnel Training Logs

ATTACHMENT 3.1 – Inspection Log and Schedule

Table G-16 Inspection Log and Schedule

This log is intended to document compliance with §§ 112.8(a)(3)(e), 112.8(c)(6), 112.8(d)(4), 112.9(b)(2), 112.9(c)(3), 112.9(d)(1), 112.9(d)(4), 112.12.(c)(6), and 112.12(d)(4), as applicable.

Date of Inspection	Container / Piping / Equipment	Describe Scope (or cite Industry Standard)	Observations	Name/ Signature of Inspector	Records maintained separately ^a
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>

^a Indicate in the table above if records of facility inspections are maintained separately at this facility.

Facility Name: _____

ATTACHMENT 3 -- Inspections, Dike Drainage and Personnel Training Logs

ATTACHMENT 3.1 -- Inspection Log and Schedule

This log is intended to document compliance with §§ 12.8(a)(2)(vi), 12.8(c)(6), 12.8(d)(4), 12.9(b)(2), 12.9(c)(3), 12.9(d)(1), 12.9(d)(4), 12.12(c)(6), and 12.12(d)(4), as applicable.

Date of Inspection	Container / Piping / Equipment	Describe Scope (or cite Industry Standard)	Observations	Name/ Signature of Inspector	Records maintained separately ^a
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>

^a Indicate in the table above if records of facility inspections are maintained separately at this facility.

Facility Name: _____

ATTACHMENT 3 -- Inspections, Dike Drainage and Personnel Training Logs

ATTACHMENT 3.1 -- Inspection Log and Schedule

Table G-16 Inspection Log and Schedule

This log is intended to document compliance with §§112.6(a)(3)(iii), 112.8(c)(6), 112.8(d)(4), 112.9(b)(2), 112.9(c)(3), 112.9(d)(1), 112.9(d)(4), 112.12(c)(5), and 112.12(d)(4) as applicable

Date of Inspection	Container / Piping / Equipment	Describe Scope (or cite Industry Standard)	Observations	Name/ Signature of Inspector	Records maintained separately ^a
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>

^a Indicate in the table above if records of facility inspections are maintained separately at this facility.

Facility Name: _____

ATTACHMENT 3 – Inspections, Dike Drainage and Personnel Training Logs

ATTACHMENT 3.1 – Inspection Log and Schedule

Table G-16 Inspection Log and Schedule

This log is intended to document compliance with 85112.6(a)(3)(vi), 112.8(d)(6), 112.8(d)(4), 112.9(b)(2), 112.9(b)(3), 112.9(d)(1), 112.9(d)(4), 112.12(c)(6), and 112.12(d)(4) as applicable.

Date of Inspection	Container / Piping / Equipment	Describe Scope (or cite Industry Standard)	Observations	Name/ Signature of Inspector	Records maintained separately ^a
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>

^a Indicate in the table above if records of facility inspections are maintained separately at this facility.

Facility Name: _____

ATTACHMENT 3.3 - Dike Drainage Log

Table G-18 Dike Drainage Log

Date	Bypass valve sealed closed	Rainwater inspected to be sure no oil (or sheen) is visible	Open bypass valve and reseal it following drainage	Drainage activity supervised	Observations	Signature of Inspector
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Facility Name: _____

Table G-18 Dike Drainage Log

Date	Bypass valve sealed closed	Rainwater inspected to be sure no oil (or sheen) is visible	Open bypass valve and reseal it following drainage	Drainage activity supervised	Observations	Signature of Inspector
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Facility Name: _____

ATTACHMENT 3.3 – Dike Drainage Log

Table G-18 Dike Drainage Log

Date	Bypass valve sealed closed	Rainwater inspected to be sure no oil (or sheen) is visible	Open bypass valve and reseal it following drainage	Drainage activity supervised	Observations	Signature of Inspector
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Facility Name: _____

Table G-18 Dike Drainage Log

Date	Bypass valve sealed closed	Rainwater inspected to be sure no oil (or sheen) is visible	Open bypass valve and reseal it following drainage	Drainage activity supervised	Observations	Signature of Inspector
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Facility Name: _____

ATTACHMENT 3.3 – Dike Drainage Log

Table G-18 Dike Drainage Log

Date	Bypass valve sealed closed	Rainwater inspected to be sure no oil (or sheen) is visible	Open bypass valve and reseal it following drainage	Drainage activity supervised	Observations	Signature of Inspector
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Facility Name: _____

ATTACHMENT 3.4 - Oil-handling Personnel Training and Briefing Log

Table G-19 Oil-Handling Personnel Training and Briefing Log

Date	Description / Scope	Attendees
2/20/17	<ul style="list-style-type: none"> • Describe inspection procedures for aboveground tanks • Describe procedure to clean minor spills & major discharges • Emphasize importance of SPEC • [112.7(f) & 112.7(f)] 	<ul style="list-style-type: none"> • Abel Espinosa • Fernando Alvarado • Martin Reyes

4. Security (excluding oil production facilities) §112.7(g):**Table G-6 Implementation and Description of Security Measures**

Security measures are implemented at this facility to prevent unauthorized access to oil handling, processing, and storage area.

The following is a description of how you secure and control access to the oil handling, processing and storage areas; secure master flow and drain valves; prevent unauthorized access to starter controls on oil pumps; secure out-of-service and loading/unloading connections of oil pipelines; address the appropriateness of security lighting to both prevent acts of vandalism and assist in the discovery of oil discharges:

The following are to be ensured every night:

- Facility gates are closed and locked.
- Each oil tank is securely locked to prevent unauthorized use.

5. Emergency Procedures and Notifications (§112.7(a)(3)(iv) and 112.7(a)(5)):**Table G-7 Description of Emergency Procedures and Notifications**

The following is a description of the immediate actions to be taken by facility personnel in the event of a discharge to navigable waters or adjoining shorelines [§112.7(a)(3)(iv) and 112.7(a)(5)]:

In the immediate event of an oil discharge out of the facility into city water lines, the following procedures are to be followed:

- 1) If any injury or emergency (ie. Fire or Explosion), call **911**.
- 2) If everyone is accountable and safe, immediately call:
 - a) **Martin Reyes – Director of Sun Land** @ (831) 713-8199
 - b) **Watsonville Fire Department** @ (831) 768-3200
 - c) **National Response Center (NRC)** @ 1-800-424-8802

ATTACHMENT 2 – Oil Spill Contingency Plan and Checklist

n oil spill contingency plan and written commitment of resources is required for:

- Flowlines and intra-facility gathering lines at oil production facilities and
- Qualified oil-filled operational equipment which has no secondary containment.

An oil spill contingency plan meeting the provisions of 40 CFR part 109, as described below, and a written commitment of manpower, equipment and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful is attached to this Plan.	<input type="checkbox"/>
--	--------------------------

Complete the checklist below to verify that the necessary operations outlined in 40 CFR part 109 - Criteria for State, Local and Regional Oil Removal Contingency Plans - have been included.

Table G-15 Checklist of Development and Implementation Criteria for State, Local and Regional Oil Removal Contingency Plans (§109.5)²

(a) Definition of the authorities, responsibilities and duties of all persons, organizations or agencies which are to be involved in planning or directing oil removal operations.	<input type="checkbox"/>
(b) Establishment of notification procedures for the purpose of early detection and timely notification of an oil discharge including:	
(1) The identification of critical water use areas to facilitate the reporting of and response to oil discharges.	<input type="checkbox"/>
(2) A current list of names, telephone numbers and addresses of the responsible persons (with alternates) and organizations to be notified when an oil discharge is discovered.	<input type="checkbox"/>
(3) Provisions for access to a reliable communications system for timely notification of an oil discharge, and the capability of interconnection with the communications systems established under related oil removal contingency plans, particularly State and National plans (e.g., NCP).	<input type="checkbox"/>
(4) An established, prearranged procedure for requesting assistance during a major disaster or when the situation exceeds the response capability of the State, local or regional authority.	<input type="checkbox"/>
(c) Provisions to assure that full resource capability is known and can be committed during an oil discharge situation including:	
(1) The identification and inventory of applicable equipment, materials and supplies which are available locally and regionally.	<input type="checkbox"/>
(2) An estimate of the equipment, materials and supplies which would be required to remove the maximum oil discharge to be anticipated.	<input type="checkbox"/>
(3) Development of agreements and arrangements in advance of an oil discharge for the acquisition of equipment, materials and supplies to be used in responding to such a discharge.	<input type="checkbox"/>
(d) Provisions for well defined and specific actions to be taken after discovery and notification of an oil discharge including:	
(1) Specification of an oil discharge response operating team consisting of trained, prepared and available operating personnel.	<input type="checkbox"/>
(2) Predesignation of a properly qualified oil discharge response coordinator who is charged with the responsibility and delegated commensurate authority for directing and coordinating response operations and who knows how to request assistance from Federal authorities operating under existing national and regional contingency plans.	<input type="checkbox"/>
(3) A preplanned location for an oil discharge response operations center and a reliable communications system for directing the coordinated overall response operations.	<input type="checkbox"/>
(4) Provisions for varying degrees of response effort depending on the severity of the oil discharge.	<input type="checkbox"/>
(5) Specification of the order of priority in which the various water uses are to be protected where more than one water use may be adversely affected as a result of an oil discharge and where response operations may not be adequate to protect all uses.	<input type="checkbox"/>
(6) Specific and well defined procedures to facilitate recovery of damages and enforcement measures as provided for by State and local statutes and ordinances.	<input type="checkbox"/>

The contingency plan must be consistent with all applicable state and local plans, Area Contingency Plans, and the National Contingency Plan (NCP)



90 Pioneer Road
Watsonville, CA 95076
(831) 724-6500 Phone
(831) 724-9443 Fax
www.sunlandgarden.com

Discharge of Oil and Other Hazardous Material

In the immediate event of an oil discharge out of the facility into city water lines, the following procedures are to be followed:

1. If safe to do so, turn off or contain source of oil discharge
2. Access your surroundings to ensure no one is hurt or if an emergency is apparent (ie. Fire, Explosion, etc).
 - **If there's an injury or emergency, call 911**
3. If everyone is safe and accountable, immediately begin to call and/or attempt to contact the following:

Contact	Method of Communication
Martin Reyes – Director of Sun Land	Phone: (831) 713-8199 OR 2-Way Radio
Abel Espinosa - Mechanic	2-Way Radio
Fernando Alvarado - Maintenance	2-Way Radio
Watsonville Fire Department	(831) 768-3200
National Response Center (NRC)	1-800-424-8802

***For more contacts, reference the contact sheet provided**



90 Pioneer Road
Watsonville, CA 95076
(831) 724-6500 Phone
(831) 724-9443 Fax
www.sunlandgarden.com

Descarga de aceite y otros materiales peligrosos

En el caso de una descarga de aceite fuera de las instalaciones en las líneas de agua de la ciudad, los siguientes procedimientos son a seguir:

1. Si es seguro hacerlo, apaga o contienen fuente de descarga de aceite
2. Asegurar nadie esta lastimado o si no hay un emergencia (ie. Incendio, explosión, etc).
 - **Si hay una lesión o emergencia, llame al 911**
3. Si todos estan seguro y no hay urgente emergencia, inmediatamente comienzan a llamar o trate de ponerse en contacto con el siguiente:

Contacto	Forma de commincarse
Martin Reyes – Director de Sun Land	Telephono: (831) 713-8199 OR 2-Way Radio
Abel Espinosa - Mechanico	2-Way Radio
Fernando Alvarado - Mantenimiento	2-Way Radio
Watsonville Fire Department	(831) 768-3200
National Response Center (NRC)	1-800-424-8802

***Para más contactos, hacer referencia a la hoja de contactos**

6. Contact List (§112.7(a)(3)(vi)):

Table G-8 Contact List	
Contact Organization / Person	Telephone Number
National Response Center (NRC)	1-800-424-8802
Cleanup Contractor(s)	
Key Facility Personnel	
Designated Person Accountable for Discharge Prevention:	Office: (831) 724-6500 x 7132
Martin Reyes	Emergency: (831) 713-8199
Abel Espinosa	Office:
	Emergency: (831) 970-0257
Fernando Alvarado	Office:
	Emergency: (323) 406-3919
	Office:
	Emergency:
State Oil Pollution Control Agencies	
Other State, Federal, and Local Agencies	
Santa County Inmate Unit	(831) 454-2022
Local Fire Department	(831) 762-3200
Local Police Department	(831) 763-4420
Hospital	(831) 724-4741
Other Contact References (e.g., downstream water intakes or neighboring facilities)	

7. NRC Notification Procedure (§112.7(a)(4) and (a)(5)):

Table G-9 NRC Notification Procedure	
In the event of a discharge of oil to navigable waters or adjoining shorelines, the following information identified in Attachment 4 will be provided to the National Response Center immediately following identification of a discharge to navigable waters or adjoining shorelines [See Discharge Notification Form in Attachment 4]: [§112.7(a)(4)]	<input type="checkbox"/>
<ul style="list-style-type: none"> • The exact address or location and phone number of the facility; • Date and time of the discharge; • Type of material discharged; • Estimate of the total quantity discharged; • Estimate of the quantity discharged to navigable waters; • Source of the discharge; 	<ul style="list-style-type: none"> • Description of all affected media; • Cause of the discharge; • Any damages or injuries caused by the discharge; • Actions being used to stop, remove, and mitigate the effects of the discharge; • Whether an evacuation may be needed; and • Names of individuals and/or organizations who have also been contacted.

8. SPCC Spill Reporting Requirements (Report within 60 days) (§112.4):

Submit information to the EPA Regional Administrator (RA) and the appropriate agency or agencies in charge of oil pollution control activities in the State in which the facility is located within 60 days from one of the following discharge events:

- A single discharge of more than 1,000 U.S. gallons of oil to navigable waters or adjoining shorelines or
- Two discharges to navigable waters or adjoining shorelines each more than 42 U.S. gallons of oil occurring within any twelve month period

You must submit the following information to the RA:

- (1) Name of the facility;
- (2) Your name;
- (3) Location of the facility;
- (4) Maximum storage or handling capacity of the facility and normal daily throughput;
- (5) Corrective action and countermeasures you have taken, including a description of equipment repairs and replacements;
- (6) An adequate description of the facility, including maps, flow diagrams, and topographical maps, as necessary;
- (7) The cause of the reportable discharge, including a failure analysis of the system or subsystem in which the failure occurred; and
- (8) Additional preventive measures you have taken or contemplated to minimize the possibility of recurrence
- (9) Such other information as the Regional Administrator may reasonably require pertinent to the Plan or discharge

* * * * *

NOTE: Complete one of the following sections (A, B or C) as appropriate for the facility type.

ATTACHMENT 4 – Discharge Notification Form

In the event of a discharge of oil to navigable waters or adjoining shorelines, the following information will be provided to the National Response Center [also see the notification information provided in Section 7 of the Plan]:

Table G-20 Information provided to the National Response Center in the Event of a Discharge			
Discharge/Discovery Date		Time	
Facility Name			
Facility Location (Address/Lat-Long/Section Township Range)			
Name of reporting individual		Telephone #	
Type of material discharged		Estimated total quantity discharged	Gallons/Barrels
Source of the discharge		Media affected	<input type="checkbox"/> Soil
			<input type="checkbox"/> Water (specify)
			<input type="checkbox"/> Other (specify)
Actions taken			
Damage or injuries	<input type="checkbox"/> No <input type="checkbox"/> Yes (specify)	Evacuation needed?	<input type="checkbox"/> No <input type="checkbox"/> Yes (specify)
Organizations and individuals contacted	<input type="checkbox"/> National Response Center 800-424-8802 Time		
	<input type="checkbox"/> Cleanup contractor (Specify) Time		
	<input type="checkbox"/> Facility personnel (Specify) Time		
	<input type="checkbox"/> State Agency (Specify) Time		
	<input type="checkbox"/> Other (Specify) Time		

ATTACHMENT 4 - Discharge Notification Form

In the event of a discharge of oil to navigable waters or adjoining shorelines, the following information will be provided to the National Response Center [also see the notification information provided in Section 7 of the Plan]:

Table G-20 information provided to the National Response Center in the Event of a Discharge

Discharge/Discovery Date		Time	
Facility Name			
Facility Location (Address/Lat-Long/Section Township Range)			
Name of reporting individual		Telephone #	
Type of material discharged		Estimated total quantity discharged	Gallons/Barrels
Source of the discharge		Media affected	<input type="checkbox"/> Soil
			<input type="checkbox"/> Water (specify)
			<input type="checkbox"/> Other (specify)
Actions taken			
Damage or injuries	<input type="checkbox"/> No <input type="checkbox"/> Yes (specify)	Evacuation needed?	<input type="checkbox"/> No <input type="checkbox"/> Yes (specify)
Organizations and individuals contacted	<input type="checkbox"/> National Response Center 800-424-8802 Time		
	<input type="checkbox"/> Cleanup contractor (Specify) Time		
	<input type="checkbox"/> Facility personnel (Specify) Time		
	<input type="checkbox"/> State Agency (Specify) Time		
	<input type="checkbox"/> Other (Specify) Time		

ATTACHMENT 4 – Discharge Notification Form

In the event of a discharge of oil to navigable waters or adjoining shorelines, the following information will be provided to the National Response Center [also see the notification information provided in Section 7 of the Plan]:

Table G-20 Information provided to the National Response Center in the Event of a Discharge

Discharge/Discovery Date		Time	
Facility Name			
Facility Location (Address/Lat-Long/Section Township Range)			
Name of reporting individual		Telephone #	
Type of material discharged		Estimated total quantity discharged	Gallons/Barrels
Source of the discharge		Media affected	<input type="checkbox"/> Soil
			<input type="checkbox"/> Water (specify)
			<input type="checkbox"/> Other (specify)
Actions taken			
Damage or injuries	<input type="checkbox"/> No <input type="checkbox"/> Yes (specify)	Evacuation needed?	<input type="checkbox"/> No <input type="checkbox"/> Yes (specify)
Organizations and individuals contacted	<input type="checkbox"/> National Response Center 800-424-8802 Time		
	<input type="checkbox"/> Cleanup contractor (Specify) Time		
	<input type="checkbox"/> Facility personnel (Specify) Time		
	<input type="checkbox"/> State Agency (Specify) Time		
	<input type="checkbox"/> Other (Specify) Time		

ATTACHMENT 4 – Discharge Notification Form

In the event of a discharge of oil to navigable waters or adjoining shorelines, the following information will be provided to the National Response Center [also see the notification information provided in Section 7 of the Plan]:

Table G-20 Information provided to the National Response Center in the Event of a Discharge

Discharge/Discovery Date		Time	
Facility Name			
Facility Location (Address/Lat-Long/Section Township Range)			
Name of reporting individual		Telephone #	
Type of material discharged		Estimated total quantity discharged	Gallons/Barrels
Source of the discharge		Media affected	<input type="checkbox"/> Soil
			<input type="checkbox"/> Water (specify)
			<input type="checkbox"/> Other (specify)
Actions taken			
Damage or injuries	<input type="checkbox"/> No <input type="checkbox"/> Yes (specify)	Evacuation needed?	<input type="checkbox"/> No <input type="checkbox"/> Yes (specify)
Organizations and individuals contacted	<input type="checkbox"/> National Response Center 800-424-8802 Time		
	<input type="checkbox"/> Cleanup contractor (Specify) Time		
	<input type="checkbox"/> Facility personnel (Specify) Time		
	<input type="checkbox"/> State Agency (Specify) Time		
	<input type="checkbox"/> Other (Specify) Time		

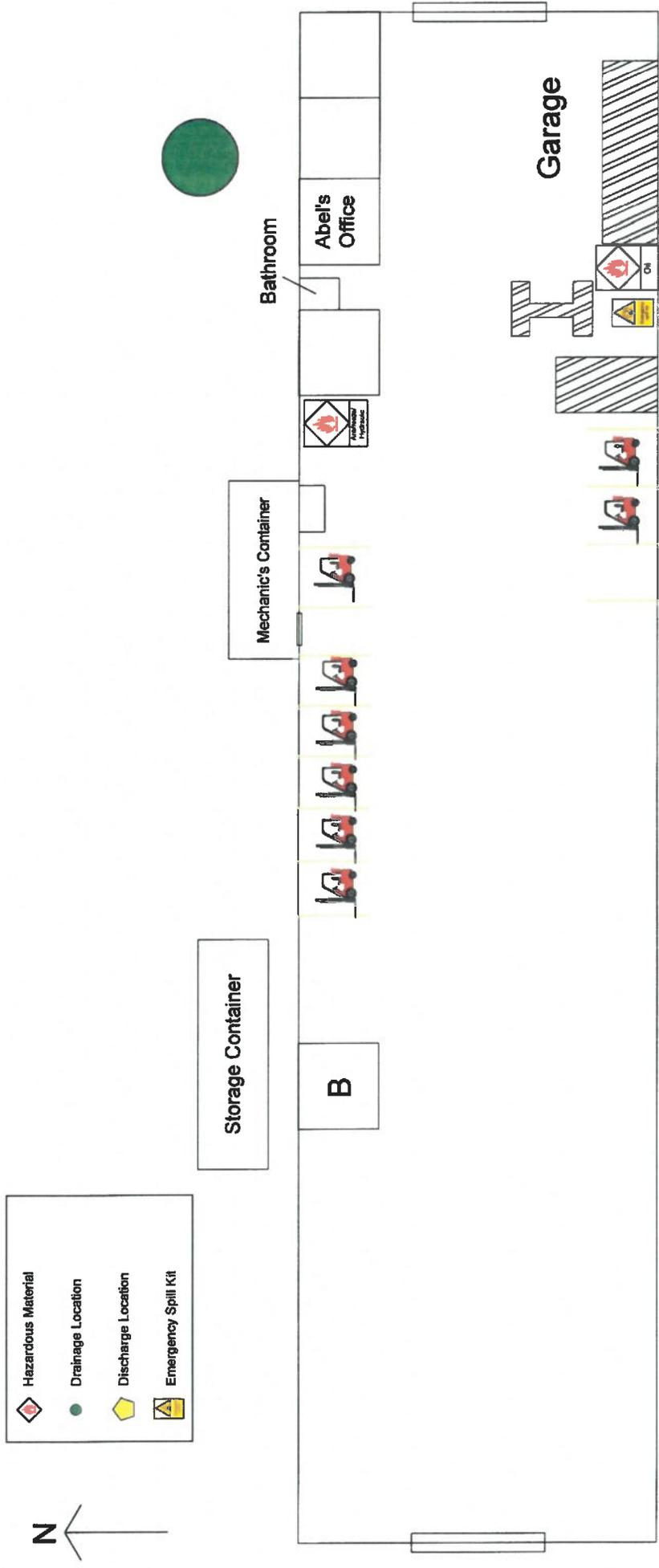
ATTACHMENT 4 – Discharge Notification Form

In the event of a discharge of oil to navigable waters or adjoining shorelines, the following information will be provided to the National Response Center [also see the notification information provided in Section 7 of the Plan]:

Table G-20 Information provided to the National Response Center in the Event of a Discharge

Discharge/Discovery Date		Time	
Facility Name			
Facility Location (Address/Lat-Long/Section Township Range)			
Name of reporting individual		Telephone #	
Type of material discharged		Estimated total quantity discharged	Gallons/Barrels
Source of the discharge		Media affected	<input type="checkbox"/> Soil
			<input type="checkbox"/> Water (specify)
			<input type="checkbox"/> Other (specify)
Actions taken			
Damage or injuries	<input type="checkbox"/> No <input type="checkbox"/> Yes (specify)	Evacuation needed?	<input type="checkbox"/> No <input type="checkbox"/> Yes (specify)
Organizations and individuals contacted	<input type="checkbox"/> National Response Center 800-424-8802 Time		
	<input type="checkbox"/> Cleanup contractor (Specify) Time		
	<input type="checkbox"/> Facility personnel (Specify) Time		
	<input type="checkbox"/> State Agency (Specify) Time		
	<input type="checkbox"/> Other (Specify) Time		

Mechanic Shop: Oil Hazards



-
**Stormwater Pollution Prevention Plan
(2017)**

Storm Water Pollution Prevention Plan

Sun-Land Garden
Products, Inc.

Watsonville, CA

Updated March 31, 2017



Prepared by

SIDERA
ENVIRONMENTAL, INC
est 1995

STORM WATER POLLUTION PREVENTION PLAN

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1. Introduction

1.1 Background

On November 16, 1990, the U.S. Environmental Protection Agency (EPA) promulgated Phase I storm water regulations in compliance with section 402(p) of the Clean Water Act. (55 Fed. Reg. 47990, codified at 40 C.F.R §§ 122.26.) These regulations require operators of facilities subject to storm water permitting (Dischargers), that discharge storm water associated with industrial activities, to obtain coverage under a National Pollutant Discharge Elimination System (NPDES) Permit. Section 402(p)(3)(A) of the Clean Water Act also requires that permits for discharges associated with industrial activity include requirements necessary to meet water quality standards.

The California State Water Resources Control Board (SWRCB) adopted Industrial Activities Storm Water General Permits in 1991 (91-013-DWQ), 1997 (97-03-DWQ) and 2014 (2014-0057-DWQ) in accordance with the Phase I regulations, and requires facilities to obtain coverage under and comply with the requirements of the Industrial Activities Storm Water General Permit No. CAS000001. This General Permit regulates industrial storm water discharges and authorized non storm water discharges (NSWDs) from specific categories of industrial facilities identified in Attachment A of the General Permit, and industrial storm water discharges and authorized NSWDs from facilities designated by the regional Water Boards to obtain coverage under the General Permit.

The General Permit authorizes discharges of industrial storm water to waters of the United States, so long as those discharges comply with all requirements, provisions, limitations, and prohibitions of the General Permit. The purpose of the regulations is to protect water quality by preventing or reducing pollutants associated with industrial activities in storm water discharges. The Industrial Activities Storm Water General Permit requires facility operators to: (1) eliminate unauthorized non-storm water discharges, (2) develop and implement a Storm Water Pollution Prevention Plan (SWPPP), and (3) perform monitoring of storm water discharges and conduct monthly visual observations for non-storm water discharges.

1.2 Electronic Submittal

The General Permit requires that the Discharger certify and submit all Permit Registration Documents (PRDs) for Notice of Intent (NOI) and No Exposure Certification (NEC) coverage via the State Water Board's Storm Water Multiple Application and Report Tracking System (SMARTS) website. (See Attachment D of the General Permit for an example of the information required to be submitted in the PRDs via SMARTS). All other documents required by the General Permit to be electronically certified and submitted via SMARTS can be submitted by the Discharger, by a designated Duly Authorized Representative on behalf of the Discharger, and by Authorized Data Submitters. Electronic reporting is required to reduce the state's reliance on paper, to improve efficiency, and to make such General Permit documents more easily accessible to the public and the Water Boards.

1.3 Storm Water Pollution Prevention Plan (SWPPP) Performance Standards

The Industrial Activities Storm Water General Permit requires the development and implementation of a site specific Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must include the information needed to demonstrate compliance with the requirements of the General Permit. This SWPPP has been prepared in accordance with all applicable SWPPP requirements in Section X of the General Permit. The SWPPP must be submitted electronically via SMARTS, and a copy must be kept at the facility. Storm Water Pollution Prevention Plans are considered a record available to the public pursuant to Section 308(b) of the Clean Water Act, and therefore available to the public at the State Water Resources Control Board via (SMARTS).

The SWPPP has three major objectives as described in Section X.C of the General Permit: (1) to identify and evaluate all sources of pollutants that may affect the quality of industrial storm water discharges and authorized non-storm water discharges (NSWDs) from the facility, (2) to identify and describe the minimum Best Management Practices (BMPs) (Section X.H.2) implemented to reduce or prevent pollutants in industrial storm water discharges and authorized NSWDs. BMPs shall be selected to achieve compliance with the General Permit, and (3) Identify and describe conditions or circumstances that may require future revisions to be made to the SWPPP. SWPPP revisions shall be completed whenever necessary, in accordance with Section X.B of the General Permit.

1.4 Storm Water Pollution Prevention Team and Contact Information

Section X.D.1 of the General Permit requires identification of the members of the Storm Water Pollution Prevention Team responsible for assisting with the implementation of the requirements in the General Permit. The Storm Water Pollution Prevention Team shall be responsible for developing, implementing and revising, when necessary, the Storm Water Pollution Prevention Plan (SWPPP) and Best Management Practices (BMPs) and conducting all Storm Water Monitoring Implementation Plan requirements required by Section XI of the Industrial Activities Storm Water General Permit. Section X.D.1 of the General Permit requires detailed information about the Pollution Prevention Team, including:

- (1) The positions within the facility organization (collectively, team members) who assist in implementing the SWPPP and conducting all monitoring requirements in the General Permit,
- (2) The responsibilities, duties, and activities of each team member, and
- (3) The procedures to identify alternate team members to implement the SWPPP and conduct required monitoring when the regularly assigned team members are temporarily unavailable.

Employee Storm Water Training has been provided to selected facility personnel. A back up for the Operations Manager has already been trained to cover sampling and monitoring requirements in case the Operations Manager is unavailable to conduct tasks. The Operations Manager shall train alternate pollution prevention team members in monitoring requirements with the monitoring guides located in the hard copy of the SWPPP when regularly assigned team members listed below are expected to be temporarily unavailable.

Table 1 – Storm Water Pollution Prevention Team

Name/Title	Responsibilities, Duties, and Activities	Contact Information
Sidera Environmental, Inc. Consultant	<ul style="list-style-type: none"> -Preparation/ significant revisions of the SWPPP; -Data Submitter on SMARTS; -Development and oversight of the Monitoring Implementation Plan; -Preparation of ERA Reports and Action Plans; -Perform Annual Comprehensive Facility Compliance Evaluation (Annual Evaluation); -Annual Report assistance; -Consult facility operator and assist in BMP implementation and General Permit compliance; -Certify Annual Compliance Report -Certify inspection and training records and reports; -Assist development of the SWPPP and assign responsibility for implementation of the SWPPP; -Perform storm water sampling, facilitate laboratory analysis, and document sampling event visual observations, or assign to trained facility personnel or qualified contractor; -Conduct Monthly Visual Observations or assign to trained facility personnel or qualified contractor; -Maintain Monthly Visual Observation records; -Implement BMPs/ eliminate discharges other than storm water into the storm drains; -Implement and document employee training; -Maintain SWPPP records; 	(800)-336-3039 engineering@siderah2o.com
Martin Reyes, Operations Manager	<ul style="list-style-type: none"> -Alternate for monitoring tasks including Monthly Observations, Sampling, and Sampling Observations; -Assist with record keeping and SWPPP documentation; -Ensure BMPs are implemented in outdoor drainage areas including good housekeeping and exposure minimization BMPs. -Maintenance of BMPs -Implement BMPs/ eliminate discharges other than storm water into storm water conveyance system; -Conduct daily visual observations while on the job; -Spill response; -Sweeping and all other housekeeping procedures; 	(831)-724-6500 martin@sunlandgarden.com
Martin Reyes Jr. Assistant to Operations Manager Paulino Sotelo Team Leader	<ul style="list-style-type: none"> -Alternate for monitoring tasks including Monthly Observations, Sampling, and Sampling Observations; -Assist with record keeping and SWPPP documentation; -Ensure BMPs are implemented in outdoor drainage areas including good housekeeping and exposure minimization BMPs. -Maintenance of BMPs -Implement BMPs/ eliminate discharges other than storm water into storm water conveyance system; -Conduct daily visual observations while on the job; -Spill response; -Sweeping and all other housekeeping procedures; 	(831)-724-6500
All Trained Facility Personnel	<ul style="list-style-type: none"> -Implement BMPs/ eliminate discharges other than storm water into storm water conveyance system; -Conduct daily visual observations while on the job; -Spill response; -Sweeping and all other housekeeping procedures; 	N/A

1.5 Revision of the SWPPP

Storm Water Pollution Prevention Plan (SWPPP) revisions shall be completed whenever necessary, in accordance with Section X.B of the General Permit. The SWPPP shall be revised, as appropriate, and implemented prior to changes in industrial activities which may significantly increase the quantities of pollutants in storm water discharge from the facility, cause a new area of industrial activity at the facility to be exposed to storm water, or begin an industrial activity which would introduce a new pollutant source at the facility. Storm Water Personnel shall:

1. Revise the on-site SWPPP whenever necessary.
2. Certify and submit via SMARTS the SWPPP within 30 days whenever the SWPPP contains significant revision(s); and,
3. With the exception of significant revisions, dischargers are not required to certify and submit via SMARTS their SWPPP revisions more than once every three (3) months in a reporting year.

Section X.A of the General Permit requires that this SWPPP include the date that it was prepared and the date of each subsequent SWPPP amendment, when significant revisions were required.

Table 2 – SWPPP Revision Log

Originally Prepared On	Prepared By	Required Revisions
7/20/16	Sidera Environmental, Inc.	N/A
Revision Date	Prepared By	Required Revisions
12/20/16	Sidera Environmental, Inc.	Advanced BMPs to be implemented in 2017 – 3.2 Updated BMPs daily sweeping/tarps/etc. in sections 4.1.1, 4.1.2, new overhead coverage – 4.1.3, tarping bulk storage piles – 4.1.4, 4.1.5, 4.2.1, 4.2.2
3/31/2017	Sidera Environmental, Inc.	BMP Summary Tables – 4.10 Updated Pollution Prevention Team (Section 1.4), Spill Response Procedures (Section 3.1), Discharge Locations (Section 5.7), Facility Site Map (Appendix A)

2. FACILITY DESCRIPTION AND GENERAL ACTIVITIES

2.1 Facility Location

The facility is located at 90 Pioneer Rd. in Watsonville. The facility occupies an approximately 22-acre site located three quarters of a mile north of Pinto Lake and one mile east of Corralitos Creek. The area surrounding the facility is primarily agricultural and residential. A map of the location of the facility is presented in Figure 1.



Figure 1

2.2 Facility Description

There are six buildings in use at the facility related to industrial activities, which cover approximately fifteen percent of the site. Approximately fifteen percent of the site consists of paved areas adjacent to the south and west sides of the buildings, including the driveway to the west of the buildings. The remaining areas of the facility are unpaved and consist of compacted soil and gravel. The primary activities at the facility include the receiving of raw materials, stockpiling materials, mixing and blending of materials, and packaging/load out of materials. The administrative offices of the company are located in a building located in the northwest corner of the site.

The majority of the facility is relatively flat, with an approximately 2.5% slope to the south. Discharge from industrial activities areas are conveyed by drain inlets and storm water channels to detention ponds located on the south side of the facility. When filled to capacity, the outfalls of the detention ponds may convey storm water to outfall pipes south of Basin 2, which discharge to the municipal storm sewer system, city of Watsonville. A topographic map of the area is presented in Figure 2.



Figure 2

2.3 Site Map

Section X.E of the Industrial Activities Storm Water General Permit requires the preparation of a Site Map. The Site Map shall include: (1) The facility boundary, storm water drainage areas within the facility boundary, and portions of any drainage area impacted by discharges from surrounding areas. Include the flow direction of each drainage area, on facility surface water bodies, areas of soil erosion, and location(s) of nearby water bodies (such as rivers, lakes, wetlands, etc.) or municipal storm drain inlets that may receive the facility's industrial storm water discharges and authorized NSWDs; (b) Locations of storm water collection and conveyance systems, associated discharge locations, and direction of flow. Include any sample locations if different than the identified discharge locations; (c) Locations and descriptions of structural control measures that affect industrial storm water discharges, authorized NSWDs, and/or run-on; (d) Identification of all impervious areas of the facility, including paved areas, buildings, covered storage areas, or other roofed structures; (e) Locations where materials are directly exposed to precipitation and the locations where identified significant spills or leaks (Section X.G.1.d of the General Permit) have occurred; and (f) Areas of industrial activity subject to the General Permit. Identify all industrial storage areas and storage tanks, shipping and receiving areas, fueling areas, vehicle and equipment storage/maintenance areas, material handling and processing areas, waste treatment and disposal areas, dust or particulate generating areas, cleaning and materials reuse areas, and other areas of industrial activity that may have potential pollutant sources. The Facility Site Map is presented in Appendix A.

2.4 Facility Operating Hours

Regular facility operating hours are Monday through Friday, 7:30 am to 3:30 pm. The facility is closed on Saturdays, Sundays, and on scheduled holidays.

Table 3 – Hours of Operation

Days	Hours	Exceptions
Monday through Friday	7:30 am – 3:30 pm	Scheduled Holidays
Saturday and Sunday	Closed	None

2.5 Description of Facility General Activities

The primary industrial activities of Sun-Land Garden Products, Inc. consist of the dynamic mixing and storage of soil amendment materials. Activities at the facility related to the mixing operations consist of grinding, screening, and bagging operations, including equipment maintenance, and truck fueling. Based upon these site activities, the facility is included in Standard Industrial Classification (SIC) Code 2875, Fertilizers, Mixing Only. This code applies to facilities that mix organic-based compost materials into a soil amendment blend, but do not produce any of their own compost.

Drainage Area A – South Side of Facility

- **Mix Lines 1 and 2:** These areas of the facility, located to the south of Building 1, contain the mechanical equipment for the mixing of soil amendment materials prior to bagging.
- **Grinder:** This area of the facility, located south of Mix Line 1, contains mechanical equipment for grinding down organic soil amendment material including redwood bark and coir.
- **Metal Bin Storage:** This area of the facility, located east of Building 2, contains metal storage bins used for the disposal of organic yard waste and empty fertilizer bags.
- **Lava Rock and Coir Storage:** This area of the facility, located east of Building 1, contains bins used for the storage of lava rocks and coir used in soil amendment blends. Storage and transfer operations are conducted in this area.
- **Processed Coir Storage:** This area of the facility, located east of Building 1, contains a bin used for the storage of processed coir used in soil amendment blends. Storage and transfer operations are conducted in this area.
- **Redwood Bark Storage:** This area of the facility, located south of the paved area, is used for the bulk storage of fine-ground, plain-ground, and unground redwood bark used in soil amendment blends.

Drainage Area B – East Side of Facility

- **Redwood Piles #1 and #2:** These areas of the facility, located on the east side of the facility, are used for the bulk storage of unground redwood bark from lumber mills, used in soil amendment blends.
- **Materials Storage:** This area of the facility located north of the redwood piles, is used for the storage of bagged peat moss and trailers.

Drainage Area C – Buildings – Northwest Side of Facility

- **Buildings 1 and 2 - Bagging:** These areas of the facility, located inside Buildings 1 and 2, contain mechanical equipment used for bagging soil amendment blends prior to shipment from the facility. Finished, bagged materials are stored in these areas.
- **Buildings 3 – Fertilizer Storage:** This area of the facility, located inside Building 3, is used for the storage of bagged fertilizer. All fertilizer is dry and bagged. No liquid fertilizers are stored or transferred at the facility.
- **Buildings 4 – Coir Storage:** This area of the facility, located inside Building 4, is used for the storage of bagged blocks of unprocessed coir (coconut shell fiber).
- **Buildings 5 – Mechanics Shop:** This area of the facility, located inside Building 5, contains the mechanics shop used for the maintenance and repair of mechanical equipment and materials used at the facility. Hazardous materials storage is also conducted in this building.
- **Buildings 6 – Maintenance Shop:** This area of the facility, located inside Building 6, contains the maintenance shop. This area is used for the storage of equipment and materials used in facility maintenance operations.
- **Truck Fueling – Above Ground Storage Tanks (ASTs):** This area of the facility, located north of Building 6, contains two ASTs used for truck fueling operations. Diesel and gasoline fueling are conducted in this area. An additional diesel AST is located southwest of Building 1, and is used for the diesel fueling of equipment.
- **Peat Moss Storage:** These areas of the facility, located around the north and west sides of the facility, is used for the storage of bagged peat moss used in soil amendment blends. The materials in these areas are bagged and not exposed to storm water.
- **Materials Staging:** This area of the facility, located in the paved area to the west side of the building, is used for the storage of bagged, mixed soil amendment products ready for shipment from the facility. The materials in this area are bagged and not exposed to storm water.

3. STORM WATER BEST MANAGEMENT PRACTICES (BMPs)

3.1 Minimum Best Management Practices

Sun-Land Garden Products, Inc. facility personnel shall, to the extent feasible, implement and maintain all of the following minimum BMPs to reduce or prevent pollutants in industrial storm water discharges, as required by Section X.H.1 of the Industrial Activities Storm Water General Permit.

Good Housekeeping

- All outdoor areas associated with industrial activity are observed daily, including storm water discharge locations, drainage areas, conveyance systems, waste handling/disposal areas, and perimeter areas impacted by off-facility materials or storm water run-on to determine housekeeping needs.
- Prior to anticipated storm events and at the end of each shift, the paved areas around the mix line and grinders are swept daily with a ride on sweeper to remove tracked and spilled redwood back, choir, and other materials used throughout the processing area and driveways.
- Spot clean with absorbent pads and/or pillows where necessary, to remove oil and grease leaks/spills. Contain spill/leak with absorbent sock if necessary. Apply absorbent pad/pillow and allow absorbent to soak up spill. Dispose of used absorbent pad/pillows in appropriate disposal drum and ensure drum is sealed after use. Hazardous waste from spill cleanup measures is disposed of in accordance with local, State, and Federal regulations.
- The entrances and exits are paved with asphalt to minimize or prevent material tracking out of the facility, and paved areas are swept daily;
- Dust spray down operations are conducted throughout the facility daily to minimize or prevent dust generated from industrial materials or activities;
- All stored industrial materials that can be readily mobilized by contact with storm water are covered. Large tarps are installed over large bulk storage piles and smaller piles in the processing area at the end of each shift. The metal bin used for the disposal of fertilizer bags is fitted with a roll on tarp;
- All non-solid industrial materials or wastes (e.g., fine fertilizer mixes, etc.) that can be transported or dispersed by the wind or contact with storm water are contained in sealed bags and/or containers within the buildings;

Preventative Maintenance

- All equipment and systems used outdoors that may spill or leak pollutants have been identified. Sun-Land properly maintains and operates forklifts, front end loaders, sweepers, numerous trucks, mixing equipment, and grinding equipment;
- Observations of the identified equipment and systems are conducted daily during use, to detect leaks or identify conditions that may result in the development of leaks;
- Regular maintenance of equipment is conducted according to the appropriate schedule for maintenance of identified equipment and systems, or on an as need basis; and,
- Procedures have been established for the prompt maintenance and repair of identified equipment, and maintenance of systems when conditions exist that may result in the development of spills or leaks. Upon discovery of conditions that may result in the development of spills or leaks, the facility management is notified. If repairs can be performed in-house, the facility management will have repairs addressed as soon as possible, but no more than a week after identification. If repairs cannot be performed in-house, the facility management will hire an offsite contractor for repairs.

Spill and Leak Prevention and Response

- The facility maintains equipment necessary to readily respond to, control, and clean small spills in a spill kit located in the mechanic shop. The spill kit is stored in a 30 gallon drum and contains absorbent pads, socks, pillows, goggles, gloves, and disposable bags. Detailed
- Sun-Land employs the following procedure for spill response for surface spills;
(1) Assess the toxicity, flammability, or other properties of materials. (2) For flammables, remove or turn off ignition sources such as motors, pumps, machines. (3) Determine if there is an immediate health threat to you or your neighbors. If so, alert neighbors, isolate the area, and call for help. (4) Is spill is minor, safely begin cleanup using the following steps:
 - Wear protective gloves and safety glasses
 - Use socks from the kit to contain spill
 - Clean spill using absorbent pads and/or pillows
 - Dispose of any materials used to clean spill in proper hazardous waste drum and keep sealed until transferred from the facility.
- (5) Notify Director of Sun Land Operations of the spill and of materials to restock. *Additional details can be found in the Spill Prevention Control and Countermeasure Plan (SPCC) that is maintained on site.*

- Sun-Land has spill response equipment readily available in the mechanic shop. These include: (1) 25 absorbent pads (2) 3 absorbent socks. (3) 3 absorbent pillows. (4) goggles, gloves, and disposable bags. Used absorbent socks, pillow, and pads are placed in disposable bags and stored in a sealed 55 gallon drum on site. Hazardous waste from spill cleanup measures is disposed of in accordance with local, State, and Federal regulations.

- Sun-Land requires all new hires to receive initial training in a number of areas pertaining to their positions. In addition, there are annual trainings. Topics include: storm water training, spill prevention and clean up, and hazardous waste training. Facility personnel also participate in periodic safety meetings that cover topics pertaining to safely operating and maintaining the facility.

Material Handling and Waste Management

- Materials or wastes that can be readily mobilized by contact with storm water are not handled outside during storm events;
- All stored non-solid industrial materials or wastes (e.g., particulates, powders, fertilizer mixes, etc.) that may be transported or dispersed by the wind or contact with storm water are contained within the buildings in sealed bags or containers;
- The metal bin containing empty fertilizer bags is covered when not in use. Cover will be provided for industrial waste disposal containers and industrial material storage containers that contain industrial materials when not in use;
- Run-on and storm water generated from within the facility is diverted away from all stockpiled materials in storm water channels. Stockpiled materials also covered with tarps;
- Spills of industrial materials or wastes that occur during handling will be cleaned in accordance with the spill response procedures (Section X.H.I.c); and,
- Observe and clean as appropriate, any outdoor material or waste handling equipment or containers that can be contaminated by contact with industrial materials or wastes.

Erosion and Sediment Controls

For each erodible surface facility location identified in the SWPPP (Section X.G.1.f), the Discharger has implemented the following:

- Dust spray down operations are conducted throughout the day to keep unpaved driveways and drainage areas damp, which prevents wind erosion and reduces dust;
- Erodible bulk materials are covered with tarps to prevent mobilization during storm events. Storm water channels reduce the flow of storm water over unpaved areas that may be prone to erosion. The new storm water conveyance and detention system to be installed in 2017 will be properly designed to prevent the erosion of channels and basins.
- Effective perimeter controls are maintained at all site entrances and exits, which are sufficiently stabilized to control discharges of erodible materials from discharging or being tracked off the site. Entrances, exits, and driveways are paved with asphalt to prevent the track out of sediment and debris from unpaved areas. Daily street sweeping is conducted on all paved areas to remove any tracked materials that have the potential to be mobilized by storm water;
- Storm water channels are located around bulk storage materials to divert run-on and storm water generated from within the facility away from all erodible materials; and,
- The original sediment basins were constructed prior to the implementation of the new general permit and required design standards. New sedimentation basins and storm water channels will be constructed at the facility in 2017. All new construction has been designed to ensure compliance with the design of storm standards in Section X.H.6. of the General Permit.

Employee Training Program

- All team members implementing the various compliance activities of this General Permit are properly trained to implement the requirements of this General Permit, including but not limited to: BMP implementation, BMP effectiveness evaluations, visual observations, and monitoring activities. If a Discharger enters Level 1 status, appropriate team members shall be trained by a QISP;
- Training materials are maintained in the administrative office;
- Identify which personnel need to be trained, their responsibilities, and the type of training they shall receive;

- All new hires receive initial training pertaining to their position at the facility. In addition, there are annual refresher trainings with topics covering storm water training, spill prevention and clean up, maintaining the facility, and safety; and,

- Documentation is maintained of all completed training classes and the personnel that received training in the SWPPP. A hard copy of the training record is available on site in Appendix C of the SWPPP.

Quality Assurance and Record Keeping

- Management procedures have been developed, including employee training and an outside consultant, to ensure that appropriate staff implements all elements of the SWPPP, including the Monitoring Implementation Plan;
- Monthly visual observations and analytical results are used to track and record the implementation and effectiveness of BMPs identified in the SWPPP; and
- Sun-Land maintains documentation of monthly observations, storm water sampling observations and results, annual evaluations, training, spill response reporting, or any storm water related issues in the administrative office for a minimum of five (5) years (Section XXI.J.4).

3.2 Advanced BMPs

In addition to the minimum BMPs described in Section X.H.1, the Discharger shall, to the extent feasible, implement and maintain any advanced BMPs identified in Section X.G.2.b, necessary to reduce or prevent discharges of pollutants in its storm water discharge in a manner that reflects best industry practice considering technological availability and economic practicability and achievability.

Advanced BMPs may include one or more of the following BMPs:

- **Exposure Minimization BMPs** – Overhead coverage provided for metal bin containing fertilizer bags. Tarps are placed over piles of organic materials (redwood bark, coir, etc.) at the end of each shift and prior to anticipated storm events.
- **Storm Water Containment and Discharge Reduction BMPs** – Three sedimentation basins receive all discharge from the facility. Drainage channels are located around all of the bulk redwood storage areas, which convey all discharge to the basins. These basins were originally constructed prior to the implementation of the new general permit and do not meet current design standards. Fall Creek Engineering has been contracted to design and install new basins and conveyance system with increased capacity that meet all design standards set forth by the new industrial permit. Construction is tentatively scheduled for the summer of 2017. Storm water contained in the basins is pumped out and used for dust spray down operations at the facility. See Section 5.7 and Appendix D for additional information.
- **Treatment Control BMPs** – No treatment processes are part of Sun-Land's storm water system. Treatment processes will be implemented at the request of the Regional Board if deemed necessary and economically feasible.
- **Other Advanced BMPs** – Silt fences are installed around bulk redwood storage piles for sediment/debris control. Silt fences and fiber rolls are also installed in strategic locations in the storm water conveyance system to reduce the amount of sediment and debris discharging to the basins. Fiber rolls are installed around storm drain inlets located between buildings.

4. ASSESSMENT OF POTENTIAL POLLUTANT SOURCES

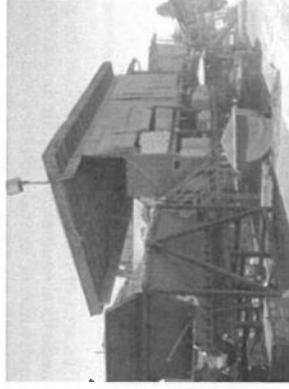
Section X.G of the Industrial Activities Storm Water General Permit requires a description and assessment of the facility's industrial activities, potential pollutant sources and potential pollutants that could be exposed to storm water or authorized non-storm water discharges. These include as applicable: (1) industrial processes, (2) material handling and storage areas, (3) dust and particulate generating activities, (4) significant spills and leaks, (5) non-storm water discharges and (6) erodible surfaces.

This assessment shall consider which pollutants are likely to be present in storm water discharges and authorized non-storm water discharges and include factors such as: (1) current storm water BMPs, (2) quantities of significant materials handled, produced, stored, or disposed of, (3) likelihood of exposure to storm water or authorized non-storm water discharges, (4) history of spills or leaks and (5) run-on from outside sources.

Section X.G.1 of the Industrial Activities Storm Water General Permit requires a description of each industrial process including the manufacturing, cleaning, maintenance, recycling, disposal or other activities related to the process. This includes the type, characteristics, and approximate quantity of significant materials used in or resulting from the process. A description of each handling and storage area is also required, including the type, characteristics, and quantity of industrial materials handled or stored, a description of the shipping, receiving, and loading procedures, and the spill or leak prevention and response procedures.

4.1 Drainage Area A – South Side of Facility

4.1.1 Mix Lines 1 and 2



Potential Pollutants	Sources
Total Suspended Solids (TSS)	Redwood Bark, Coir, Peat Moss, etc.
Oil and Grease (O&G)	Leaks from trucks, forklifts, or mechanical equipment

These areas of the facility, located on the paved area south of Building 1, contain mechanical equipment used for the dynamic mixing of soil amendment blends. The primary materials mixed in these areas include conifer-species lumber mill products such as Coastal Redwood and Douglass Fir, Canadian Sphagnum Peat Moss, and Coir (coconut husk fiber). In addition, bagged amendments are added to some

blends. Bagged amendments may include perlite, vermiculite, dolomite, ferrous sulfate, gypsum, potassium sulfate, calcium carbonate, magnesium sulfate, and potassium nitrate. All mixing equipment is located outdoors and potentially exposed to storm water. Storm water received in these areas flows south to storm water channels, which convey discharges to Sedimentation Basin 2.

Debris from mixing operations may accumulate in the drainage area and be mobilized by storm water. Leaks of oil and fluids from mechanical equipment or trucks could potentially be exposed to storm water. Spill and leak management limits the exposure of these materials to storm water. A spill kit containing absorbent is located near these areas for the management of leaks or spills. Employees have been trained in spill and leak prevention and control.

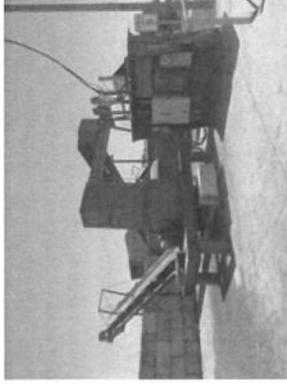
Mix Line BMPs

This area is managed to prevent the contamination of storm water by oil, fluids, and debris. Minimum Best Management Practices have been implemented in this area, including but not limited to:

- Conducting daily observations of the area for sediment, debris, and oil/fluid leaks. Any identified sediment, debris, waste, spills, rust, or leaked materials shall be cleaned and disposed of properly.
- Conducting daily sweeping of the area for sediment and organic debris that has accumulated in the area.
- Cover piles of choir and other organic materials with tarps at the end of each shift during the wet season and prior to anticipated storm events.
- Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements.
- Performing weekly inspections of spill control equipment and materials near the area.
- Following established procedures and/or controls to minimize leaks and spills in the area and prevent materials from discharging through the storm water conveyance system.

Minimum BMPs shall be implemented by members of the pollution prevention team and designated facility personnel. All discharge from these areas is conveyed to sedimentation basin 2, where mobilized solids are allowed to settle.

4.1.2 Grinder



Potential Pollutants	Sources
Total Suspended Solids (TSS)	Redwood Bark, Coir, Peat Moss, etc.
Oil and Grease (O&G)	Leaks from trucks, forklifts, or mechanical equipment

This area of the facility, located on the paved area south of Building 1, contains mechanical equipment used for the grinding of redwood bark and coir. All grinding equipment is located outdoors and potentially exposed to storm water. Ground materials are stored in bins in this area, prior to transfer to mix lines. Storm water received in this area flows south to storm water channels, which convey discharges to Sedimentation Basin 2.

Debris from grinding operations may accumulate in the drainage area and be mobilized by storm water. Leaks of oil and fluids from mechanical equipment or trucks could potentially be exposed to storm water. Spill and leak management limits the exposure of these materials to storm water. A spill kit containing absorbent is located near this area for the management of leaks or spills. Employees have been trained in spill and leak prevention and control.

Grinder BMPs

This area is managed to prevent the contamination of storm water by oil, fluids, and debris. Minimum Best Management Practices have been implemented in this area, including but not limited to:

- Conducting daily observations of the area for sediment, debris, and oil/fluid leaks. Any identified sediment, debris, waste, spills, or leaked materials shall be cleaned and disposed of properly.
- Conducting daily sweeping of the area for sediment and organic debris that has accumulated in the area.
- Cover piles of choir and other organic materials with tarps at the end of each shift during the wet season and prior to anticipated storm events.
- Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements.
- Performing weekly inspections of spill control equipment and materials near the area.

- Following established procedures and/or controls to minimize leaks and spills in the area and prevent materials from discharging through the storm water conveyance system.

Minimum BMPs shall be implemented by members of the pollution prevention team and designated facility personnel. All discharge from this area is conveyed to sedimentation basin 2, where mobilized solids are allowed to settle. No additional advanced BMPs are necessary to reduce or prevent pollutants in storm water discharges from this area.

4.1.3 Metal Bin Storage



Potential Pollutants	Sources
Iron (Fe)	Rust from metal bin leakage
Nitrate and Nitrite (N+N), Phosphorous (P)	Residues from fertilizer bags in metal bin leakage

This area of the facility, located east of Building 2, is used for the storage of metal bins. The larger bins contain is used for the disposal of wood pallets and organic debris from facility maintenance and landscaping operations. The smaller green bin is used for the disposal of fertilizer bags. The materials are transferred from inside the facility through the garage door located in this area. All transfer and storage operations are conducted outdoors and exposed to storm water. Storm water received in this area flows south via sheet flow to storm water channels, which convey discharges to Sedimentation Basin 2.

Oil and fluid leaks from trucks and trailers could be exposed to storm water. Spill and leak management limits the exposure of these materials to storm water. Storm water leakage from the metal bin containing fertilizer bags could potentially contaminate storm water discharges. Overhead coverage for this metal bin has been provided by a roll-on tarp which was constructed for this area. A spill kit containing absorbent is located in this area for the management of leaks or spills.

Metal Bin Storage BMPs

This area is managed to prevent the contamination of storm water by fertilizer residues, debris, and oil/fluid leaks. Minimum Best Management Practices have been implemented in this area, including but not limited to:

- Cover metal bin containing empty fertilizer bags with tarp when not in use and prior to anticipated storm events.
- Inspecting metal bin for leakage of refuse residues following storm events.
- Conducting daily observations of the area for refuse residues, debris, and oil/fluid leaks. Any identified debris, waste, spills, or leaked materials shall be cleaned and disposed of properly.
- Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements.
- Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system.

Minimum BMPs shall be implemented by members of the pollution prevention team and designated facility personnel. No additional advanced BMPs are necessary to reduce or prevent pollutants in storm water discharges from this area.

4.1.4 Lava Rock and Coir Storage



Potential Pollutants	Sources
Total Suspended Solids (TSS)	Lava rock and coir debris tracked out of bins
Oil and Grease (O&G)	Leaks from trucks, and forklifts

This area of the facility, located east of Building 1, contains bins used for the bulk storage of a lava rock and coir used in soil amendment mixes. All transfer and storage operations are conducted outdoors and exposed to storm water. Storm water received in this area flows south via sheet flow to storm water channels, which convey discharges to Sedimentation Basin 2.

Debris from materials stored in the bins may be tracked out by trucks and mobilized by storm water. Oil and fluid leaks from trucks and trailers could be exposed to storm water. Spill and leak management limits the exposure of these materials to storm water. A spill kit containing absorbent is located near this area for the management of leaks or spills.

Lava Rock and Coir Storage BMPs

This area is managed to prevent the contamination of storm water by fertilizer residues, debris, and oil/fluid leaks. Minimum Best Management Practices have been implemented in this area, including but not limited to:

- Conducting daily sweeping of the area for sediment and organic debris that has accumulated in the area.
- Cover piles of coir and other organic materials with tarps at the end of each shift during the wet season and prior to anticipated storm events.
- Conducting daily observations of the area for tracked out debris and oil/fluid leaks. Any identified debris, waste, spills, tracked, or leaked materials shall be cleaned and disposed of properly.
- Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements.
- Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system.

Minimum BMPs shall be implemented by members of the pollution prevention team and designated facility personnel. All discharge from these areas is conveyed to Sedimentation Basin 2, where mobilized solids are allowed to settle. No additional advanced BMPs are necessary to reduce or prevent pollutants in storm water discharges from this area.

4.1.5 Redwood Bark Storage



Potential Pollutants	Sources
Total Suspended Solids (TSS)	Debris from bulk piles and sediments from unpaved areas
Nitrate and Nitrite (N+N), Phosphorous (P)	Leachate from decomposing redwood bark

This area of the facility, located in the southern side of the facility, is used for the bulk storage of conifer-species lumber mill products, including Redwood and Douglas Fir bark. There are six bulk storage piles in this area. From west to east, there are two fine ground piles, one plain ground pile, and three unground piles. Storm water channels are located between each of the piles, which convey storm water to a channel running along the southern edge of this storage area, which discharges to Sedimentation Basin 2. The east, west, and southern edges of each pile are protected with silt fences and fiber rolls. Additional silt fences and fiber rolls have been placed in strategic locations along the storm water channels to reduce mobilized solids in storm water discharges. All transfer and storage operations are conducted outdoors and exposed to storm water. Storm water received in this area flows to south in storm water channels, which convey discharges to Sedimentation Basin 2. During heavy storm events, sedimentation basins may fill to capacity and discharge at Sampling Location D-1.

Leachate residues and debris from redwood materials stored in this area may be mobilized by storm water. Debris management limits the exposure of these materials to storm water. A spill kit containing absorbent is located near this area for the management of leaks or spills.

Redwood Bark Storage BMPs

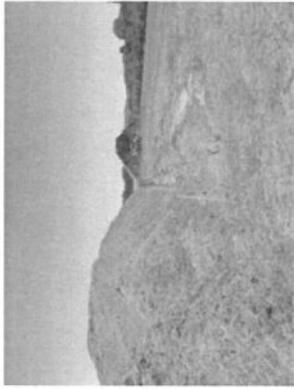
This area is managed to prevent the contamination of storm water by leachate, sediment, and debris. Minimum Best Management Practices have been implemented in this area, including but not limited to:

- Cover piles redwood bark with tarps at the end of each shift during the wet season and prior to anticipated storm events.
- Conducting daily observations of the surrounding area for leachate, tracked out debris and oil/fluid leaks. Any identified debris, waste, spills, tracked, or leaked materials shall be cleaned and disposed of properly.
- Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements.
- Conducting inspections of drainage channels, silt fences, and fiber rolls following storm events to ensure conveyance system and treatment devices are well maintained, cleaning/repairing when necessary.
- Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system.

Minimum BMPs shall be implemented by members of the pollution prevention team and designated facility personnel. All discharge from these areas is conveyed to Sedimentation Basin 2. Additional advanced BMPs implemented in this area include silt fences around bulk storage piles to contain sediment and debris, and covering bulk storage piles with tarps at the end of each shift during the wet season, and prior to anticipated storm events. Removing accumulated sediment from conveyance system following storm events.

4.2 Drainage Area B – East Side of Facility

4.2.1 Redwood Piles



Potential Pollutants	Sources
Total Suspended Solids (TSS)	Debris from bulk piles and sediments from unpaved areas
Nitrate and Nitrite (N-N), Phosphorous (P)	Leachate from decomposing redwood bark

This area of the facility, located in the east side of the site, is used for the bulk storage of unprocessed conifer-species lumber mill products, including Redwood and Douglas Fir bark. There are two piles located in this area. Storm water channels are located between each of the piles, which convey storm water to a channel running along the southern edge of this storage area. Silt fences and fiber rolls have been placed in strategic locations along the storm water channels and basins to reduce mobilized solids in storm water discharges. All transfer and storage operations are conducted outdoors and exposed to storm water. Storm water received in this area flows to the south in storm water channels, which convey discharges to Sedimentation Basins 1A and 1B. During heavy storm events, sedimentation basins may fill to capacity and discharge at Sampling Location D-1.

Leachate residues and debris from redwood materials stored in this area may be mobilized by storm water. Debris management limits the exposure of these materials to storm water. A spill kit containing absorbent is located near this area for the management of leaks or spills.

Redwood Pile BMPs

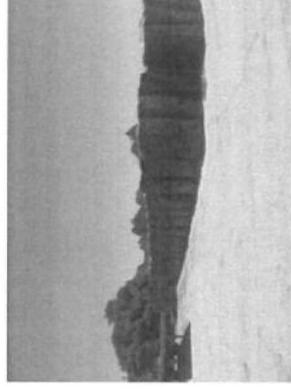
This area is managed to prevent the contamination of storm water by leachate, sediment, and debris. Minimum Best Management Practices have been implemented in this area, including but not limited to:

- Cover piles redwood bark with tarps at the end of each shift during the wet season and prior to anticipated storm events.
- Conducting daily observations of the surrounding area for leachate, tracked out debris and oil/fluid leaks. Any identified debris, waste, spills, tracked, or leaked materials shall be cleaned and disposed of properly.
- Using absorbent on oil and fluid leaks and spills immediately and disposing of property, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements.

- Conducting monthly inspections of drainage channels, silt fences, and fiber rolls to ensure conveyance system and treatment devices are well maintained.
- Inspect drainage channels, silt fences, and fiber rolls following storm events for sediment build and debris, cleaning/repairing when necessary.
- Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system.

Minimum BMPs shall be implemented by members of the pollution prevention team and designated facility personnel. All discharge from these areas is conveyed to Sedimentation Basins 1A and 1B, where mobilized solids are allowed to settle. Discharge will only occur from the facility during heavy storm events when sedimentation basins fill to capacity. This allows for the containment of all potential pollutants on site during most storm events. Additional advanced BMPs implemented in this area include silt fences around bulk storage piles to contain sediment and debris, and covering bulk storage piles with tarps at the end of each shift during the wet season, and prior to anticipated storm events. Removing accumulated sediment from conveyance system following storm events.

4.2.2 Materials Storage



Potential Pollutants	Sources
Total Suspended Solids (TSS)	Sediment from unpaved driveways and storage areas
Oil and Grease (O&G)	Leaks from trucks, and forklifts

This area of the facility, located north of the Redwood Piles #1 and #2, is used for the storage of materials. All materials stored in this area are bagged and sealed which prevents contact with storm water. Materials include bagged peat moss and finished soil amendment blends. Trucks and trailers may also be temporarily stored in this area. All transfer and storage operations are conducted outdoors and exposed to storm water. Storm water received in this area flows south via sheet flow down the unpaved driveway, or to the storm water channels surrounding the redwood piles, which convey discharges to Sedimentation Basins 1A and 1B.

Sediment from unpaved areas/driveways has the potential to be mobilized by storm water. Oil and fluid leaks from trucks and trailers could be exposed to storm water. Spill and leak management limits the exposure of these materials to storm water. A

spill kit containing absorbent is located near this area for the management of leaks or spills.

Materials Storage BMPs

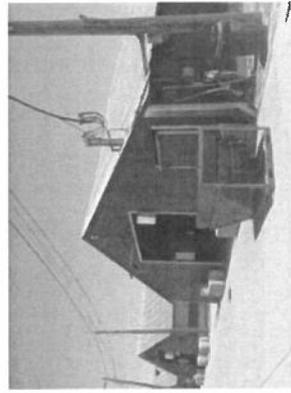
This area is managed to prevent the contamination of storm water by sediment and oil/fluid leaks. Minimum Best Management Practices have been implemented in this area, including but not limited to:

- Conducting daily sweeping of the area for sediment and organic debris that has accumulated in the area.
- Conducting daily observations of the area for oil/fluid leaks. Any identified debris, waste, spills, tracked, or leaked materials shall be cleaned and disposed of properly.
- Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements.
- Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system.

Minimum BMPs shall be implemented by members of the pollution prevention team and designated facility personnel. All discharge from these areas are conveyed to sedimentation basins, where mobilized solids are allowed to settle. No additional advanced BMPs are necessary to reduce or prevent pollutants in storm water discharges from this area.

4.3 Drainage Area C – Northwest Side of Facility

4.3.1 Buildings 1 and 2 - Bagging



Potential Pollutants	Sources
Total Suspended Solids (TSS)	Tracked out debris from bagging operations
Oil and Grease (O&G)	Tracked out leaks from equipment and forklifts

This area of the facility, located inside of Buildings 1 and 2, contains mechanical equipment used in bagging operations. Materials are transferred from the mix lines to this area for bagging prior to shipment from the facility. All operations are performed inside the building and under cover. Bagged, finished product may be temporarily staged in this area prior to transfer operations. All materials are bagged and stored inside the building and are not exposed to storm water. This limits the potential for storm water contamination from the area. No fluids are used or stored in these areas. Storm water received on the roof of buildings and unpaved areas between the buildings is conveyed to storm drain inlets. These drain inlets, located between the buildings, convey storm water via underground conveyance to Sedimentation Basin 2.

Tracked out materials have the potential to be mobilized by storm water. Tracked out oil and fluid leaks from equipment and forklifts could potentially be exposed to storm water. Debris, spill and leak management limits the exposure of these materials to storm water. A spill kit containing absorbent is located near this area for the management of leaks or spills.

Buildings 1 and 2 - Bagging BMPs

This area is managed to prevent the contamination of storm water by tracked out debris and oil/fluid leaks. Minimum Best Management Practices have been implemented in this area, including but not limited to:

- Conducting daily observations of the bagging areas for debris and oil/fluid leaks. Any identified debris, waste, spills, tracked, or leaked materials shall be cleaned and disposed of properly.
- Inspect and maintain fiber rolls around storm drain inlets. Remove accumulated sediment following storm events and replace fiber rolls when necessary.
- Conducting daily sweeping of indoor bagging area to prevent the accumulation and tracking of materials/debris.
- Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements.
- Performing weekly inspections of spill control equipment and materials near the area.
- Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system.

Minimum BMPs shall be implemented by members of the pollution prevention team and designated facility personnel. The bagging areas are located indoors and there is no potential for exposure of bagging operations to storm water. All discharge from roof run-off and between buildings is conveyed to sedimentation basins, where mobilized solids are allowed to settle. Fiber rolls are maintained around drain inlets between buildings to reduce mobilized sediment in storm water discharges.

4.3.2 Buildings 3 and 4 – Fertilizer and Coir Storage



Potential Pollutants	Sources
Total Suspended Solids (TSS), Nitrate and Nitrite (N+N), Phosphorous (P)	Tracked out debris from leaks and spills of fertilizer
Oil and Grease (O&G)	Tracked out leaks from trucks and forklifts

These areas of the facility, located inside of Buildings 3 and 4, are used for the storage of materials. Building 3 is used for the storage of dry, bagged fertilizers. No liquid fertilizers are stored or used at this facility. Building 4 is used for the storage of unprocessed coir blocks. All materials are stored inside of the building and are not exposed to storm water. The materials stored in these buildings are bagged and sealed which limits the potential for spills and tracking out of building. Storm water received on the roof of buildings and unpaved areas between the buildings, is conveyed to storm drain inlets. These drain inlets, located between the buildings, convey storm water via underground conveyance to Sedimentation Basin 2.

Tracked out materials have the potential to be mobilized by storm water. Tracked out oil and fluid leaks from equipment and forklifts could potentially be exposed to storm water. Debris, spill and leak management limits the exposure of these materials to storm water. A spill kit containing absorbent is located near this area for the management of leaks or spills.

Buildings 3 and 4 – Fertilizer and Coir Storage BMPs

This area is managed to prevent the contamination of storm water by tracked out debris and oil/fluid leaks. Minimum Best Management Practices have been implemented in this area, including but not limited to:

- Conducting daily observations of the storage areas for debris and oil/fluid leaks. Any identified debris, waste, spills, tracked, or leaked materials shall be cleaned and disposed of properly.
- Inspect and maintain fiber rolls around storm drain inlets. Remove accumulated sediment following storm events and replace fiber rolls when necessary.
- Conducting daily sweeping of storage areas to prevent the accumulation and tracking of materials/debris.

- Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements.
- Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system.

Minimum BMPs shall be implemented by members of the pollution prevention team and designated facility personnel. The bagging areas are located indoors and there is no potential for exposure of bagging operations to storm water. All discharge from roof run-off and between buildings is conveyed to sedimentation basins, where mobilized solids are allowed to settle. Fiber rolls are maintained around drain inlets between buildings to reduce mobilized sediment in storm water discharges.

4.3.3 Building 5 – Mechanics Shop



Potential Pollutants	Sources
Oil and Grease (O&G), Zinc (Zn), Iron (Fe)	Tracked out leaks and spills of new oil/fluids, residues, and particulates

This area of the facility, located inside of Building 5, contains the mechanics shop. This building is used for the maintenance and repair of equipment used in facility operations. Equipment, materials, and tools used in mechanical repair operations are stored in this building. Hazardous materials and waste storage is conducted in this area. The fluids used and stored in the area include motor oil, transmission fluid, hydraulic oil, coolant and solvent. Motor and hydraulic oil dispensers are stored inside the building within a storage tank protected by secondary containment. Transmission fluid and coolant are stored inside the building in drums. The used oil is held for recycling in a 55-gallon drum located inside the building. Mechanical equipment is used to crush used oil filters and stored in 55-gallon drums for recycling. The used coolant is held in a 55-gallon drum for recycling. All unsealed drums of hazardous materials are stored over secondary containment. All operations are performed inside the building and under cover. All materials are stored inside the building and are not exposed to storm water. This limits the potential for storm water contamination from the area. Storm water received on the roof of buildings and unpaved areas between the buildings, is conveyed to storm drain inlets. These drain inlets, located between the buildings, convey storm water via underground conveyance to Sedimentation Basin 2.

Tracked out materials have the potential to be mobilized by storm water. Tracked out particulates, residues, oil and fluid leaks from mechanical repair operations and used oil storage could potentially be exposed to storm water. Debris, spill and leak management limits the exposure of these materials to storm water. A spill kit containing absorbent is located in this building for the management of leaks or spills.

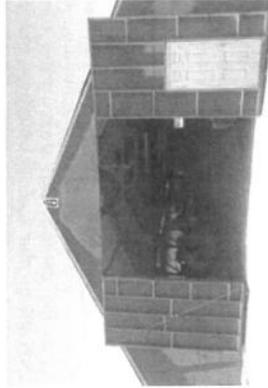
Building 5 – Mechanics Shop BMPs

This area is managed to prevent the contamination of storm water by tracked out residues, debris, particulates, and oil/fluid leaks. Minimum Best Management Practices have been implemented in this area, including but not limited to:

- Conducting daily observations of the shop for debris and oil/fluid leaks.
- Any identified debris, waste, spills, tracked, or leaked materials shall be cleaned and disposed of properly.
- Inspect and maintain fiber rolls around storm drain inlets. Remove accumulated sediment following storm events and replace fiber rolls when necessary.
- Conducting daily sweeping of the shop to prevent the accumulation and tracking of materials/debris.
- Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements.
- Ensure all hazardous materials and wastes are properly stored and maintained over secondary containment.
- Implementing adequate preventative maintenance program to prevent line leaks in oil dispensing equipment.
- Performing weekly inspections of spill control equipment and materials in the area.
- Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system.

Minimum BMPs shall be implemented by members of the pollution prevention team and designated facility personnel. The shop is located indoors and there is no potential for exposure of repair or storage operations to storm water. All discharge from roof run-off and between buildings is conveyed to sedimentation basins, where mobilized solids are allowed to settle. Fiber rolls are maintained around drain inlets between buildings to reduce mobilized sediment in storm water discharges.

4.3.4 Building 6 – Maintenance Shop



Potential Pollutants	Sources
Oil and Grease (O&G)	Tracked out leaks and spills from equipment

This area of the facility, located inside of Building 6, contains the facility's maintenance shop. This building is used for the storage of equipment and materials used in facility maintenance operations. Equipment, materials, and tools used in facility maintenance operations are stored in this building. All equipment and materials are stored inside the building and are not exposed to storm water. This limits the potential for storm water contamination from the area. Storm water received on the roof of buildings and unpaved areas between the buildings, is conveyed to storm drain inlets. These drain inlets, located between the buildings, convey storm water via underground conveyance to Sedimentation Basin 2.

Tracked out materials have the potential to be mobilized by storm water. Tracked out oil and fluid leaks from equipment could potentially be exposed to storm water. Debris, spill and leak management limits the exposure of these materials to storm water. A spill kit containing absorbent is located in this building for the management of leaks or spills.

Building 6 – Maintenance Shop BMPs

This area is managed to prevent the contamination of storm water by tracked out debris and oil/fluid leaks. Minimum Best Management Practices have been implemented in this area, including but not limited to:

- Conducting daily observations of the shop for debris and oil/fluid leaks.
- Any identified debris, waste, spills, tracked, or leaked materials shall be cleaned and disposed of properly.
- Inspect and maintain fiber rolls around storm drain inlets. Remove accumulated sediment following storm events and replace fiber rolls when necessary.
- Conducting daily sweeping of the shop to prevent the accumulation and tracking of materials/debris.
- Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements.

- Performing weekly inspections of spill control equipment and materials near the area.
- Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system.

Minimum BMPs shall be implemented by members of the pollution prevention team and designated facility personnel. The shop is located indoors and there is no potential for exposure of maintenance or storage operations to storm water. All discharge from roof run-off and between buildings is conveyed to sedimentation basins, where mobilized solids are allowed to settle. Fiber rolls are maintained around drain inlets between buildings to reduce mobilized sediment in storm water discharges.

4.3.5 Truck Fueling – Above Ground Storage Tanks



Two above ground storage tanks (ASTs) are located north of Building 6. This area is used for AST storage and dispensing of fuel to trucks and loaders. The gasoline AST is 250 gallons, and the diesel AST is 500 gallons. Both ASTs are located over secondary containment. An additional 250 gallon AST containing diesel is located south of the staging area. This AST used for equipment fueling is located in a storm resistant shelter with secondary containment. All fueling operations are performed outdoors and are potentially exposed to storm water. Storm water received in these drainage areas is conveyed south via sheet flow to storm water channels or drain inlets which discharge to Sedimentation Basin 2.

Spills from fueling operations could be available for storm water contamination. Oil and fluids leaks from trucks and loaders during fueling could be available for exposure to storm water. Spills and leaks occurring during fuel delivery could be exposed to storm water. Spill and leak management limits the exposure of these materials to storm water. A spill kit containing absorbent is located near these areas for the management of leaks or spills. Employees have been trained in spill and leak prevention and control.

Truck Fueling – Above Ground Storage Tank BMPs

Practices will be implemented to minimize the discharge of pollutants to storm water from these areas. The fueling areas are managed to prevent the contamination of storm water by fuel spills, oil, fluids, and debris. Minimum Best Management Practices have been implemented in this area, including but not limited to:

- Monitoring the area during fueling operations to prevent fuel spills.
- Using spill and overflow protection during fueling.
- Conducting daily observations of the area for fuel spills, debris, and oil/fluid leaks from trucks and loaders fueled in the area. Any identified debris, waste, fuel spills, or leaked materials shall be cleaned and disposed of properly.
- Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements.
- Implementing adequate preventative maintenance program to prevent line leaks.
- Performing weekly inspections of spill control equipment and materials near the area.
- Inspecting secondary containment following storm events for overflowing. Drain storm water from secondary containment when necessary.
- Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system.

Minimum BMPs shall be implemented by members of the pollution prevention team and designated facility personnel. All ASTs are protected with secondary containment, which contains any potential pollutants from being mobilized from the area. No additional advanced BMPs are necessary to reduce or prevent pollutants in storm water discharges from this area

4.3.6 Materials Staging and Peat Moss Storage



Potential Pollutants	Sources
Total Suspended Solids (TSS)	Sediment from unpaved driveways/aisles
Oil and Grease (O&G)	Oil/fluid leaks from truck and forklifts

These areas of the facility, located north and west of Buildings 1 through 6, are used for the staging and storage of materials. All materials stored in these areas are bagged and sealed which prevents contact with storm water. Materials include bagged peat moss and finished soil amendment blends. The area directly west of the buildings is used for the staging of bagged, finished products prior to shipment from the facility. All transfer and storage operations are conducted outdoors and exposed to storm water. All bagged materials are stored on wood pallets and contents are not exposed to rainfall or storm water flow. Storm water received in these drainage areas is conveyed south via sheet flow to storm water channels or drain inlets which discharge to Sedimentation Basin 2.

Sediment from unpaved areas/driveways has the potential to be mobilized by storm water. Oil and fluid leaks from trucks and trailers could be exposed to storm water. Spill and leak management limits the exposure of these materials to storm water. A spill kit containing absorbent is located near this area for the management of leaks or spills.

Materials Staging and Peat Moss Storage BMPs

These areas are managed to prevent the contamination of storm water by sediment and oil/fluid leaks. Minimum Best Management Practices have been implemented in this area, including but not limited to:

- Conducting daily observations of the area for spills of materials and oil/fluid leaks. Any identified debris, waste, spills, tracked, or leaked materials shall be cleaned and disposed of properly.
- Conducting daily sweeping of the area for sediment and organic debris that has accumulated in the area.
- Storing bagged materials on wood pallets to prevent contact with storm water flow.

- Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements.
- Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system.

Minimum BMPs shall be implemented by members of the pollution prevention team and designated facility personnel. All discharge from these areas is conveyed to sedimentation basins, where mobilized solids are allowed to settle. There is little potential for the exposure of potential pollutants from these areas and no advanced BMPs are necessary to reduce or prevent pollutants in storm water discharges from this area.

4.4 List of Industrial Materials

Section X.F of the Industrial Activities Storm Water General Permit requires a list of significant materials handled and stored at the site. For each material a description is provided of the locations where the material is being stored, received, shipped, and handled, as well as the typical quantities and frequency. Materials shall include raw materials, intermediate products, final or finished products, recycled materials, and waste or disposed materials.

Table 4 - List of Industrial Materials

Material	Location Material Stored/Handled and Shipped/Received	Quantity	Frequency
Diesel Fuel	Drainage Area C – Truck Fueling AST	Up to 500 gallons	Continuous
Diesel Fuel	Drainage Area C – Equipment Fueling AST	Up to 250 gallons	Continuous
Gasoline	Drainage Area C – Truck Fueling AST	Up to 250 gallons	Continuous
Milled lumber products (redwood bark/ chips)	Drainage Areas A and B	Varies	Continuous
Bagged Fertilizer	Building 3	Up to 55 gallons	Continuous
Used oil	Building 5	Up to 55 gallons	Continuous
Used coolant	Building 5	Up to 55 gallons	Continuous
Used oil filters	Building 5	Up to 55 gallons	Continuous

Table 4 - List of Industrial Materials (Continued)

Material	Location Material Stored/Handled and Shipped/Received	Quantity	Frequency
Motor Oil	Building 5	1 to 55 Gallons	Continuous
Transmission Oil	Building 5	1 to 55 Gallons	Continuous
Hydraulic Oil	Building 5	1 to 55 Gallons	Continuous
Bagged Amendments (perlite, vermiculite, dolomite, gypsum, etc.)	Building 3	Varies	Continuous
Coir	Drainage Area A and Building 4	Varies	Continuous

4.5 Dust and Particulate Generating Activities

Potential airborne dust sources include grinding and screening operations as well as vehicle traffic along exposed soil surfaces. During dry months, dust is controlled using a portable water truck, which periodically sprays down aisle areas and driveways throughout the day. No particulate pollutants have been identified with dust at this facility. The facility operates two sweepers to regularly clean mixing and transfer areas in an effort to limit dust.

4.6 Significant Spills and Leaks

The facility has been evaluated for areas where spills and leaks can likely occur.

- No industrial materials have spilled or leaked in significant quantities and have discharged from the facility's storm water conveyance system within the previous five-year period;
- No toxic chemicals identified in 40 Code of Federal Regulations section 302 have been discharged from the facilities' storm water conveyance system within the previous five-year period;
- No oil or hazardous substances in excess of reportable quantities (40 C.F.R. §§ 110, 117, and 302) have discharged from the facility's storm water conveyance system within the previous five-year period;
- No industrial materials have spilled or leaked in significant quantities which had the potential to be discharged from the facility's storm water conveyance system within the previous five year period;

4.7 Non-Storm Water Discharges (NSWDs)

Section XI.A.1 of the Industrial Activities Storm Water General Permit requires monthly inspections of the facility to identify all non-storm water discharges, sources, and drainage areas. All non-storm water discharges shall be described, and shall include the source, quantity, frequency, and characteristics of the non-storm water discharges and associated drainage areas. Each non-storm water discharge described must be identified as an authorized or unauthorized non-storm water discharge.

Wash down of outgoing material delivery trucks, out-turning of the coir using sprinkler system contained within an out turning area (a bin constructed of concrete blocks), and dust spray down operations are the only activities that use significant amounts of water that could potentially flow through the storm water conveyance system during the dry season. These activities occur upstream from the sedimentation basins and there is never sufficient volume of water from these activities to produce enough discharge to reach the sedimentation basins. The small amount of water generated by these activities infiltrates into the soil. Discharge only occurs when sedimentation basins fill to capacity so there is no potential for NSWDs from the facility. See section 5.7 for description of conveyance system and discharge location.

4.8 Erodeable Surfaces

The potential for soil erosion is low given the relatively flat nature of the site and the fact that the processing area and driveways are paved with asphalt. There are two unpaved areas on the south side of the facility between the processing area and large redwood piles to the east. There is a slight slope to the south, and to limit soil erosion on-site, vehicles will be limited to the parking areas and designated driveways/aisles. Gravel will be added to the unpaved areas to the south to reduce the potential for erosion in this area. The unpaved area adjacent to the processing area will be paved when economically feasible. Storm water channels and sedimentation basins will be inspected monthly and following storm events for signs of erosion and blockage. Eroded side slopes will be repaired/stabilized and accumulated sediment will be removed and stored on site. Areas of industrial activity prone to erosion will be paved in 2017 or when economically feasible, and new vegetated conveyance system and sedimentation basins will also reduce erosion, once constructed in 2017.

4.9 303(d) Listed Impairments

Section X.G.2 of the General Permit requires the identification of industrial pollutants related to the receiving waters with 303(d) listed impairments. Dischargers in the 303(d) impaired watershed are required to analyze for additional parameters, if applicable. Impaired water bodies within the watershed include Furlong Creek, Millers Canal, Pajaro River, Pinto Lake, Corralitos Creek, Rider Creek, Gallighan Slough, Harking Slough, Struve Slough, Watsonville Creek, and Watsonville Slough.

Table 5 – Summary of Pollutants Within Impaired Watershed

Parameter	Pollutant	Present at Facility
Boron	Boron	No
Chloride	Chloride	No
Chlorpyrifos	Chlorpyrifos	No
Dieldrin	Dieldrin	No
Dissolved Oxygen	Low Dissolved Oxygen	Yes
E. Coli and Enterococcus	Escherichia coli (E. coli)	No
E. Coli and Enterococcus	Fecal Coliform	No
E. Coli and Enterococcus	Pathogens	No
Nitrate, Nitrite, and Total Nitrogen	Nitrate	Yes
Nitrate, Nitrite, Total Nitrogen, Dissolved Oxygen, Temperature, and Total Phosphorus	Nutrients	Yes
PCBs (Polychlorinated biphenyls)	PCBs (Polychlorinated biphenyls)	No
Pesticide Screen	Pesticides	No
Sodium	Sodium	No

Table 5 – Summary of Pollutants Within Impaired Watershed (continued)

Specific Conductivity	Electrical Conductivity	No
Temperature	Temperature, water	No
Total DDT	DDD	No
Total Dissolved Solids	Total Dissolved Solids	No
Total Chlordane	Chlordane	No
Turbidity	Turbidity	Yes
pH	pH	Yes

The industrial pollutants related to the receiving waters with 303(d) listed impairments identified during the pollutant source assessment include Nitrate, Nutrients, Low Dissolved Oxygen, Turbidity, and pH. Bagged fertilizers could potentially be sources of nitrate, nutrients, and low dissolved oxygen. The dry fertilizer is stored indoors in bags and there is no potential for exposure to storm water. Overhead coverage has been installed over the metal bin used to dispose of empty fertilizer bags to eliminate potential exposure of residues. The facility will analyze storm water samples for Nitrate, Nitrite, Total Nitrogen, and Phosphorous, which are required based on the facility's SIC code. Sources of increased turbidity and variations in pH could be attributed to soil erosion in unpaved driveways and mobilized organic materials from bulk materials storage (redwood bark, coir, etc.). All storm water is conveyed to sedimentation basins to reduce turbidity by allowing suspended solids to settle. Silt fences and fiber rolls have also been installed around bulk materials storage and in storm water channels to help reduce suspended solids in storm water discharges. Discharge only occurs from the facility during heavy storm events that fill sedimentation basins. Total Suspended Solids and pH are basic parameters that will be analyzed in all storm water samples taken from sedimentation basin outfalls.

4.10 BMP Summary Table

Section X.H.5 of the Industrial Activities Storm Water General Permit requires a table summarizing each identified area of industrial activity and associated pollutant sources, the industrial pollutants, and Best Management Practices (BMPs):

Table 6 – Summary of Potential Pollutant Sources and Corresponding Best Management Practices

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Mix Lines and Grinder	Grinding and screening of materials, mixing of soil amendment blends	Redwood bark, coir, peat moss, etc. (debris from grinding and mixing operations) Oil/fluid leaks from trucks, loaders, forklifts and mechanical equipment	Total Suspended Solids (TSS) Oil and Grease (O&G)	<ul style="list-style-type: none"> - Conducting daily observations of the area for sediment, debris, and oil/fluid leaks. Any identified sediment, debris, waste, spills, or leaked materials shall be cleaned and disposed of properly. - Conducting daily sweeping of the area sediment and organic debris that has accumulated in the area. - Cover piles of coir and other organic materials with tarps at the end of each shift during the wet season and prior to anticipated storm events. - Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements. - Performing weekly inspections of spill control equipment and materials near the area. - Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system.

Table 6 – Summary of Potential Pollutant Sources and Corresponding Best Management Practices (Continued)

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Metal Bin Storage	Materials storage and transfer	Fertilizer residues in metal bin leakage (from empty fertilizer bags) Rust in metal bin leakage	Nitrate and Nitrite Nitrogen (N+N) Phosphorous (P) Iron (Fe)	<ul style="list-style-type: none"> - Cover metal bin containing empty fertilizer bags with tarp when not in use and prior to anticipated storm events. - Inspecting metal bin for leakage of refuse residues following storm events. - Conducting daily observations of the area for refuse residues, debris, and oil/fluid leaks. Any identified debris, waste, spills, or leaked materials shall be cleaned and disposed of properly. - Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements - Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system

Table 6 – Summary of Potential Pollutant Sources and Corresponding Best Management Practices (Continued)

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Lava Rock and Coir Storage	Materials storage and transfer	Tracked out material and debris Oil/fluid leaks from trucks and loaders	Total Suspended Solids (TSS) Oil and Grease (O&G)	<ul style="list-style-type: none"> - Conducting daily sweeping of the area sediment and organic debris that has accumulated in the area. - Cover piles of coir and other organic materials with tarps at the end of each shift during the wet season and prior to anticipated storm events. - Conducting daily observations of the area for refuse residues, debris, and oil/fluid leaks. Any identified debris, waste, spills, or leaked materials shall be cleaned and disposed of properly. - Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements - Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system

Table 6 – Summary of Potential Pollutant Sources and Corresponding Best Management Practices (Continued)

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Redwood Bark Storage and Redwood Piles	Materials storage and transfer	Debris from bulk piles and sediments from unpaved areas Leachate from decomposing redwood bark	Total Suspended Solids (TSS) Nitrate and Nitrite Nitrogen (N+N) Phosphorous (P)	<ul style="list-style-type: none"> - Cover piles of redwood bark with tarps at the end of each shift and prior to anticipated storm events. - Conducting daily observations of the area for leachate, tracked out debris, and oil/fluid leaks. Any identified debris, waste, spills, or leaked materials shall be cleaned and disposed of properly. - Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements. - Conducting monthly inspections of drainage channels, silt fences, and fiber rolls to ensure conveyance system and treatment devices are well maintained. - Inspect drainage channels, silt fences, and fiber rolls following storm events for sediment build-up and debris, cleaning/repairing when necessary. - Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system

Table 6 – Summary of Potential Pollutant Sources and Corresponding Best Management Practices (Continued)

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Materials Storage, Materials Staging, and Peat Moss Storage	Bagged materials storage and transfer	Sediment from unpaved driveways/aisles Oil/fluid leaks from trucks and forklifts	Total Suspended Solids (TSS) Oil and Grease (O&G)	<ul style="list-style-type: none"> - Conducting daily observations of the area for spills of materials and oil/fluid leaks. Any identified debris, waste, spills, or leaked materials shall be cleaned and disposed of properly. - Storing all bagged materials on wood pallets to prevent contact with storm water flow. - Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements. - Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system

Table 6 – Summary of Potential Pollutant Sources and Corresponding Best Management Practices (Continued)

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Buildings 1 and 2 Bagging	Bagging of soil amendment blends by mechanical equipment, materials transfer	Tracked out debris from bagging operations Tracked out oil/fluid leaks from equipment and forklifts	Total Suspended Solids (TSS) Oil and Grease (O&G)	<ul style="list-style-type: none"> - Conducting daily observations of the bagging areas for debris and oil/fluid leaks. Any identified debris, waste, spills, or leaked materials shall be cleaned and disposed of properly. - Inspect and maintain fiber rolls around storm drain inlets. Remove accumulated sediment following storm events and replace fiber rolls when necessary. - Conducting daily sweeping of indoor bagging areas to prevent the accumulation and tracking out of materials/debris. - Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements. - Performing weekly inspections of spill control equipment and materials near the area. - Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system

Table 6 – Summary of Potential Pollutant Sources and Corresponding Best Management Practices (Continued)

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Buildings 3 and 4 Fertilizer and Coir Storage	Storage and transfer of bagged materials	Tracked out debris from fertilizer leaks and spills Tracked out oil/fluid leaks from trucks and forklifts	Total Suspended Solids (TSS), Nitrate and Nitrite Nitrogen (N+N) Phosphorous (P) Oil and Grease (O&G)	<ul style="list-style-type: none"> - Conducting daily observations of the bagging areas for debris and oil/fluid leaks. Any identified debris, waste, spills, or leaked materials shall be cleaned and disposed of properly. - Inspect and maintain fiber rolls around storm drain inlets. Remove accumulated sediment following storm events and replace fiber rolls when necessary. - Conducting daily sweeping of storage areas to prevent the accumulation and tracking out of materials/debris. - Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements. - Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system

Table 6 – Summary of Potential Pollutant Sources and Corresponding Best Management Practices (Continued)

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Building 5 Mechanics Shop	Maintenance and repair of equipment	Tracked out leaks and spills of new oil/fluids, residues, and particulates	Oil and Grease (O&G), Zinc (Zn), Iron (Fe)	<ul style="list-style-type: none"> - Conducting daily observations of the shop for debris and oil/fluid leaks. Any identified debris, waste, spills, or leaked materials shall be cleaned and disposed of properly. - Inspect and maintain fiber rolls around storm drain inlets. Remove accumulated sediment following storm events and replace fiber rolls when necessary. - Conducting daily sweeping of the shop to prevent the accumulation and tracking out of materials/debris. - Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements. - Ensure all hazardous materials and wastes are properly stored and maintained over secondary containment. - Implementing adequate preventative maintenance program to prevent line leaks in oil dispensing equipment - Performing weekly inspections of spill control equipment and materials in the area. - Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system

Table 6 – Summary of Potential Pollutant Sources and Corresponding Best Management Practices (Continued)

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Building 6 Maintenance Shop	Storage of equipment and materials used for facility maintenance operations	Tracked out leaks and spills from equipment	Oil and Grease (O&G)	<ul style="list-style-type: none"> - Conducting daily observations of the shop for debris and oil/fluid leaks. Any identified debris, waste, spills, or leaked materials shall be cleaned and disposed of properly. - Inspect and maintain fiber rolls around storm drain inlets. Remove accumulated sediment following storm events and replace fiber rolls when necessary. - Conducting daily sweeping of the shop to prevent the accumulation and tracking out of materials/debris. - Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements. - Performing weekly inspections of spill control equipment and materials in the area. - Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system

5. MONITORING IMPLEMENTATION PLAN

5.1 Overview of Monitoring Implementation Plan

A facility specific Storm Water Monitoring Implementation Plan has been developed for Sun-Land Garden Products, Inc., in accordance with all requirements of the General Permit. The Monitoring Implementation Plan requirements are designed to assist the Discharger in developing a comprehensive plan for the monitoring requirements in the General Permit and to assess their monitoring program. The Monitoring Implementation Plan includes a description of visual observation procedures and locations, as well as sampling procedures, locations, and methods.

The monitoring data will be used to determine:

- (1) Whether Best Management Practices (BMPs) addressing pollutants in industrial storm water discharges and Authorized Non-Storm Water Discharges (NSWDs) are effective for compliance with the effluent and receiving water limitations of the General Permit.
- (2) The presence of pollutants in industrial storm water discharges and Authorized BMPs (and their sources) that may trigger the implementation of additional BMPs and/or Storm Water Pollution Prevention Plan (SWPPP) revisions.
- (3) The effectiveness of BMPs in reducing or preventing pollutants in industrial storm water discharges and Authorized NSWDs.

The Monitoring Implementation Plan requires:

- (1) An identification of team members assigned to conduct the monitoring requirements.
- (2) A description of discharge locations, visual observation procedures, and visual observation response procedures related to monthly visual observations and sampling event visual observations in accordance with Attachment H of the General Permit.
- (3) Justifications for alternative discharge locations in accordance with Section XI.C.3 of the General Permit, representative sampling reduction in accordance with Section XI.C.4 of the General Permit or qualified combined samples in accordance with Section XI.C.5 of the General Permit, which are applicable to the facility.
- (4) Procedures for field instrument calibration instructions, including calibration intervals specified by the manufacturer.
- (5) An example Chain of Custody form used when handling and shipping water quality samples to the lab.

The Monitoring Implementation Plan prepared for Sun-Land Garden Products, Inc. includes performing Monthly Visual Observations of Authorized and Unauthorized Non-Storm Water Discharges (NSWDs), Sampling Event Visual Observations, Storm Water Sampling and Analysis, an Annual Comprehensive Facility Compliance Evaluation, and maintaining records of visual observations and storm water sampling analysis results.

5.2 FACILITY MONITORING PERSONNEL

The following team members have been assigned to conduct the monitoring requirements of the General Permit at Sun-Land Garden Products, Inc. The group is led by Mr. Martin Reyes- Operations Manager, and assisted by selected facility personnel and qualified storm water contractor.

Table 7 – Identification of Team Members Assigned to Conduct Monitoring Requirements

Monitoring Task	Team Member Assigned to Task	Alternate Team Member Assigned to Task
Monthly Visual Observations	Martin Reyes	Martin Reyes Jr.
Storm Water Sampling and Sampling Event Visual Observations	Martin Reyes	Martin Reyes Jr. or Sidera Environmental Inc.
Annual Comprehensive Facility Compliance Evaluation	Sidera Environmental, Inc.	Martin Reyes

This Monitoring Implementation Plan has been developed and implemented at this facility. The Plan shall be revised whenever appropriate, due to changes in discharge locations, drainage areas and pollutant sources. The Monitoring Implementation Plan will be readily available in the SWPPP for review by employees, Regional Water Quality Control Board staff and local regulatory agency inspectors.

5.3 MONTHLY VISUAL OBSERVATIONS

At least once per calendar month, on a days without precipitation, monitoring personnel shall visually observe all outdoor industrial equipment and storage areas, outdoor industrial activities drainage areas, and their discharge locations. The Monthly Visual Observations will be conducted during daylight hours of the scheduled facility operating hours. Visual observations provide immediate information indicating the presence of many pollutants and their sources. The facility will implement corrective actions and revise BMPs, as necessary, when the visual observations indicate pollutant sources have not been adequately addressed in the SWPPP.

Monthly Visual Observations and evaluations of the following will be conducted and documented monthly by monitoring personnel:

- (1) The presence or indications of prior, current, or potential Unauthorized Non-Storm Water Discharges (NSWDs) and their sources.
- (2) Any Authorized Non-Storm Water Discharges (NSWDs), sources, and associated Best Management Practices (BMPs) to ensure compliance with Section IV.B.3 of the General Permit.
- (3) Outdoor industrial equipment and storage areas, outdoor industrial activity areas, Best Management Practice (BMP) implementation, and all other potential sources of industrial pollutants.

Monitoring Personnel shall:

- (1) Visually observe and record the presence of any non-storm water discharge pollutant characteristics, such as floating and suspended materials, oil and grease, discolorations, turbidity, odors, trash/debris and the source(s) of any discharged pollutants.
- (2) Visually observe and document the effectiveness of BMP implementation in areas of outdoor industrial activity.

Sun-Land Garden Products, Inc. shall maintain records of all Monthly Visual Observations. Records shall include the date, approximate time, locations observed, presence and possible source of any observed pollutants, name of person(s) that conducted the observations, and any response actions and/or additional Storm Water Pollution Prevention Plan (SWPPP) revisions necessary in response to the visual observations.

5.4 SAMPLING EVENT VISUAL OBSERVATIONS

Sampling Event Visual Observations will be conducted by monitoring personnel at the same time sampling is performed at the discharge locations of the facility. At each discharge location where a sample is obtained, monitoring personnel shall observe the discharge of storm water associated with industrial activity.

Monitoring Personnel shall:

- (1) Visually observe and record the presence or absence of floating and suspended materials, oil and grease, discolorations, turbidity, odors, trash/debris, and source(s) of any discharged pollutants.
- (2) Ensure that visual observations of storm water discharged from containment sources (e.g. secondary containment or storage ponds) are conducted at the time that the discharge is sampled.
- (3) In the event that a discharge location is not visually observed during the sampling event, storm water monitoring personnel shall record which discharge locations were not observed during sampling or that there was no discharge from the discharge location.
- (4) Provide an explanation for uncompleted sampling event visual observations will be included in the Annual Report.

Dischargers are only required to perform Sampling Event Visual Observations during scheduled facility operating hours. If a storm event occurs during unscheduled facility operating hours (e.g. during the weekend or night) and during 12 hours preceding the scheduled facility operating hours, storm water monitoring personnel are still responsible for performing visual observations at discharge locations that are still producing a discharge at the start of facility operations.

Sun-Land Garden Products, Inc. shall maintain records of all Sampling Event Visual Observations. Records shall include the date, approximate time, locations observed, presence and possible source of any observed pollutants, name of person(s) that conducted the observations, and any response actions and/or additional Storm Water Pollution Prevention Plan (SWPPP) revisions necessary in response to the visual observations. BMPs shall be revised as necessary when the visual observations indicate pollutant sources have not been adequately addressed in the SWPPP.

5.5 STORM WATER SAMPLING AND ANALYSIS

The General Permit requires that Sun-Land Garden Products, Inc. shall collect and analyze storm water samples from two (2) Qualifying Storm Events (QSEs) within the first half of each reporting year (July 1 to December 31), and two (2) QSEs within the second half of each reporting year (January 1 to June 30). These monitoring program requirements are designed to provide useful, cost-effective, timely, and easily obtained information to assist Dischargers as they identify their facility's pollutant sources and implement corrective actions and revise BMPs as necessary.

A Qualifying Storm Event (QSE) is a precipitation event that:

- (1) Produces a discharge from at least one drainage area.
- (2) Is preceded by 48 hours with no discharge from any drainage area.

Except as provided in Section XI.C.3-4 of the General Permit (Alternate Discharge Locations and Representative Sampling Reduction), samples shall be collected from each drainage area and at all discharge locations.

The samples must be:

- (1) Representative of storm water associated with industrial activities and any commingled Authorized Non-Storm Water Discharges (NSWDs).
- (2) Associated with the discharge location of contained storm water.

Samples from each discharge location shall be collected within four (4) hours of:

- (1) The start of the discharge.
- (2) The start of facility operations if the Qualifying Storm Event (QSE) occurs within the previous 12-hour period (e.g., for storms with discharges that begin during the night for facilities with day-time operating hours). Sample collection is required during scheduled facility operating hours and when sampling conditions are safe in accordance with Section XI. C.6.a.ii. of the General Permit.

Sun-Land Garden Products, Inc. shall have all collected samples analyzed for the following parameters:

- (1) Total Suspended Solids (TSS) and Oil and Grease (O&G).
- (2) pH
- (3) Additional parameters identified by the Discharger on a facility-specific basis that serve as indicators of the presence of all industrial pollutants identified in the pollutant source assessment (Section X.G.2 of the General Permit). These additional parameters may be modified (added for removed) in accordance with

any updated Storm Water Pollution Prevention Plan (SWPPP) pollutant source assessment.

- (4) Additional applicable Table 1 parameters dependent on the facility Standard Industrial Classification (SIC) Code(s) as listed on Table 1 of the General Permit.
- (5) Additional applicable industrial parameters related to receiving waters with 303(d) listed impairments or approved TMDLs based on the assessment in Section X.G.2.a.ix. of the General Permit.
- (6) Additional parameters required by the Regional Water Board.

The Additional Table 1 Parameters required for this facility based upon Standard Industrial Classification (SIC) Code are:

Table 8 – Additional Table 1 Analytical Parameters

SIC Code(s)	Classification	Additional Table D Parameters Required
2875	Fertilizers – Mixing Only	Iron (Fe)
		Nitrate + Nitrite
		Nitrogen (N+H)
		Lead (Pb)
		Zinc (Zn)
		Phosphorous (P)

5.6 STORM WATER MONITORING METHODS

The General Permit requires that Sun-Land Garden Products, Inc. shall:

- (1) Ensure that the collection, preservation and handling of all storm water samples are in accordance with Attachment H of the General Permit.
- (2) Ensure that samples from different discharge locations shall not be combined or composited except as allowed in Section XI.C.5 of the General Permit.
- (3) Ensure that all laboratory analyses are conducted according to test procedures under 40 Code of Federal Regulations part 136, including the observations of holding times, unless other test procedures have been specified in this General Permit or by the Regional Water Board. With the exception of analysis conducted by the discharger or contractor, all laboratory analysis will be

conducted at a laboratory certified for such analysis by the State Department of Health Services.

- (4) Ensure all monitoring instruments and equipment, including the contractors own field instruments, shall be calibrated and maintained in accordance with manufacturers specification to ensure accurate measurements. Field test measurements of pH shall be performed as soon as practicable, but no later than 15 minutes after the sample is collected.

The current analytical methods and corresponding method detection limits used to detect pollutants in storm water discharges at the facility follow:

Table 9 – Analytical Methods and Reporting Units

Parameter	Analytical Method	Reporting Units
pH	Portable Analysis or Wide Range Litmus Paper	pH units
Total Suspended Solids (TSS)	SM 2540-D	mg/L
Oil and Grease (O&G)	EPA 1664A	mg/L
Iron	EPA 200.8	mg/L
Nitrate + Nitrite Nitrogen (N+N)	SM 4500-NO3-E	mg/L
Lead (Pb)	EPA 200.8	mg/L
Zinc (Zn)	EPA 200.8	mg/L
Phosphorous (P)	SM 4500-P B+E	mg/L

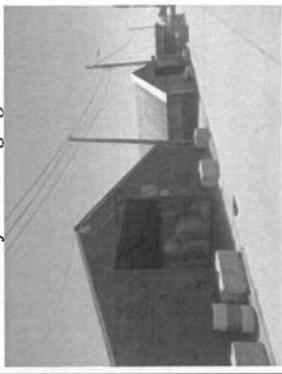
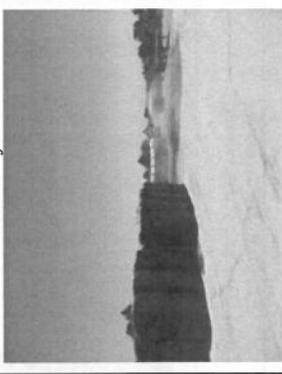
The quality control methods for each storm water sampling and analysis are described in the laboratory analysis results report.

pH will be analyzed with a calibrated portable instrument for pH. Employees shall ensure that all field measurements are conducted in accordance with the accompanying manufacturer's instructions. Calibration of the portable instrument for pH analysis is performed using the one-point calibration method with pH 7.0 standard buffer solution. The calibration interval is weekly, as recommended by the manufacturer.

5.7 STORM WATER DISCHARGE LOCATIONS

All storm water discharge at this facility is conveyed to sedimentation basins, except for a small amount of potential sheet flow that may discharge at the three driveway locations. The driveway to Green Valley Road does not receive discharge from any industrial areas of the facility and only receives discharge from a small section of the driveway and surrounding orchards. Sampling is not conducted at this location. The eastern driveway to Pioneers Road is sloped to convey any discharge from the driveway west toward the channel where Outfall D-1 is located. The west driveway to Pioneers Road may discharge sheet flow during heavy storm events. Construction of the new storm water conveyance and detention system will include diverting any potential discharge from the driveways to the new detention basins. Discharge will be monitored at these locations during storm events and sampling will be conducted if discharge is sufficient for sample collection.

Table 10 – Potential Sampling Location – West Driveway to Pioneers Road

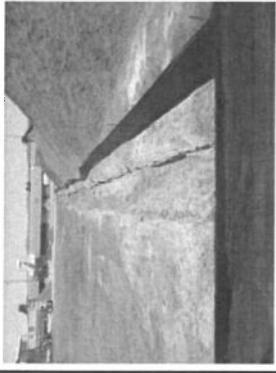
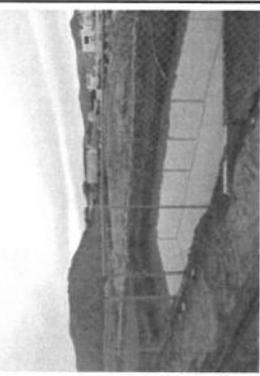
Discharge Location	Drainage Areas
 <p>West Driveway to Pioneers Road</p>	 <p>Driveways and Staging Areas</p>
 <p>East Driveway to Pioneers Road</p>	 <p>Driveways</p>

Discharge from the majority of the facility only occurs during heavy storm events with sufficient rainfall to fill the basins. The basins are located downslope from all industrial activity and storage areas, on the south side of the site. Discharge in Drainage Areas A and C, which occupy the west and central portions of the site, is conveyed to Sedimentation Basin 2. Discharge from the paved area containing mix lines and grinding areas is conveyed south via sheet flow to the storm water channels located around the bulk redwood materials stored in Area A. Discharge from Area C is either conveyed to the drain inlets located between Building 1 through 6 or via sheet flow to the storm water channels around the bulk redwood storage near Sedimentation Basin 2. If filled to capacity, discharge from Basin 2 is conveyed south under the driveway to Discharge Location D-1.

Table 11 - Storm Water Conveyance System – Drainage Area A

<p>Storm Water Conveyance</p> <p>Drain Inlets Between Buildings</p> 	<p>Drainage Areas to Sedimentation Basin 2</p> <p>Buildings 1 through 6 – Area C</p> 
<p>Outfall to Storm Water Channel</p> 	<p>Redwood Storage – Area A</p> 

Table 11 - Storm Water Conveyance System – Drainage Area A (continued)

<p>Storm Water Conveyance</p> <p>Storm Water Channels</p> 	<p>Drainage Areas to Sedimentation Basin 2</p> <p>Paved Areas – Mix Lines, Grinder, Etc.</p> 
<p>Main Channel to Basin 2</p> 	<p>Sedimentation Basin 2</p> 

All discharge from Drainage Area B containing Redwood Piles #1 and #2, located along the east side of the site, is conveyed by storm water channels to Detention Basin 1A and 1B. Discharge is conveyed under the driveway by the storm water channels running north to south, to a channel running east to west, which discharges into Detention Basin 1A. If detention basin 1A is filled to capacity, discharge is conveyed to Detention Basin 1B. Detention Basins 1A and 1B will only be filled to capacity during heavy storm events. If filled to capacity, discharge from Basin 1B is conveyed west under the driveway to Discharge Location D-1. Please refer to Appendix D – Sedimentation Basin Feasibility Study, for capacity of sedimentation basins and additional design considerations. New vegetated conveyance system and sedimentation basins have been contracted to be installed in 2017. New storm water system has been designed to meet all design standards in the general permit, with an increased capacity to contain all storm water discharges during most storm events. SWPPP will be updated to include new construction once complete.

Table 12 - Storm Water Conveyance System – Drainage Area B

Storm Water Conveyance	Drainage Areas to Sedimentation Basin 2
Storm Water Channels	Redwood Piles #1 and #2
Main Channel to Basin 1A	Sedimentation Basin 1A
Channel Connecting Basins 1A and 1B	Sedimentation Basin 1B

Storm water sampling is conducted at Discharge Location D-1, located adjacent to Pioneer Rd. near the southeast driveway. Discharge only occurs at this sampling location if Sedimentation Basins 1B or 2 are filled to capacity. Separate outfall pipes for these detention basins are located at the sampling location. If both detention basins are filled to capacity and discharging at the sampling location, two separate samples shall be collected from the two outfall pipes at Discharge Location D-1. The storm water drainage areas, storm drain inlets, sampling locations, and storm water conveyance system at the facility are shown on the Facility Site Map. Storm water sampling is conducted at Discharge Location D-1, and potentially at the driveways to Pioneers Road, as described in Storm Water Sample Collection and Handling Methods.

Table 13 - Storm Water Sampling Location D-1

Storm Water Sampling Location	Drainage Areas
Outfall From Basin 2	Sedimentation Basin 2
Outfall from Basin 1B	Sedimentation Basin 1B

New sedimentation basins have been designed to comply with the current design storm standards of the new General Permit and will be installed in 2017.

5.8 MONITORING EXCEPTIONS

Except as provided in section XI.C.3-5 (Alternative Discharge Locations, Representative Sampling Reduction, and Qualified Combined Samples), the General Permit requires that storm water samples be collected and analyzed from each drainage area at all discharge locations. Sun-Land Garden Products, Inc. will comply with the monitoring methods described in the General Permit and Attachment H. Exceptions in the Monitoring Implementation Plan for the facility may include:

1. **Sample Collection and Visual Observations Exceptions:** Sample collection and visual observations are not required under the following conditions:
 - i. During dangerous weather conditions such as flooding or electrical storms; or,
 - ii. Outside of schedule facility operating hours. The Discharger is not precluded from collecting samples or conducting visual observations outside of scheduled facility operating hours.
 - iii. In the event that samples are not collected or visual observations are not conducted in accordance with Section XI.B.5 due to these exceptions, an explanation shall be included in the Annual Report.
 - iv. Sample collection is not required for drainage areas with no exposure to industrial activities and materials in accordance with the definitions in Section XVII.
2. **Sampling Frequency Reduction Certification:** Dischargers are eligible to reduce the number of QSEs sampled each reporting year in accordance with the following requirements:
 - i. Results from four (4) consecutive QSEs that were sampled (QSEs may be different reporting years) did not exceed any NALs as defined in Section XII.A, and
 - ii. The Discharger is in full compliance with the requirements of the General Permit and has updated, certified and submitted via SMARTS all documents, data, and reports required by the General Permit during the time period in which samples were collected.

The Regional Water Board may notify a Discharger that it may not reduce the number of QSEs sampled each reporting year if the Discharger is subject to an enforcement action. An eligible Discharger shall certify via SMARTS that it meets the conditions above. Upon Sampling Frequency Reduction certification, the Discharger shall collect and analyze samples from one (1) QSE within the first half of each reporting year (July 1 to December 31), and one (1) QSE within the second half of each reporting year (January 1 to June 30). All other monitoring, sampling, and reporting requirements remain the same.

5.9 STORM WATER SAMPLE COLLECTION AND HANDLING METHODS

Storm water sample collection and handling methods at Sun-Land Garden Products, Inc., include:

- (1) Identifying the sampling parameters required to be tested and the number of storm water discharge points that will be sampled. Request the analytical testing laboratory to provide the appropriate number and type of sample containers, sample container labels, blank chain of custody forms, and sample preservation instructions.
- (2) Determine how samples will be transported to the laboratory. The testing laboratory should receive samples within 48 hours of the physical sampling (unless otherwise required by the laboratory). The Discharger may either deliver the samples to the laboratory, arrange for the laboratory to pick up the samples, or overnight ship the samples to the laboratory. All sample analysis shall be done in accordance with 40 Code of Federal Regulations, Part 136. Samples for pH have a holding time of 15 minutes.
- (3) For grab samples, use only the sample containers provided by the laboratory to collect and store samples. Use of any other type of containers may contaminate the samples. To prevent contamination, do not touch inside of sample container or cap or put anything into the sample containers before collecting storm water samples.
- (4) Do not overfill sample containers. Overfilling can change the analytical results. Tightly screw on the cap of each sample container without stripping the threads of the cap.
- (5) Complete and attach a label for each sample container. The label shall identify the date and time of sample collection, the person taking the sample, and the sample collection location or discharge point. The label should also identify any sample containers that have been preserved.
- (6) Carefully pack sample containers into an ice chest or refrigerator to prevent breakage and maintain temperature during shipment. Remember to place frozen ice packs into shipping containers. Samples should be kept as close to 4 C (39 F) as possible until arriving at the laboratory. Do not freeze samples.
- (7) Complete a Chain of Custody form for each set of samples. The Chain of Custody form shall include the Discharger's name, address, and phone number, identification of each sample container and sample collection point, person collecting the samples, the date and time each sample container was filled, and the analysis that is required for each sample container.
- (8) Upon shipping/delivering the sample containers, obtain both the signatures of the person relinquishing and receiving the sample containers.

- (9) Personnel shall be designated and trained to collect, maintain, and ship samples in accordance with the sample protocols and laboratory practices.
- (10) Refer to Table 1 in the General Permit for test methods, detection limits, and reporting units.
- (11) Dischargers are required to report to the Water Board any sampling data collected more frequently than required in this General Permit (Section XXI.J.2).
- (12) All sampling and sample preservation shall be in accordance with 40 Code of Federal Regulations, Part 136 and the current edition of the "Standard Method for the Examination of Water and Wastewater" (American Public Health Association). All monitoring instruments and equipment (including Discharger field instruments for measuring pH or specific conductance if identified as an additional sampling parameter) shall be calibrated and maintained in accordance with manufacturers' specifications to ensure accurate measurements. All laboratory analyses shall be conducted according to approved test procedures under 40 Code of Federal Regulations, Part 136, unless the Regional Water Quality Control Board has specified other test procedures. All metals shall be reported as total metals. Dischargers may conduct their own field analysis of pH (or specific conductance if identified as an additional sampling parameter) if the Discharger has sufficient capability (qualified and trained employees, properly calibrated and maintained field instruments, etc.) to adequately perform the field analysis. With the exception of field analysis conducted by Dischargers for pH (or specific conductance if identified as an additional sampling parameter), all analysis shall be sent to and combined at laboratory certified for such analysis by the California Department of Public Health.

5.10 Sampling Analysis Reporting

All sampling and analytical results from storm water samples are required to be submitted via SMARTS within 30 days of obtaining all results for each sampling event. The method detection limit will be provided when an analytical result from samples taken is reported by the laboratory as a "non-detect" or less than the method detection limit. A value of zero shall not be reported. Storm water personnel will provide analytical results reported by the laboratory as below the minimum level (often referred to as the reporting limit) but above the method detection limit. Reported analytical results will be averaged automatically by SMARTS. For any calculation required by the General Permit, SMARTS will assign a value of zero (0) for all results less than the minimum level as reported by the laboratory.

5.11 Numeric Action Levels (NALs) and Exceedance Response Actions (ERAs)

Analytical monitoring provides an additional indication of the presence and concentrations of pollutants in storm water discharges. Sampling, analysis, and reporting in accordance with the requirements of the General Permit will be conducted at this facility and compared to the two types of Numeric Action Levels (NALs) in Table 11 of this Monitoring Implementation Plan (see Table 2 of the General Permit).

Table 14 – Parameter NAL Values, Test Methods, and Reporting Units

Parameter	Test Method	Reporting Units	Annual NAL	Instantaneous Maximum NAL
pH	Portable Analysis	pH units	N/A	Less than 6.0 Greater than 9.0
Total Suspended Solids (TSS)	SM 2540-D	mg/L	100	400
Oil and Grease (O&G), Total	EPA 1664A	mg/L	15	25
Iron, Total (Fe)	EPA 200.7	mg/L	1.0	N/A
Nitrate + Nitrite Nitrogen (N+N)	SM 4500-NO3-E	mg/L	0.68	N/A
Lead (Pb)	EPA 200.8	mg/L	0.262	N/A
Zinc (Zn)	EPA 200.8	mg/L	0.26	N/A
Phosphorous (P)	SM 4500-P B+E	mg/L	2.0	N/A

NAL exceedances are not in and of themselves, violations of the General Permit. A Discharger that does not fully comply with the Level 1 status and/or Level 2 status ERA requirements, when required by the terms of the General Permit, is in violation of the General Permit.

5.14 MONITORING AND RECORDS

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. If Dischargers monitor any pollutant more frequently than required, the results of such monitoring shall be included in the calculation and reporting of the data submitted.

The General Permit requires Dischargers to maintain records of all Monitoring Implementation Plan tasks performed during each reporting year. Records of the monitoring information shall include the date, exact location, and time of sampling or measurement; the date(s) analyses were performed; the individual(s) that performed the analysis; the analytical techniques or methods used; and the results of such analysis. Dischargers shall retain for a period of at least five (5) years, either a paper or electronic copy of all storm water monitoring information, records, data, and reports required by the General Permit. Copies shall be available for review by the Water Board's staff at the facility during scheduled facility operating hours.

Upon written request by Water Boards, U.S. EPA, or local municipal agencies, Dischargers shall provide paper or electronic copies of Annual Reports or other requested records within ten (10) days from receipt of request.

5.15 ANNUAL REPORT

An Annual Report shall be certified and submitted electronically via SMARTS no later than July 15 following each reporting year using the standardized format and checklists in SMARTS. A copy of each Annual Report shall be retained at the facility for a minimum of five years. The Annual Report shall include:

- (1) A Compliance Checklist that indicates whether a Discharger complies with, and has addressed all applicable requirements of the General Permit,
- (2) An explanation for any non-compliance of requirements within the reporting year, as indicated in the Compliance Checklist,
- (3) An identification, including page numbers and/or sections, of all revisions made to the SWPPP within the reporting year,
- (4) The date(s) of the Annual Evaluation.

6. EMPLOYEE STORM WATER TRAINING PROGRAM

Section X.H.1.f of the General Permit requires an Employee Storm Water Training Program as a Minimum Best Management Practice, which must be implemented by all facilities covered by the Permit. The facility's Storm Water Training Program shall ensure that all team members implementing the various compliance activities of the General Permit are properly trained to implement the requirements of the General Permit, including but not limited to: BMP implementation, BMP effectiveness evaluations, visual observations, and monitoring activities. If Sun-Land Garden Products, Inc. enters a Level 1 status, appropriate team members shall be trained by a QISP. The employee-training program shall, at a minimum, address topics such as spill response, good housekeeping, and materials handling procedures, and actions necessary to implement all BMPs identified in the SWPPP and requirements of the SWMIP.

Employee awareness of the relationship between their daily activities and storm water pollution is essential in improving the quality of storm water discharged from this facility. The employee-training program shall cover the following items:

- **NPDES Storm Water Regulations:** NPDES permit requirements and penalties for violations.
- **Storm Water Drainage and Sanitary Sewers:** Differences between storm water conveyances and sanitary sewers/septic systems, including the types of water or waste-water that may be discharged to the two systems.
- **Sources and Effects of Pollutants:** Sources of pollutants present on the facility that could be discharged with storm water and the effects of different types of pollutants on receiving surface waters.
- **Best Management Practices (BMPs):** BMPs that are being implemented at the facility and individual responsibilities for maintaining the effectiveness of the BMPs.
- **Proper Chemical and Petroleum Storage, Handling, and Disposal Practices:** Employees who work with chemicals and petroleum products are trained in the proper storage, use, handling, and disposal of these materials.
- **Spill Response Procedures:** Employees who regularly work with potential pollutants are trained to cleanup of minor spills and leaks (generally, less than one gallon) of these materials, to notify supervisors/managers of all spills, and to recognize conditions that require the assistance of emergency contractors.
- **Good Housekeeping:** Good housekeeping practices that should be incorporated into daily activities to reduce the amounts of pollutants discharged in storm water.
- **Monitoring Tasks:** Designated employees are trained to perform the various monitoring tasks required by the Permit.

Refer to Appendix C: Employee Storm Water Training Record for documentation of all completed training classes and the personnel that received training in the SWPPP.

7. Certification

**SUN-LAND GARDEN PRODUCTS, INC.
WATSONVILLE, CA**

CERTIFICATION AND SIGNATURE

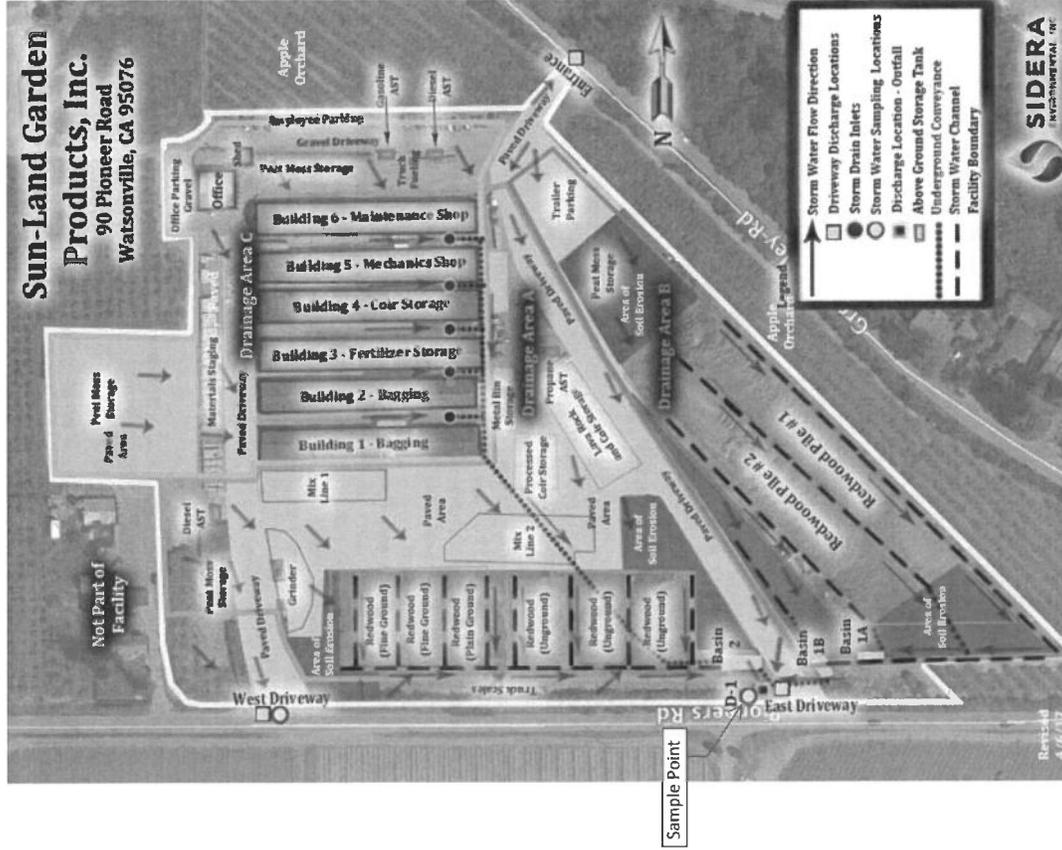
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage 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 fine and imprisonment for knowing violations."

Signature: _____
 Name: Martin Reyes
 Title: Operations Manager
 Date: _____

Sun-Land Garden Products, Inc.
 Storm Water Pollution Prevention Plan

Facility Site Map

Appendix A



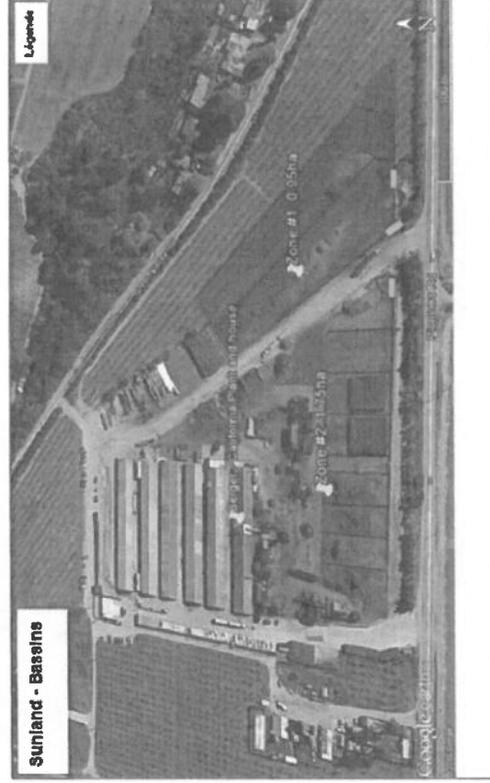
Sedimentation basins
 Sun Land Garden (a division of Berger Peatimossi), Watsonville, CA

Goal: collect rain water and remove as much as possible suspended particles from it.

Theory: Based on experience from our CDL composting site in Québec, which has an annual rainfall / snowfall average of 800 mm and a daily treatment capacity of 26.5 m³, Watsonville has approximately 600 mm of precipitation annually (see charts at the end of this document).

The purpose of the basins is to induce a sudden flow speed drop at the entrance, thus creating a retention time long enough to allow particles in suspension in the water to sink and get caught in the basins.

The following picture shows an aerial view of the Watsonville site, the 2 main zones of drainage, and the approximate positions of the 3 sedimentation basins:



The following table shows the optimal design requirements:

Optimal requirements examples					
depth (m)	width (m)	length (m)	depth (ft)	width (ft)	length (ft)
1.5	3	8.4	5	10	28
1.5	4	12	5	13	38

Note: Max width of 5 m (excavator reach) and ideal ratio length / width of 2.5:1 to 3:1



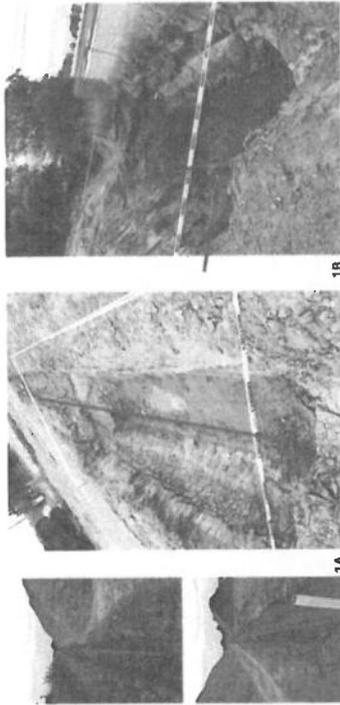
Based on real-life experience on one of our composting site, the following table shows the used sizing ratio (in m³/ha, 1 ha = 100 m x 100 m) the volume to be treated:

Sedimentary basin sizing	Hectares	Sizing ratio (m ³ /ha)	requested treated volume (m ³)
Zone #1 to be drained	0.95	40	38
Zone #2 to be drained	1.75	40	70

Due to yard limitation (underground pipes, access road), 2 basins were dug in zone 1 to compensate for the fact that there was not enough room to dig only 1 with the appropriate dimensions. The following table shows the actual sites of each of the 3 basins:

Basins	Actual dimensions					ratio L/w
	depth (m)	width (m)	length (m)	width (ft)	length (ft)	
1A	1.8	3.64	6.7	6	22	1.8
1B	1.8	3.64	7.9	6	26	2.2
2	1.8	3.64	8.5	6	28	2.3

Pictures and drawings:



1A

1B

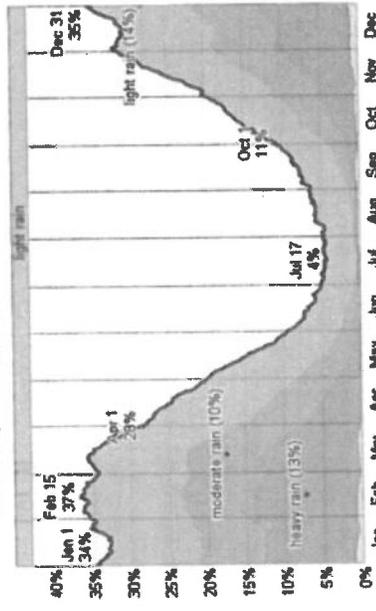


2

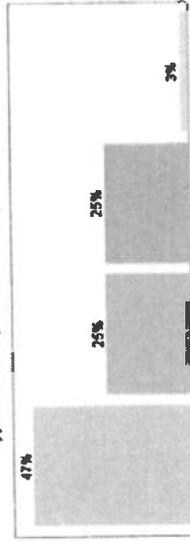
Watsonville weather averages

Annual high temperature: 67.8°F
 Annual low temperature: 46.9°F
 Average temperature: 57.35°F
 Average annual precipitation - rainfall: 23.51 inch

Probability of Precipitation at Some Point in the Day



Types of Precipitation Throughout the Year



Relative frequency of various types of precipitation over the course of a typical year.

**Previous Phase I and Phase II ESA Report
(2011)**

Phase I/II Environmental Site Assessment

Sun Land Garden Products, Inc., (Sunland)
90 & 94 Pioneer Road, Watsonville, California

February 28, 2011



Prepared for:

Sun Land Garden Products, Inc., (Sunland)
90 Pioneer Road,
Watsonville, California 95076



Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Dr., Watsonville, CA 95076
(831) 722-3580 Fax (831) 722-1159
www.weber-hayes.com

Project # 2X101

Phase I/II Environmental Site Assessment
Sun Land Garden Products, Inc., (Sunland)
90 Pioneer Road, Watsonville, California

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Figure 2b Site Map Soil & Groundwater Analytical Results

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Site Inspection Checklist with Photo Sheets
Land use Questionnaire
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Historical Maps and Aerial Photos of Subject Site & Vicinity
Database Research Reports & City Directory Review (EDR, Inc.)
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Santa Cruz County Health Services Agency (SC-HSA)
Certified Analytical Report – Chain of Custody Documentation
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ABBREVIATIONS AND ACRONYMS

- ACM: Asbestos Containing Materials
- APN: Assessor's Parcel Number
- ASTM: American Society for Testing and Materials
- BGS: Below Ground Surface
- Cal/CDPH: California Department of Public Health
- Cal/EPA: California Environmental Protection Agency
- Cal/OSHA: California Occupational Health and Safety Administration
- CERCLIS: Comprehensive Environmental Response, Compensation and Liability Information System
- CRWQCB: California Regional Water Quality Control Board, Central Coast Region
- DTSC: Department of Toxic Substances Control
- EDR: Environmental Data Resources
- ESA: Environmental Site Assessment
- HAZNET: Hazardous Materials Facility & Manifest
- Hist UST: Historical Underground Storage Tanks
- LUST: Leaking Underground Storage Tank
- MBUAPCD: Monterey Bay Unified Air Pollution Control District
- SCC-ARES: Santa Cruz County Amateur Radio Emergency Service
- SC-HSA: Santa Cruz County Health Services Agency
- SLIC: Spills Leaks Investigations and Cleanup
- USTs: Underground Storage Tanks
- WQO: Water Quality Objective

1.0 EXECUTIVE SUMMARY

This report contains results of a combined Phase I/II Environmental Site Assessment (ESA) that was conducted to assess potential environmental liability risks associated with current and historical land uses at commercial property located at 90 & 94 Pioneer Road in Watsonville ("Site", see Figure 2). Potential environmental risks defined in the combined Phase I/II ESA real estate transaction assessment process are identified as "recognized environmental conditions"¹. Conclusions are based on a site inspection, interviews, a review of both historical and regulatory documents, and the completion of limited soil and groundwater assessment.

The subject Site assessed as part of this Phase I ESA includes three adjacent parcels.

- **Parcel #1** (APN: 109-23-105, 90 Pioneer Road). This approximately 10.45 acre parcel contains the commercial operations for Sun Land Garden Products, Inc., (Sunland). It houses six large structures (Buildings 1-6) and a small office building, which are approximately 40 to 50 years old. Sun Land Garden Products, Inc., (Sunland) operates a commercial garden supply business that includes the manufacture of various mixes of soils and potting products.
- **Parcel #2** (APN: 109-23-102). This approximately 16-acre parcel contains a large orchard along Green Valley Road and an agricultural row-crop farm surrounding a relatively new residential dwelling in the northwest portion of the parcel.
- **Parcel #3** (APN: 109-23-106, 94 Pioneer Road). This approximately 7-acre parcel contains an orchard and several residential dwellings along Pioneer Road. The structures located at this parcel are 70+ years old.



The agricultural parcels are managed by individuals not associated with Sunland. The topography of the Site is fairly flat-lying (Fig. 1) and first encountered groundwater was found at depths ranging from 12 to 20 feet. Neighboring properties are predominately agricultural and residential.

¹: A "Recognized Environmental Condition" is defined as "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property" (ASTM Standard E 1527-05).

1.1 Summary of the Phase I Research

1.1.1 Historical Review

The historical review of the subject Site and surrounding sites generated from land use maps, aerial photographs, topographic maps and the reverse telephone directory search did not reveal any *recognized environmental conditions* at the subject Site.

1.1.2 Summary of the Review of Regulatory Databases

The review of regulatory databases revealed the subject Site to be listed on multiple databases. The subject Site is listed as storing hazardous materials on-site including an aboveground storage tank (AST), discharging commercial waste water to the storm drain system, and having a 1,000 gallon underground storage tank (UST) containing gasoline on the property installed in 1983.

Official regulatory inspections by the Santa Cruz County Health Services Agency (SC-HSA) (see Appendix C for copies of official inspection reports) documented a few observations of concern.

- Inspection reports identified “oil spilled all over the floor of the waste oil shed”. A request to develop procedures to transfer oil with minimal spillage and to clean up spills after they happen, inspection dated February 26, 2009
- Inspection reports requested documentation of proper disposal of hazardous materials. These housekeeping issues are considered a *recognized environmental condition*, inspection dated June 9, 2009

1.1.3 Summary of the Site Inspection and Interview

The general condition of the subject Site inspection revealed the following *recognized environmental conditions*:

- Long-Term Fuel Storage and Dispensing: The Site contained multiple Gravity-fed AST’s, having dispensers that extend out over native soil.
- Long-Term Vehicle/Equipment Maintenance Operations: Building 5 and an adjacent shed are currently used as chemical storage and maintenance area for vehicle equipment and machinery. Hazardous materials stored and used at this location include lubricants, solvents and fuels. Chemical Wastes are also generated but only limited records exist that document the storage and proper disposal of these chemicals. The existing *Hazardous Materials Management Plan* is out of date and does not match up with Site conditions (i.e., antifreeze/kerosene).
- Long-Term Machine Shop: Building 6 has operated as a long-term metals fitting and fabrication shop. Metals, cutting oils, lubricants and solvents are common chemicals

used and waste generated at machine shop operations. The shop floor is unpaved and this represents a *recognized environmental condition*.

- Long-Term Open-Air Vehicle/Equipment Storage on Native Soils: Commercial machinery and equipment had been stored adjacent to the east entrance along Green Valley Road. This type of long-term vehicle storage can result in potential oil leaks directly on to native soil.

1.1.4 Phase I Recommendation

In summary, multiple *recognized environmental conditions* were identified based on Phase I inspections and research. We recommended completing a *Limited Phase II Soil and Groundwater Investigation* to determine whether any significant environmental liabilities existed as a result of the identified *recognized environmental conditions*.

1.2 Summary of Limited Phase II Drilling and Sampling

A *Limited Phase II Soil and Groundwater Investigation* was completed at the Site specifically to assess potential environmental conditions associated with:

- Long term on-site above and below ground storage of petroleum and diesel products
- Long-term vehicle/equipment maintenance operations and chemical storage
- Long-term machine shop using solvent cutting agents and degreasers.
- Long-term open-air vehicle/equipment storage on native soils

A total of thirteen (13) driven probe borings were advanced across the Site to investigate potential negative impacts to shallow soil and groundwater. Continuous soil cores were advanced to depths ranging from 8 to 27 feet below the ground surface (bgs). Grab groundwater samples were collected from seven of the thirteen borings. Discrete, shallow (i.e., 4 feet bgs) soil samples were collected for laboratory testing from four of the borings located adjacent to ASTs and chemical storage areas. Additionally, three shallow (i.e., 12-15-inches bgs) 3-point composite soil samples were collected and laboratory tested to provide broad coverage of specific land use areas across the property (i.e., vehicle / equipment storage, maintenance and fabrication area, and the mixing operations area). Sample locations and targeted land use areas are shown on Figure 2. The collected soil and groundwater samples targeted for testing were submitted to a State-certified laboratory for the following analysis:

- Total Petroleum Hydrocarbons in the Diesel and Motor Oil ranges (TPH-d/mo) by EPA Method 8015M;
- Total Petroleum Hydrocarbons as Gasoline (TPH-g), and the gasoline constituents Methyl-tert-Butyl Ether (MTBE), Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX) by EPA Method 9260;

- Chlorinated Solvents (Total Volatile Organic Compounds, VOCs), EPA 8010 list by EPA Method 8260;

The Three (3) 3'-point composite soil samples were analyzed for:

- Total Petroleum Hydrocarbons in the diesel and oil range, RCRA 8 metals by EPA Method 6010B, and Organochlorine Pesticides by EPA Method 8081A.

1.2.1 Soil Analytical Results (presented on Figure 2b and Tables 1 & 2):

Field observation and screening of all collected soil cores did not reveal any obvious discoloration or odors that would indicate a chemical soil impacts. Samples targeted for lab-testing included discrete soil samples obtained from locations adjacent to existing and former ASTs (i.e., borings DP-2, -4, and -10) and adjacent to the chemical storage area (i.e., DP-9). These samples were analyzed to confirm field observations indicating no significant impacts have occurred to shallow soil as a result of long-term fueling operations. Results of these discrete samples revealed:

- The soil sample collected at boring DP-2 revealed a slightly elevated concentration of 1,2-Dichloroethane (a common Lead scavenger in gasoline) at a detection of 0.0081 mg/kg, which slightly exceeds the conservative risk based Environmental Screening Levels (ESLs)² of 0.0045 mg/kg. All other constituents were detected at trace levels or were not detected.
- Samples collected from DP-2, -9 and -10 revealed only trace to non-detect concentrations of contaminants.

Similarly, field observations of the shallow (i.e., 12-15-inches bgs) 3-point soil composite samples (i.e., COMP-1, 2, & 3) revealed no indication of potential soil impacts.

- Laboratory test results of the composite soil samples revealed no significant impacts. We note that concentrations of metals fell well below the conservative, risk-based ESL thresholds in all three composite samples, with the exception of Arsenic. Note low-level arsenic concentrations (< 2.1 mg/kg) are consistent with naturally occurring background concentrations.

1.2.2 Groundwater Analytical Results (presented on Figure 2b, and Table 3):

² Environmental Screening Levels (ESLs): California Regional Water Quality Control Board- San Francisco Bay Region has prepared and provided the ESLs in a document entitled: Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater (interim Final, November 2007, Revised May 2008). The ESLs are intended to provide guidance on whether or not remediation of detected contamination should be warranted.

A total of seven (7) groundwater "grab" samples collected from borings positioned across the Site were submitted for laboratory analysis. Groundwater samples can provide information as to whether or not a significant release of contaminants has occurred at the Site either at the boring location itself or from areas upgradient of the boring. Analytical results indicate:

- Groundwater from five of the nine borings (DP-3b, -7, -9, -12, and -13) contained low levels detections of TPH as motor oil and diesel. These detected concentrations were well below the California Regional Water Quality Control Board - Central Coast Region's Water Quality Objective (WQO), set at 1,000 parts per billion (ppb)³.
- A trace concentration of MTBE (3.5 ppb) was detected in the grab groundwater sample collected in the apparent downgradient direction of the former gasoline UST (i.e., DP-6), at a concentration below the WQO set at 5 ppb.
- No other detections of tested contaminants of concern were detected in any of the grab groundwater samples.

1.3 Conclusion

The results of the Limited Phase II Soil and Groundwater Assessment did not reveal any significant contaminant concentrations in shallow soil or groundwater. The only exceedance of note was a trace detection of 1,2-Dichloroethane (fuel additive), which was detected in shallow soils adjacent to existing diesel AST (i.e., DP-2). This trace detection of 0.0081 mg/kg slightly exceeded the conservative risk-based ESL and does not appear to be significant, particularly because: 1) no obvious contamination was noted in the soil core during drilling and, 2) no contaminants were detected in groundwater collected from this boring.

1.4 Recommendations

Based on the results of this Phase I/II ESA we recommend the following:

1. The Santa Cruz County Health Services Agency (SC-HSA) is the regulatory agency responsible for protection of human health and the environment with regard to soil contamination in the County. Because one of the soil samples contains a detection that slightly exceeds the risk-based ESL threshold. A copy of this report should be submitted to the SC-HSA to confirm that no further action is required.
2. Note: No testing for pesticides was included for the current agricultural land use areas (i.e., row crops and orchards). However, should there be a desire to rezone for residential

³ Water Quality Goals: Goals established by the CRWQCB Central Coast Region based on State drinking water Maximum Contaminant Limits (Department of Health Services) or taste & odor threshold limits.

development in the future, there could be a requirement for testing of persistent pesticides prior to development approval.

3. Future operations should stay in compliance with SC-HSA hazardous material storage requirements for the City of Watsonville.
4. Title 22 drinking water quality testing of the Site supply well should be conducted if groundwater is used as a drinking water source for the residences. Results should be checked against State drinking water standards to confirm no liability exists or whether filtration infrastructure is necessary.

It is our opinion that Phase II soil and groundwater sampling completed to assess potential environmental liabilities for a property assessment, has determined that no significant environmental conditions are present at the site, given the limitations of this due diligent investigation.

2.0 PURPOSE AND SCOPE

A *Phase I Environmental Site Assessment* (ESA) was conducted at the Site to assess the potential for possible environmental liabilities resulting from historic or existing land uses at the subject property. Completed work tasks conformed to the recommended guidelines established by the American Society for Testing and Materials (ASTM E1527-05) and the Environmental Protection Agency *Standard Practices for All Appropriate Inquiries* (40 CFR Part 312). Limitations and Exceptions of Assessment are listed at the end of this report.

The purpose of this ESA is to provide a professional opinion regarding *recognized environmental conditions* at the Site, including potential impacts from known contaminated sites in the vicinity of the Site. The term "*recognized environmental condition*" is defined as "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property" (ASTM Standard E 1527-05).

A Phase II drilling program was completed to evaluate specific *recognized environmental conditions* related to long term on-site above and below ground storage of petroleum and diesel products, long term vehicle/equipment maintenance operations and chemical storage, long term machine shop using solvent cutting agents and degreasers, and long term open-air vehicle/equipment storage on native soils. The Phase II assessment included subsurface investigation (utility locating, exploratory drilling, sampling, and laboratory analyses of soil and or groundwater potentially contaminated by land use) to determine whether contamination was present, and if so, to list risks to current/future users.

2.1 Scope and Methodology

The scope of services for this ESA included the following:

- Review of historical maps and aerial photographs, available geologic, topographic and groundwater data of the Site and vicinity.
- Visual inspection of the Site to check for indicators that might suggest a potential source of contamination such as current hazardous materials storage or use, unusually stained ground surfaces (soils, slabs), stressed vegetation, sumps/drains/tanks, and discarded hazardous material containers. A copy of our Site Inspection Checklist, which includes Site photos, is included in Appendix A. A Land Use Questionnaire completed by the current operation manager, regarding current and historical uses of the Site (copy included in Appendix A).
- Historical records search was provided by an information research firm specializing in environmental data collection (EDR, Inc.), which included a regulatory list search of sites containing underground fuel storage tanks (UST's), contaminated sites, hazardous waste generation or treatment-storage-and disposal facilities and landfills located within ASTM survey radius. We evaluated the locations of all identified sites relative to the subject Site (see Appendix B for a copy of EDR's radius report).
- Review of available hazardous material storage and chemical releases records for the subject Site, and sites within a quarter-mile radius, available at Local and State regulatory agencies. Records reviewed included some from the California State Water Resources Control Board (GeoTracker database), the Department of Toxic Substances Control (EnviroStor database), and the SC-HSA (see Appendix C for regulatory documentation)
- We completed a drilling program, advancing soil borings to depths ranging from 12 to 21 feet below ground surface (bgs), (copies of the boring logs are included in Appendix D) and implemented a sampling plan to assess potential impacts to soil and groundwater quality at the Site.

The research, inspections and interviews were completed in January 2011, and the collected information was compiled into this summary document.

3.0 SITE DESCRIPTION

3.1 Location Setting

The Site is located at 90 Pioneer Road in an agricultural zoned portion of Watsonville (see Location Map, Figure 1). The Site is composed of three adjoining parcels. Parcel #1 contains the commercial operation for Sun Land Garden Products, Inc., (Sunland). Sun Land Garden Products, Inc., (Sunland) operates a commercial garden supply business that produces various

different soils and potting mixes. The parcel is approximately 10.45 acres and has a site address of 90 Pioneer Road, Watsonville. There are six large structures (building 1-6) and an adjacent office building. The buildings are approximately 40 to 50 years old and have some structural repairs. Parcel #2 contains a large orchard along Green Valley road and an agricultural row-crop farm surrounding a residential dwelling in the northwest portion of the parcel. The parcel is approximately 16 acres and contains one residential structure approximately 15 years old. Parcel #3 contains an orchard and several residential dwellings. The parcel is approximately 7 acres in size as is located west of Sun land garden products, Inc., (Sunland) operations along Pioneer Road. The site address at this parcel is 94 Pioneer Road. The structures located at this parcel are 70+ years old.

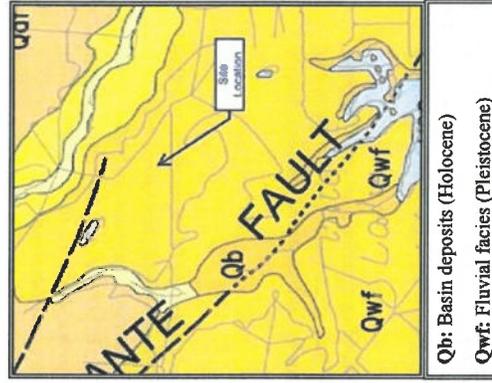
3.2 Neighboring Properties

The Site is adjacent to agricultural and residential properties in all directions, (see vicinity map, Fig 3). There is a water reservoir located adjacent to the property to the northwest.

3.3 Local Hydrogeologic Setting

The subject Site is located within an area comprising older flood plain deposits which include semi consolidated moderately to poorly sorted silt, sand, silty clay, and gravel. These deposits can be as much as 200 feet thick (Brabb, Earl E., Geologic Map of Santa Cruz County, 1989). The depth to groundwater of the uppermost aquifer was encountered at depths ranging from approximately 12 to 20 feet below ground surface (bgs), during the current investigations water supply aquifers are present at depth. Based on regional topography and the locations of nearby streams and lakes, the shallow groundwater flow direction beneath the Site is believed to be toward the south or southeast (see, Fig 1).

It should be noted that localized groundwater flow and direction might vary due to the differential permeability of existing subsurface deposits and seasonal changes in the magnitude of groundwater flow. The current drilling program collected soil samples to depths of up to 27 feet below ground surface. Continuous cores were obtained to minimum depths of 8 feet below ground surface in all borings (with the exception of DP-3b), to inspect for evidence of potential environmental impacts from the recognized environmental



Qb: Basin deposits (Holocene)
Qwf: Fluvial facies (Pleistocene)

conditions identified above. Detailed geologic logs generated during the subsurface field investigation are provided in Appendix D.

4.0 HISTORICAL REVIEW

Historic maps and aerial photographs can be valuable resources for determining obvious past uses of the property. These records can provide evidence of notable land use changes to the property and potential clues of hazardous material storage (copies of historic maps and aerials are included in Appendix B).

4.1 City Telephone Directories

Historical reverse telephone directories are used to obtain information on businesses that previously operated at the Site. *Polk City Telephone Directories* were reviewed and listings were found for the subject Site and neighboring sites (originals provided by EDR included in Appendix B). This record check listed the occupants of the subject Site and adjoining parcels as follows:

Subject Site Occupants/Businesses	
Year	Site Occupants
2003	Sun-Land Garden Products, Inc., (Sunland)
2010	Sun-Land Garden Products, Inc., (Sunland)
Neighboring Site Occupants/Businesses:	
Year	Site Occupants
2003	51 Pioneer Rd 98 Pioneer Rd Pioneer Organic Produce Residential
2007	100 Pioneer Rd 128 Pioneer Rd 51 Pioneer Rd 98 Pioneer Rd Residential Residential Pioneer Organic Produce Residential
2010	100 Pioneer Rd 128 Pioneer Rd 51 Pioneer Rd 98 Pioneer Rd Residential Residential Pioneer Organic Produce Residential

No neighboring sites of note were observed on the EDR provided City Directory report. Note: addresses searched include 100 Pioneer Road, 114 Pioneer Road, 128 Pioneer Road, 51 Pioneer Road, 94 Pioneer Road, (see Appendix B for further details).

4.2 Sanborn Insurance Co. Land Use Maps

Sanborn Fire Insurance Maps provide detailed "snapshots" of historical land use information at urban locations when the insurance company provided coverage for a specific area. However,

Sanborn Map database was reviewed, and no coverage was available for this parcel (see *Sanborn Coverage Report*, Appendix B).

4.3 Aerial Photographs

Nine historical aerial photographs were obtained dating back to 1939, which provide snapshots of historical land uses over the last 70 years (enhanced reproductions are provided in the figures section of this report). Large-scale versions of these same aerial photos are provided in Appendix B, which show more detail on the surrounding area. The following table summarizes land use observations made during the review of aerial photographs:

Year	On-Site Photo Observations	Off-Site Photo Observations
1939	The Site is located at the intersection of Green Valley Rd and Pioneer Rd. There are 6 small structures on the property all located along Pioneer Rd at the SW corner of the property. An orchard runs along Green Valley Road. The remainder of the property is undeveloped.	The neighboring properties in all directions appear agricultural orchards. Neighboring properties also include sparsely populated residential dwellings. A reservoir is visible just north of the subject Site in what appears to be a natural drainage following south along Green Valley Rd.
1948	The Site as depicted in the 1948 aerial photograph closely resembles the previous aerial photo. The property retains 6 structures along Pioneer Rd. The orchard along Green Valley Rd appears to be in the process of removing the older trees and replanting younger trees.	The neighboring properties in all directions appear similar to the previous configuration in 1939. Some removal and replanting of orchards is evident.
1956	The subject Site appears the same as the previous year with the exception that now row-crops are planted around the structures. Also the Site is divided into three portions and resembles the current parcel lines for the property.	The neighboring properties in all directions appear similar to the previous configuration in 1948.
1964	The subject Site has changed somewhat from its previous configuration. Three shed like structures previous located adjacent to the residence along Pioneer Rd no longer exist. More clearly are now 6 long warehouse-like buildings and appear as building 1-6 do today. The water tower is located where it appears today.	The neighboring properties in all directions appear similar to the previous configuration in 1956.
1973	Due to poor resolution on the photographs from 1973 an accurate description of the subject Site cannot be determined.	Due to poor resolution on the photographs from 1973 an accurate description of the subject Site cannot be determined.
1981	Minor development on the subject Site is visible. Minor development around the 6 large building is visible but unclear as to the exact type due to poor resolution. The residence along Pioneer Rd remains as does the orchard along Green Valley Rd.	The neighboring properties in all directions appear similar to the previous configuration in 1956.

Year	On-Site Photo Observations	Off-Site Photo Observations
1993	The subject Site appears as it does in the previous photo from 1981.	The neighboring properties in all directions appear similar to the previous configuration in 1981.
1998	The subject Site appears similar to the previous configuration. There is now a residential dwelling located at the northwest corner of the property.	The neighboring properties along Green Valley Rd now appear multiple residential dwellings.
2005	The subject Site appears as it does today.	The neighboring properties in all directions appear similar to the current configuration.

4.4 Topographic Maps

Historical topographic maps, including the subject property and surrounding sites were reviewed (copies included in Appendix B). USGS topographical maps appear consistent with historical aerial photograph observations described above, (Section 4.3). No obvious evidence of any recognized *environmental conditions* are visible from these maps.

4.5 Summary of Historical Review

The historical review of the subject Site and surrounding sites generated from land use maps, aerial photographs, topographic maps and the reverse telephone directory search did not reveal any *recognized environmental conditions* at the subject Site, that appear to have a significant potential for a chemical release.

5.0 REGULATORY AGENCY INFORMATION

5.1 Database Search of Federal and State Environmental Records

Records of hazardous material storage and releases are required to be kept by regulatory agencies overseeing environmental issues. An information research firm specializing in environmental data collection, EDR, prepared a *Radius Map Report* for the Site, dated December 07, 2010 (included in Appendix B). The *Radius Map Report* identifies sites listed in the selected regulatory databases, presents location maps and details on identified sites, provides a description of the Federal and State agency data reviewed, and limitations to the search. The search specifically documents sites having registered underground fuel storage tanks (USTs), hazardous waste generation, hazardous waste treatment-storage-disposal, and subsurface contamination. Search distances are per ASTM's E1527-05 standard (see Appendix B for a list of all sites and full descriptions of all regulatory databases). The database search identified the following records for the subject Site.

Subject Site	Database Source	Comment
Sun Land Garden Products, Inc., (Sunland) 90 Pioneer Road, Watsonville	WDS NPDES HIST UST AST HAZNET	<p>The subject Site is identified on the aforementioned databases.</p> <ul style="list-style-type: none"> WDS (Waste Discharge System) – A Site that has been issued waste discharge permit for commercial wastewater. NPDES (NPDES Permits Listing) – A listing of NPDES permits including storm water. HIST UST (Historical Underground Storage Tank) – The Site is reported to have had a 1,000-gallon Gasoline fuel storage tank installed in 1983. AST (Aboveground Storage Tank) – The Site is reported to have a 5,010-gallon AST. HAZNET (Facility & Manifest Data) – The Site is reported to have generated a hazardous waste manifests as part of proper disposal of waste materials State records indicate annual waste generated and disposed from the Site to range from 0.27-2.64 tons (includes empty containers, PCB-containing materials and solvent waste all disposed of at a recycles facility).

The database search did not identify any neighboring sites located within a 1/4-radius form the subject Site.

5.2 Santa Cruz County Health Services Agency (SC-HSA) File Review

The SC-HSA has public-right-to-know records for the subject Site including a current, *Hazardous Material Management Plan*. Inspection Reports completed by the SC-HSA and an underground fuel tank removal report. The following table summarizes significant reports on file with the county:

Facility Name	Comment
Sun Land Garden Products, Inc., (Sunland) 90 Pioneer Road, Watsonville	<p><i>Underground Fuel Tank Removal Report</i>, dated May 2, 2000 was completed by Sampson Engineering, Inc. The report summarizes work completed for the removal of a 1,000-gallon Underground Storage Tank located at the property. The UST was removed on Jan 13, 2000. Soil samples were taken for the excavation pit and analyzed. Results contained low levels of TPH and Benzene. The excavation pit was backfilled. A Workplan for further assessment was requested by SC-HSA and submitted by Sampson Engineer on March 9, 2000. Further sampling and temporary wells were installed around the previous location of the UST. California Regional Water Quality Control Board issued a No Further Action Letter dated July 17, 2000 (see Appendix C for copy of Letter and reports).</p>
Sun Land Garden Products, Inc., (Sunland) 90 Pioneer Road, Watsonville	<p>Hazardous Materials Management Plan: Sunland Garden Products, Inc., (Sunland) maintain a current Hazardous Material Management Plan (HMMP) with the Santa Cruz County Health Services Agency (SC-HSA). <i>The Chemical Inventory Form</i> identifies on-site chemicals that include: Argon Gas (260 cu-ft container), Acetylene (398 cu-ft), Oxygen (251 cu-ft), Motor Oil (55-gal drum), Waste Oil (300-gal container), Gasoline (500-gal tank), Red Diesel (1,000 gal tank), Propane (1,000 gal tank), and various different types of fertilizer mix ingredients (see HMMP in Appendix C for full list).</p>
Sun Land Garden Products, Inc., (Sunland) 90 Pioneer Road, Watsonville	<p>Official Inspection Report (Santa Cruz County Health Services Agency (SC-HSA), dated February 26, 2009 identified that Site as no longer storing gasoline, diesel and aqueous ammonia. The inspection reported, "oil spilled all over the floor of the waste oil shed". A request to develop transfer procedures in a manner to avoid spills was noted. Inspection Report required proper labeling antifreeze and proper disposal of waste antifreeze, and secondary containment for a 55-gal drum of waste kerosene. A follow up inspection was completed on June 09, 2009, which noted, "add antifreeze, diesel, and propane to HMMP, housekeeping in oil shed has improved and employees have received Hazardous material training". The follow up inspection also noted to "properly dispose of waste antifreeze and kerosene and provide a documentary manifest of this disposal".</p>

5.3 Geotracker/Envirostor Review

Records of hazardous material releases can also be found in State regulatory agency databases including the California State Water Resources Control Board's Geotracker database and the Department of Toxic Substances Control's (DTSC) EnviroStor database. A review was conducted for records on the subject Site, neighboring sites and one additional cleanup case was identified (Section 5.2).

Both the Geotracker and Envirostor databases did not identify any records of contamination to soil or groundwater at the subject Site or sites within 1/4-mile radius of the subject Site (see Geotracker Map, Figure 5).

5.4 Summary of Regulatory Review

The regulatory review of local, state and federal environmental records for land uses on and around the Site indicate there are hazardous materials stored and waste generated on-site by Sun Land Garden Products, Inc., (Sunland).

The review of Regulatory Databases revealed the subject Site to be listed on multiple databases. The subject Site is listed as having hazardous materials on-site including an above ground storage tank (AST), having a permit to discharge waste water to the storm drain system, and having a 1,000 gallon historic underground storage tank containing gasoline on the property (installed in 1983).

Official regulatory inspections by the Santa Cruz County Health Services Agency (SC-HSA) (see Appendix C for copies of official inspection reports) indicated,

- Inspection reports identified “oil spilled all over the floor of the waste oil shed”. A request to develop procedures to transfer oil with minimal spillage and to clean up spills after they happen, inspection dated February 26, 2009
- Inspection reports requested documentation of proper disposal of hazardous materials. These housekeeping issues are considered a *recognized environmental condition*, inspection dated June 9, 2009

In summary, the review of regulatory files and records identified some areas of potential concern including: some poor-housekeeping with regards to the proper storage and handling of chemicals, and storage of bulk fuels and wastes.

6.0 SITE INSPECTION

6.1 Methodology and Limiting Conditions

A physical inspection of the Site was conducted on January 14, 2011 to note potential sources of contamination associated with on-site activities. A copy of the completed *Site Inspection Checklist*, which contains detailed documentation of the Site survey including a photographic record of the inspection, is contained in Appendix A. A brief summary of inspection observations is noted below.

	Site Inspection Observations
Current Use of Property	The property contains 3 parcels. The main parcel (Parcel 1) is currently occupied by Sun Land Garden Products, Inc., (Sunland). Sun Land operates a commercial garden supply business that produces various different soils and potting mixes. Bordering this parcel to the east and north is a separate parcel (Parcel 2) containing apple orchards that extend parallel to Green Valley Road. Bordering this parcel (Parcel 3) to the south are row-crops and residential dwellings. The apple orchard and row-crops are managed by a separate company to Sun Land. The topography of the Site varies at different locations, grade slopes to the northwest in parcel 2, to the southeast in parcel one and southwards towards Pioneer Rd in parcel 3. Sun Land operation contains 6 main structures (building 1-6) and an office building. Building 1-6 are approximately 40/50 years old and structural improvements to the roof are evident.
Evidence of Past Uses of Property	Evidence of long-term agricultural produce is evident in Parcel 2 and 3. Evidence of long-term soil mixing facility is evident in parcel 1. No further evidence of past site usage is evident.

	Site Inspection Observations
Potable Water Source	There is an agricultural production well located at the southwest entrance to parcel 1 – Sun land garden Products, Inc., (Sunland). The well is houses within a pump house with PVWMA etched onto the pvc piping. Water supplied by this well is reported to only be used for operations at parcel 1. Another water production well is reported to be located in parcel 3 and used for domestic purposes.
Sewage Disposal Source	There is a septic tank located at the southeast corner of building 1 in parcel 1. Three sumps are located adjacent to this tank.
Pools of Liquid/Odors?	The operations at Sun Land use water to spray onto mixes when moving and processing the various mixes. As a result pools of surface water are visible through out. No odors were encountered.
Electric or hydraulic equipment?	Electrical and hydraulic equipment was encountered in building 1 and 2 in the main Sun Land operations area. Electricity is supplied to the Site by two main transformers mounted onto concrete slabs in building 2. No staining was observed during inspection. Adjacent to the transformer was a compressor with staining observed. Compressor is located on native soil. Another smaller transformer is located adjacent to the backup generator. Some possible wicking was observed at the base of the concrete slab. Hydraulic equipment is used by Sun land in the operation of bagging mixed soils. Specialized hydraulic closed-loop systems are located in building 1 and 2. Hydraulic equipment appears in good condition with some staining noted around hose fittings.
Storage tanks?	Multiple storage tanks were observed during the site inspection. Two unused Above Ground Storage Tanks are located along the entrance to Sunland operation. One of these tanks is empty and an unknown amount of diesel in the other. Both AST are gravity fed tanks with side dispensers extending out. Both AST have containment directly under the tank. Both AST are located directly on native soil. A small top fill diesel tank is attached to the backup generator. This tank is attached to the backup generator with no secondary containment. To fill tank Diesel must be poured in from the top. A 1,000-gallon Diesel AST located adjacent to the mixing operations in Parcel 1. This tank is within a confined secondary containment. Diesel is dispensed using an old dispensing unit. The dispenser extends out over a limited sized concrete slab. To the rear of this Diesel AST is a mounted propane tank used to fuel the forklifts throughout the facility. This tank is located on native soil. Another AST is located on Parcel 3 adjacent to residential dwellings. This is the same gravity fed extending dispenser as noted previously. This is a used tank and is reported to be filled every couple of months. This tank has a containment area but is located directly on native soil. Containment area has a removed plug and contains rainwater. A large Water storage tank is located adjacent to the office building in Parcel 1. This water tower is located on top of a structure housing machine machines and adjacent pump house. Another water tower is located to the rear of residential dwelling in Parcel 3.

Drums or Containers?	<p>Site Inspection Observations</p> <p>Multiple drums and containers were observed during the site inspection. Building 6 is primarily used as a metal fabrication area to repair fabricated parts for operations. Solvents and lubricates are scattered through this building. Building 5 is used as a maintenance and storage area. Multiple 55-gallon drums and 5-gallon pails of motor oil, hydraulic oil and antifreeze located on pallets were observed throughout. Adjacent to this building is a located haz mat storage shed containing additional 55 gal drums and 5 gal pails of motor oil and hydraulic oil. Spilling and staining was observed in this shed. Adjacent to the shed on concrete slab are 2 more 55-gallon drums of motor oil. No clearly labeled waste was identified.</p> <p>No ponds pits or lagoons were identified during the Site visit. A water retention reservoir was observed adjacent the Parcel 2 at the northwest corner.</p> <p>Minor spill and stains were observed in building 5 on concrete slab, building 6 does not have a concrete slab floor and some minor staining was observed.</p> <p>The operations at Sun Land produce excess runoff and discharge to the Storm drain system under permit. A graded floor drain flowing to the storm drain is located at the west entrance of building 1. Surface runoff flow southeasterly towards storm drain pipe located at the south east corner of the parcel. Bais of hay form a filtration barrier surround the pip entrance. Some coloring was observed on the water flowing into the storm drain.</p> <p>The Site maintains a current HMMP that lists on-site chemicals as: Argon Gas, Acetylene, Oxygen, Motor Oil, Waste Oil, Gasoline, Red Diesel, Propane, and various different types of fertilizer mix ingredients. Multiple 55-gallon drums were observed that are not listed in the HMMP. No antifreeze is listed in the HMMP.</p>
Exterior Observations	<p>Adjoining properties are mixed agricultural and residential along Pioneer Rd and Green Valley Rd. The area is and has been historically agricultural orchards and crop.</p>

6.2 Summary of Site Inspection

The visual inspection of the property revealed on-site hazardous material storage and hazardous waste generation by Sun Land Garden Products, Inc., (Sunland). The site inspection identified a number of *recognized environmental conditions* at the subject Site including,

- Long term Fuel storage and dispensing from Above Ground Storage Tanks (AST) – gravity fed AST’s with dispensers that extend out over native soil poses a *recognized environmental condition* due the length of time in operation and the real possibility of spills directly onto native soil.
- Long Term Vehicle/Equipment Maintenance Operations & Chemical Storage. Building 5 and adjacent shed are currently used as chemical storage and maintenance area for vehicle equipment and machinery. Hazardous material stored at this location includes the use of lubricants, solvents and fuels and the generation of chemical wastes. Only limited records exist that document the storage and proper disposal of these chemicals. The

- existing Hazardous Materials Management Plan is out of date and does not match up with site conditions (i.e., antifreeze/kerosene). This is a *recognized environmental condition*.
- Long Term Machine Shop. Building 6 has been a metals fitting and fabrication area for a long period of time. Metals, cutting oils, lubricants and solvents are common chemicals/waste used and generated at machine shop operations. The shop floor is unpaved and this represents a *recognized environmental condition*.
 - Long Term Open-Air Vehicle/Equipment Storage on Native Soils. Sunland machinery and equipment has been stored adjacent to the east entrance along Green Valley Road. This poses a *recognized environmental concern* due to potential oil leaks over a long period of time directly over native soil.
 - Stormwater Monitoring. The Site operates under an industrial waste discharge permit. Review of permit requirements and any sampling violations is recommended to determine whether any significant infrastructure changes are likely during a property transaction
 - Supply Well Water Quality Testing. Supply well testing of water quality should be conducted if this water is used as a drinking water source for the residences. Results should be checked against State drinking water standards to confirm no liability exists or whether filtration infrastructure is necessary.

In summary, multiple *recognized environmental conditions* were identified during the Site Inspection.

7.0 PROPERTY LAND USE QUESTIONNAIRE/ INTERVIEW

A representative of the current property owner, Mr. Juan Ramirez, completed a *Land Use Questionnaire* regarding current and historical uses of the Site (copy included in Appendix A). The following summarizes the answers to the questionnaire.

	Land Use Questionnaire Observations
Site Contact/time affiliated	Mr. Juan Ramirez – operation manager at the Site for the past 14 years. Sunland Garden Products, Inc., (Sunland) and Orchard / Organic Crop are located at the Site. Sun Land operates a soil mixing and bagging operation.
Current Site Use	Different soil mixes use different recipes for different clients. There are 6 large structures approx 40/50 years old and an office building located adjacent to the water tower.
Previous Occupants	Poultry Farm
Hazardous Materials	Chemicals stored on-site are Gasoline, Diesel, Propane, motor oil, hydraulic oil, lubricants, degreasers and small quantities of cutting solvent.
Site Infrastructure	On-Site groundwater wells at south entrance and one or two groundwater wells adjacent to residence along Pioneer Rd. Surface water runoff flows to storm drain at entrance to building 1 and to SE corner of parcel. No other floor drains. The Site uses a septic system.

Land Use Questionnaire Observations

Adjoining properties	Agricultural and residential dwellings
Environmental reports	None known

7.1 Summary of Land Use Questionnaire

The land use questionnaire completed by the landowner representative, revealed no *recognized environmental conditions* at the Site.

7.2 Summary of Phase I ESA Research

In summary, *recognized environmental conditions* were identified for the subject property. Our Phase I ESA research revealed the following environmental conditions at the Site:

Historical Research

The historical review of the subject Site and surrounding sites generated from land use maps, aerial photographs, topographic maps and the reverse telephone directory search did not reveal any *recognized environmental conditions* at the subject Site.

Regulatory File Review

The review of Regulatory Databases revealed the subject Site to be listed on multiple databases. The subject Site is listed as having hazardous materials on-site including an above ground storage tank (AST), discharging waste water to the storm drain system, and having a 1,000 gallon historic underground storage tank containing gasoline on the property installed in 1983. Official regulatory inspections by the Santa Cruz County Health Services Agency (SC-HSA) (see Appendix C for copies of official inspection reports) indicated,

- Official Inspection dated February 26, 2009 identified 'oil spilled all over the floor of the waste oil shed'. A request to develop procedures to transfer oil with minimal spillage and to clean up spills after they happen.
- Official Inspection dated June 9, 2009 and the subsequent follow up official inspection both requested to properly dispose of hazardous materials and document this process. This is considered a *recognized environmental condition*.

Site Inspection

- Long term Fuel storage and dispensing from Above Ground Storage Tanks (AST) – gravity fed AST's with dispensers that extend out over native soil poses a *recognized environmental condition* due the length of time in operation and the real possibility of spills directly onto native soil.
- Long Term Vehicle/Equipment Maintenance Operations & Chemical Storage. Building 5 and adjacent shed are currently used as chemical storage and maintenance area for

vehicle equipment and machinery. Hazardous materials stored at this location include the use of lubricants, solvents and fuels and the generation of chemical wastes. Only limited records exist that document the storage and proper disposal of these chemicals. The existing Hazardous Materials Management Plan is out of date and does not match up with Site conditions (i.e., antifreeze/kerosene). This is a *recognized environmental condition*.

- Long Term Machine Shop. Building 6 has been a metals fitting and fabrication area for a long period of time. Metals, cutting oils, lubricants and solvents are common chemicals/waste used and generated at machine shop operations. The shop floor is unpaved and this represents a *recognized environmental condition*.
- Long Term Open-Air Vehicle/Equipment Storage on Native Soils. Sunland machinery and equipment has been stored adjacent to the east entrance along Green Valley Road. This poses a *recognized environmental concern* due to potential oil leaks over a long period of time directly over native soil.
- Stormwater Monitoring. The Site operates under an industrial waste discharge permit. Review of permit requirements and any sampling violations is recommended to determine whether any significant infrastructure changes are likely during a property transaction
- Supply Well Water Quality Testing. Supply well testing of water quality should be conducted if this water is used as a drinking water source for the residences. Results should be checked against State drinking water standards to confirm no liability exists or whether filtration infrastructure is necessary.

8.0 LIMITED PHASE II SOIL AND GROUNDWATER INVESTIGATION

Soil and groundwater samples were collected to assess potential environmental liabilities associated with both former and current Site use. The Limited Phase II Soil and Groundwater investigation completed for the Site was designed to determine if there the property has been negatively impacted from:

- Long term on-site above and below ground storage of fuel products
- Long Term Vehicle/Equipment Maintenance Operations & Chemical Storage
- Long Term Machine Shop using solvent cutting agents and degreasers.
- Long Term Open-Air Vehicle/Equipment Storage on Native Soils

Specifically, a total of thirteen driven probe borings were advanced across the Site to investigate potential negative impacts to shallow soil and groundwater. Continuous soil cores were advanced to depths ranging from 8 feet to 27 feet below the ground surface (bgs). We note that

four of the boring locations were advanced via hydropunch technique (i.e., direct push with no soil coring) to depths of 22 to 40 feet bgs for grab groundwater sampling, following inspection of soil to 8-foot bgs. This technique as employed as first encountered groundwater was observed to be highly variable across the Site. Sampling for lab analysis included:

- Grab groundwater samples were collected from seven of the thirteen borings:
- Discrete shallow (i.e., 4 feet bgs) soil samples were collected from four of the borings located adjacent to ASTs and chemical storage areas.
- Three shallow (i.e., 12-15-inches bgs) 3-point composite soil samples were collected to provide broad coverage of specific land use areas across the property (i.e., vehicle / equipment storage, maintenance and fabrication area, and the mixing operations area).

Sample locations and targeted land use areas are shown on Figure 2.

Following sample collection, each boring was properly sealed to the ground surface with neat cement grout.

Soil cuttings generated during the drilling investigation were contained in a single 55-gallon drum on-site. Proper disposal of these cuttings is the responsibility of the property owner.

8.1 Field Investigation

We completed a drilling program to evaluate potential environmental liability associated with the recognized conditions listed above. Analytical results of the laboratory tested soil and groundwater are tabulated on Tables 1, 2 and 3 and presented graphically on Figures 2 and 2b. Drilling logs of observations made by the field geologist for borings with continuous cores (DP-1 through 13), field notes, project photo sheets and the Certified Analytical Reports issued by the testing laboratory are presented in Appendix D.

Driven-Probe Drilling Operations: Exploratory drilling was completed with a GeoProbe drill rig at the Site on January 27th and 28th. Drilling and Sampling followed our standard *Field Methodology for Hydraulic Driven Probes*, which is included in Appendix D. The exploratory borings were drilled using a truck-mounted GeoProbe driven-probe system operated by ECA, of Aptos, CA. Soil coring was conducted to map subsurface soil types, to physically check for evidence of chemical releases (i.e. chemical odor, soil discoloration), and to obtain soil and groundwater for analysis by a certified laboratory. The collection of groundwater samples is especially ideal for assessing whether a chemical release has occurred because it can provide evidence of upgradient releases over a relatively large area.

Relatively undisturbed soil samples were retrieved by driving a 1.5-inch sampling barrel into native soils through hollow-stem steel probes. Soil samples were retrieved in acetate liners and were regularly checked for discoloration and chemical odor. Once the sampling barrel was

brought to the surface, soil targeted for laboratory analysis was immediately protected at both ends with Teflon tape, sealed with non-reactive caps, taped, and stored in an insulated container cooled with blue ice. A portion of the retained soil core was then placed in a plastic baggie to check for the presence of volatile organic compounds using a photoionization field meter calibrated to benzene.

Groundwater was first observed in the borings at variable depths of 12-19 feet below ground surface (bgs). We note that groundwater was not encountered in continuously cored boring DP-5 to a depth of 27 feet bgs indicating that first groundwater across the Site is highly variable. Based on this variable depth to groundwater information obtained from the first few borings installed at the Site (i.e., borings DP-5, -9, -12, and -13), groundwater was obtained from boring DP-3b, 6, 7, and 10 by advancing a hydropunch sampler to depths of 22-40 feet bgs, then casing the borehole with screen section for groundwater sampling. Discrete groundwater samples were collected from borings DP-3b, -6, -7, -9, -10, -12, and -13 through 0.010-inch slotted PVC using a peristaltic pump system equipped with dedicated poly tubing and dispensed directly into appropriate glass sample bottles, and placed in ice chests cooled with blue ice. Soil and groundwater samples were transported under appropriate chain-of-custody documentation to a State-certified laboratory (ESC Labs).

Shallow Composite Soil Sampling: The shallow composite soil sampling followed our *Standard Operating Procedure for Shallow Soil Sampling*, which is presented in Appendix D. The shallow 3 to 1 composite samples were obtained from depths of 12-15-inches below the ground surface by hand-augering to a depth just above the sampling interval, then advancing a slide-hammer equipped with a stainless steel sampling sleeve. The sleeve was immediately protected at both ends with Teflon tape, sealed with non-reactive caps, taped, and stored in an insulated container cooled with blue ice.

8.2 Laboratory Analytical Results

The collected soil and groundwater samples were submitted to a State-certified laboratory for the following analysis:

- Total Petroleum Hydrocarbons in the diesel and oil ranges (TPH-d/mo) by EPA Method 8015M;
- Total Petroleum Hydrocarbons as gasoline (TPH-g), and the gasoline constituents Methyl-tert-Butyl Ether (MTBE), Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX) by EPA Method 8260;
- Total Volatile Organic Compounds (VOCs) - EPA 8010 VOC list by EPA Method 8260;

Three 3-point composite soil samples were analyzed for:

- Total Petroleum Hydrocarbons in the diesel and oil range, RCRA 8 metals by EPA Method 6010B, and Organochlorine Pesticides by EPA Method 8081A.

These analyses provide a broad coverage for typical contaminants of concern associated with commercial/industrial land uses that include equipment / vehicle maintenance and storage, metal fabrication, and fuel storage. Analysis for organochlorine pesticides was also included in assessing shallow soils to confirm or deny any significant impacts resulting from the subject sites agricultural use. We note that no testing for pesticides was included for the current agricultural land use areas (i.e., row crops and orchards); however, should land use at these locations change in the future we recommend that testing of these areas be completed.

Soil Analytical Results: Field observation and screening of all collected soils did not reveal any obvious soil impacts. Discrete soil samples collected at relatively shallow depths (i.e., 4-foot bgs) obtained from locations adjacent to existing and former ASTs (i.e., borings DP-2, 4, and 10) were analyzed to confirm field observation that no significant impacts have occurred to shallow soil as a result of long-term fueling operations. Results of these discrete samples revealed:

- The soil sample collected at boring DP-2 revealed no detections of contaminants, with the exception of slightly elevated concentration of 1,2-Dichloroethane (a lead scavenger found in gasoline) at a detection of 0.0081 mg/kg which slightly exceeds the conservative risk based Environmental Screening Levels (ESLs) of 0.0045 mg/kg. All other constituents were detected at trace levels or were not detected.
- Soil samples collected from borings DP-4 and 10 revealed no detections of contaminants. A discrete soil sample was also collected adjacent to the chemical storage area (i.e., DP-9 at a depth of 4 feet bgs) to confirm field observation that no significant impacts have occurred to shallow soil as a result of long-term chemical storage. Results of this discrete sample revealed:
 - Only a trace concentration of TPH-diesel was detected well below the conservative risk based ESL. No other contaminants were detected at this location.

Field observations of the shallow (i.e., 12-15-inches bgs) 3-point soil composite samples (i.e., COMP-1, 2, & 3) revealed no indication of potential soil impacts. Results of the composite soil samples revealed:

- Only trace concentration of TPH-diesel and motor oil were detected well below the conservative risk based ESLs in COMP-2.
- Concentrations of metals fell well below the conservative ESLs in all three composite samples, with the exception of Arsenic. NOTE: although the concentrations of Arsenic were detected at concentrations above the ESLs, they are relatively consistent across the Site, which indicates that they are likely naturally occurring background concentrations.

- Only a trace detection of the pesticide compound 4,4-DDE was detected in COMP-3 at concentrations well below the ESLs. No other pesticide compounds were detected in any of the composite samples.

Discrete Groundwater Analytical Results: A total of seven groundwater samples collected across the Site were submitted for laboratory analysis. We note that groundwater samples can provide information as to whether or not a significant release of contaminants has occurred at the Site. Gab groundwater analytical results indicate:

- Five of the nine borings (DP-3b, -7, -9, -12, and -13) contained low levels of TPH as motor oil and/diesel. These detected concentrations were well below the California Regional Water Quality Control Board - Central Coast Region Water Quality Objective set at 1,000 parts per billion (ppb).
- A trace concentration of MTBE (3.5 ppb) was detected in the grab groundwater sample collected in the down-gradient direction of the former gasoline UST (i.e., DP-6) at a concentration below the WQO set at 5 ppb.
- No other detections of contaminants were detected in any of the grab groundwater samples.

9.0 CONCLUSIONS

This report contains results of a combined *Phase I/II Environmental Site Assessment* (ESA) that was conducted to assess potential environmental liability risks associated with current and historical land uses at commercial property located at 90 & 94 Pioneer Road in Watsonville ("Site", see Figure 2). Potential environmental risks defined in the combined *Phase I/II ESA* real estate transaction assessment process are identified as "*recognized environmental conditions*". Conclusions are based on a site inspection, interviews, a review of both historical and regulatory documents, and the completion of limited soil and groundwater assessment.

10.0 RECOMMENDATIONS

Based on the results of this Phase I/II ESA we recommend the following:

1. The Santa Cruz County Health Services Agency (SC-HSA) is the regulatory agency responsible for protection of human health and the environment with regard to soil contamination in the County. Because one of the soil samples slightly exceeded the SC-HSA conservative threshold (ESL) a copy of this report should be submitted to the SC-HSA for their opportunity to review comment to confirm that no further action is required.

2. The California Regional Water Quality Control Board – Central Coast Region (Water Board) is the regulatory agency responsible for protection of human health and the environment in regards to groundwater impacts. As noted above, none of the tested groundwater contained chemical concentrations that exceed regulatory Water Quality Goals. However, the SC-HSA relies on input from the Water Board.
3. We note that no testing for pesticides was included for the current agricultural land use areas (i.e., row crops and orchards), however, should land use at these locations change in the future we recommend that testing of these areas be completed.
4. Review of industrial waste discharge permit requirements and any sampling violations is recommended to determine whether any significant infrastructure changes are likely during a property transaction.
5. Water quality of the site supply well should be tested if this water is used as a drinking water source for the residences. Results should be checked against State drinking water standards to confirm no liability exists or whether filtration infrastructure is necessary.

11.0 LIMITATIONS

This report and the associated work have been provided in accordance with the principles and practices generally employed by the local environmental consulting profession. This is in lieu of all other warranties, express or implied. This report has been prepared solely for our client. The assessment is provided so the client may make a more informed decision as to Site conditions. This report shall not be relied upon by or transferred to any other party, or used for any other purpose, without the express written authorization of Weber, Hayes, and Associates.

This ESA is not a regulatory compliance audit or an evaluation of the efficiency of the use of any hazardous materials at the Site. Unless otherwise stated no evaluation for the presence of asbestos-containing building materials, Lead-based paint, urea-formaldehyde foam insulation, or other potentially hazardous building materials; methane; radon gas; Lead in drinking water; or wetlands, is included in our assessment.

Our findings and opinions are based on information collected from regulatory agency files and lists, interviews, and Site conditions at the time of our Site reconnaissance. Note that our findings and opinions are based on information that we obtained on specific dates through records review, Site reconnaissance, and related activities. It is possible that other information exists or subsequently has become known, just as it is possible for conditions we observed to have changed after our observations.

The accuracy and thoroughness of any environmental assessment depend on a variety of factors and optimally will include soil and groundwater sampling. Weber, Hayes, and Associates cannot and will not provide guarantees, certifications, or warranties that the investigated property is or is

not free of environmental impairment. Any person who is aware of any *recognized environmental conditions* of the Site or surrounding areas that are different from those described in the report should report them immediately to this office for evaluation as part of an additional scope of work.

If you have any questions or comments regarding any aspect of this project, please contact us at our office (831-722-3580).

Respectfully submitted,

Weber, Hayes and Associates



And:

Patrick Hoban, PG
Senior Geologist



And:

Jered Chaney, PG# 8452
Project Geologist



And:

12.0 QUALIFICATION OF ENVIRONMENTAL PROFESSIONAL

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in §312.10⁴ of this part.
I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.



[Handwritten Signature]

And: Patrick Hoban, PG
Senior Geologist

⁴ ASTM Standard E 1527-05, X2, 1, 1 and Federal Register 40 CFR Part 312, §312.10:

- (1) A person who possesses sufficient specific education, training, and experience necessary to exercise professional judgment to develop opinions and conclusions regarding conditions indicative of releases or threatened releases... on, at, in, or to a property, sufficient to meet the objectives and performance factors...
- (2) Such a person must:
 - (i) Hold a current Professional Engineer's or Professional Geologist's license or registration from a state, tribe, or U.S. territory (or the Commonwealth of Puerto Rico) and have the equivalent of three (3) years of full-time relevant experience; or
 - (ii) Be licensed or certified by the federal government, a state, tribe, or U.S. territory (or the Commonwealth of Puerto Rico) to perform environmental inquiries ... and have the equivalent of three (3) years of full-time relevant experience; or
 - (iii) Have a Baccalaureate or higher degree from an accredited institution of higher education in a discipline of engineering or science and the equivalent of five (5) years of full-time relevant experience; or
 - (iv) Have the equivalent of ten (10) years of full-time relevant experience.

13.0 REFERENCES

Documents

- ASTM E1527-05, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process; 2005
- Federal Register 40CFR Part 312, Innocent Landowners, Standards for Conducting All Appropriate Inquiry, 2005
- Sampson Engineering Inc, *Environmental Investigation Report*, dated May 2, 2010
- California Regional Water Quality Control Board (CRWQCB) *No further action letter*, dated July 17, 2000.
- Santa Cruz County Environmental Health:
 - Official Inspection Form – 90 Pioneer Road, Watsonville, Ca 95076, dated June 09, 2009
 - Official Inspection Form – 90 Pioneer Road, Watsonville, Ca 95076, dated February 26, 2009
 - *No further action letter* dated June 14, 2000.
 - *Hazardous Materials Management Plan (HMMP)*
- Soil Control Lab Storm Water Monitoring sample results dated January 19th, 2010.
- State Water Resources Control Board (SWRCB) Annual Report for Storm Water Discharges associated with industrial activities reporting period, July 1 2009 through June 30th, 2010.

Websites

- California Regional Water Quality Control Board, Environmental Protection Agency (EPA)
- Department of Conservation Oil & Gas Maps (DOGGR)
 - <http://maps.conservation.ca.gov/doms/index.html>
- Department of Toxic Substances Control (DTSC) Envirostor database,
 - <Http://www.Envirostor.Disc.Ca.Gov/Public/>
- State Water Resources Control Board (SWRCB) Geotracker database,
 - <http://www.geotracker.swrcb.ca.gov/>
- CA Storm water Multiple Applications and Report Tracking System
 - <https://smarts.waterboards.ca.gov/smarts/faces/SwSmartsLogin.jspx>
- Santa Cruz County, Department of Environmental Health,
 - Planning Department, Records Office, <http://www.clerkrecordssearch.org/>: Appraisal Excerpts from property assessment dated August 14th, 2006.

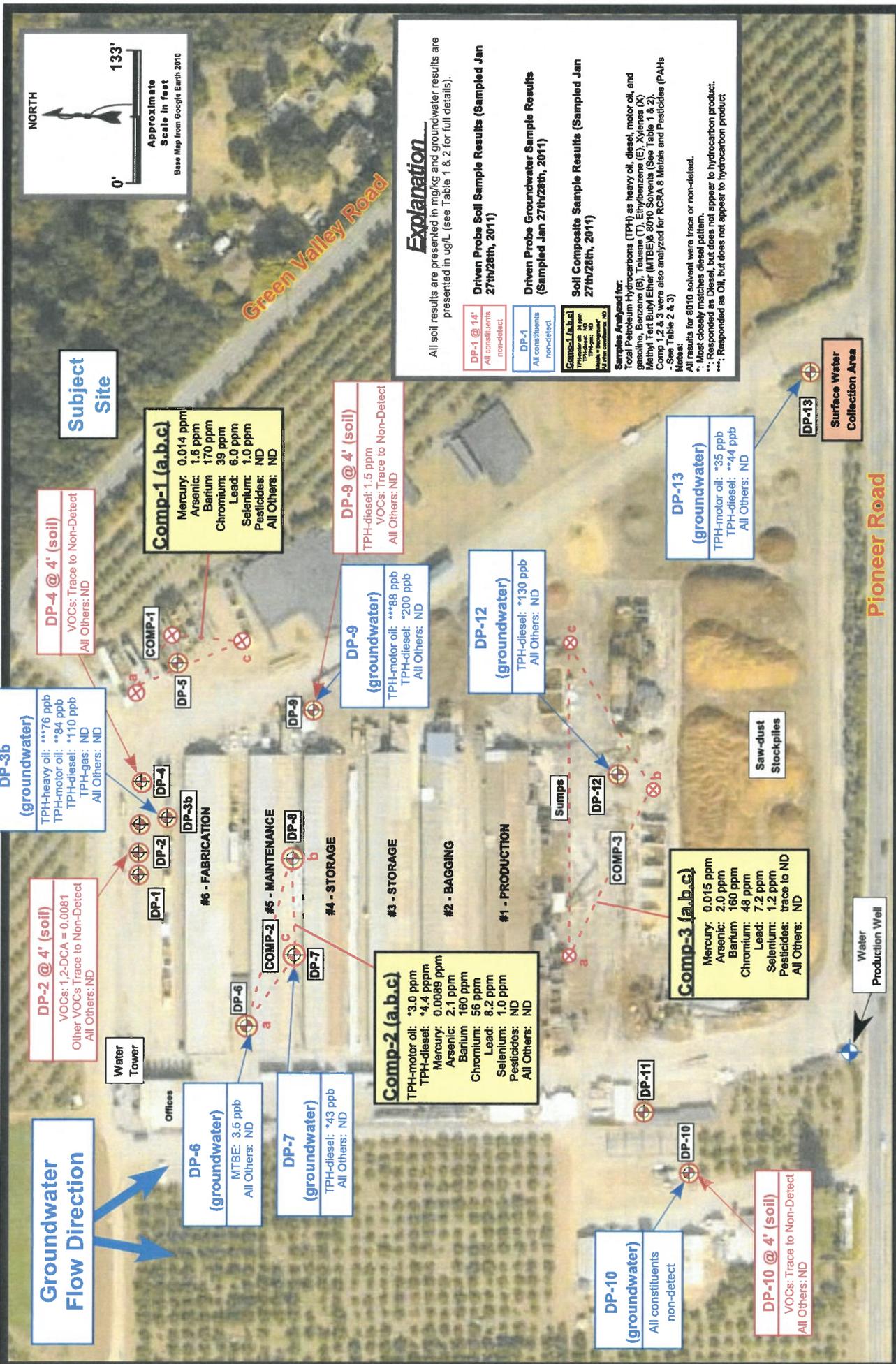


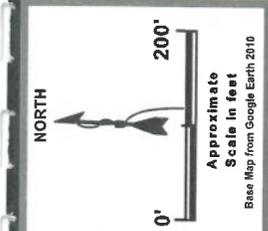
FIGURE 2b
Job # 2X101

Site Map with Soil & Groundwater Results
Phase I/II Environmental Site Assessment
Sun Land Garden Products
90 Pioneer Road,
Watsonville, California

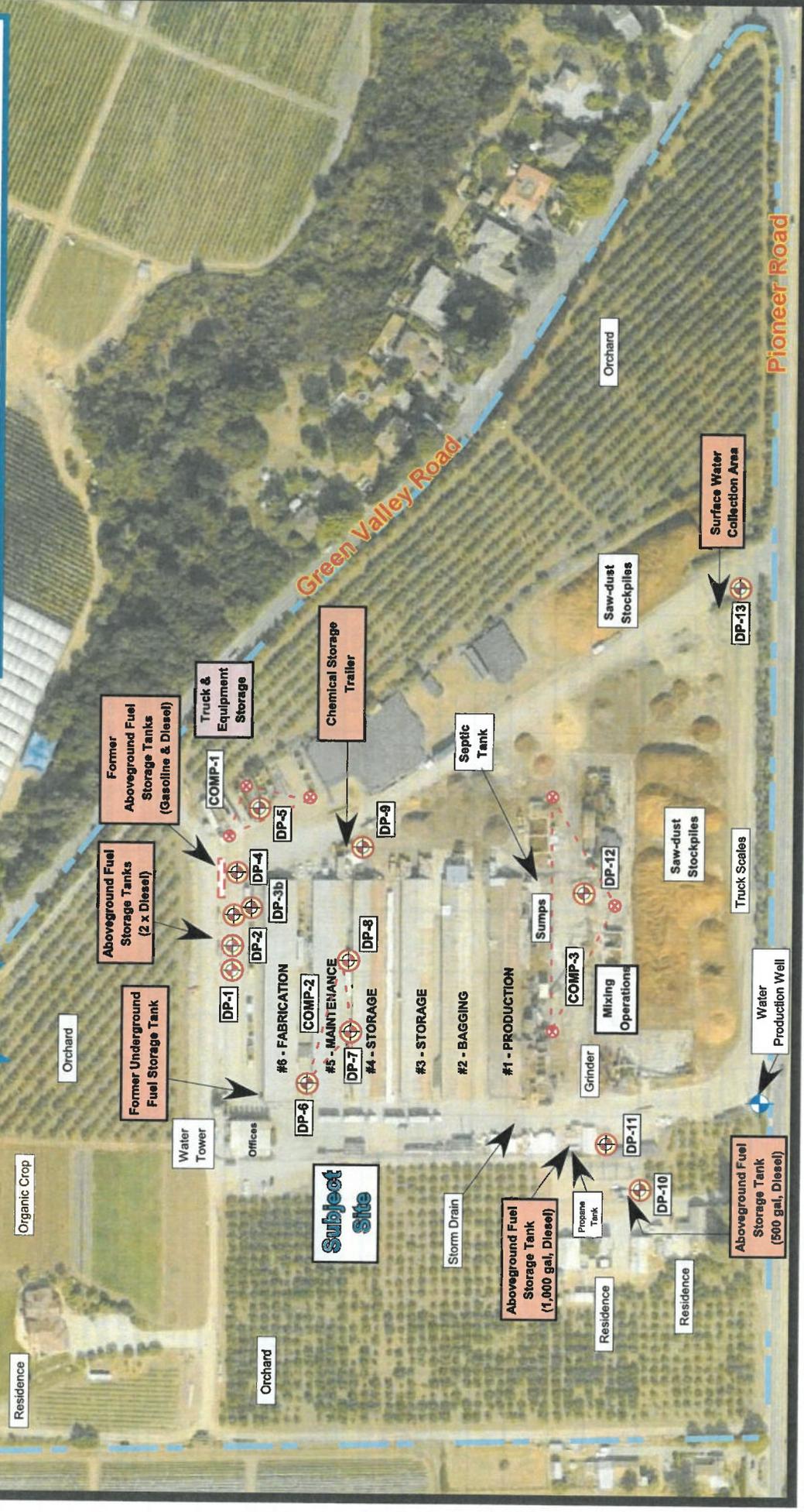
Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Drive, Watsonville, CA 95076
(831) 722 - 3580 Fax (831) 722 - 1159
www.weber-hayes.com



Estimated Groundwater Flow Direction
 (assumed site flow based on shallow ground-water conditions and local topography)



EXPLANATION
 Shallow Driven Probe Soil Boring Locations & Designation
 Composite Soil Sample Locations & designation



Weber, Hayes & Associates
 Hydrogeology and Environmental Engineering
 120 Westgate Drive, Watsonville, CA 95076
 (831) 722 - 3580 Fax (831) 722 - 1159
 www.weber-hayes.com

Site Map
 Phase I/II Environmental Site Assessment
 Sun Land Garden Products
 90 Pioneer Road,
 Watsonville, California

FIGURE 2
 Job # 2X101



OFFICIAL INSPECTION REPORT
Santa Cruz County Environmental Health Service
701 Ocean St., Room 312
Santa Cruz, CA 95060
(831) 454-2022 - www.scceh.com

Facility Name : Sun Land Garden Products
Site Address : 90 Pioneer Rd , Watsonville
Facility Phone : (831) 724-6500
Facility ID : FA0004490

Owner : Melissa Berger
Owner Address : 90 Pioneer Rd, Watsonville
Owner Phone : (418)862-4462
Inspection Date : 7/3/2018

Programs Inspected at this facility

Inspection #	Program Identifier	Record ID	Type of Inspection
DAQQTINT	Hmmp Standard Form Filing Fee	PR0009738	Routine Inspection - Ongoing
DAXABD2SR	Aboveground Petroleum Storage-Spcc Facility	PR0012785	Routine Inspection - Ongoing
DAZAMDOSQ	Hazardous Waste Generator (Hmmp Std Form)	PR0009943	Routine Inspection - Ongoing

An inspection of your facility revealed the following violations of the California Health and Safety Code, the California Code of Regulations, and/or Chapter 7.100 of the Santa Cruz County Code. A reinspection may occur at any time to verify correction of these violations. Please note the date for correction as listed per violation. Thank you for your cooperation.

Inspection Violations

Minor Violations

Regulatory Requirement:

Annually review and electronically certify that the business plan is complete and accurate on or ... - 01 H307

Comply by 8/2/2018

Complied on 7/3/2018

Violation Description:

Failure to annually review and electronically submit the business plan on or before the annual due date and certify that it is complete, accurate, and in compliance with EPCRA. HSC 6.95 25508(a)(1), 25508.2

Inspector Comments:

Overall Inspection Comments

On site today to observe the management of hazardous materials and waste, training and record keeping.
All hazardous materials and wastes are stored properly with secondary containment.
All hazardous waste containers have the proper haz waste labels on them.
The diesel generator on the west side of the property does not have the proper size secondary containment for the full capacity of the fuel tank.
The operator only fills the tank 1/4 of its capacity however I suggest that you provide a secondary containment that will cover the full capacity of the tank.
No violations were observed here today.

Received by:

Signature:

Inspector: Derek Prestesater
Environmental Health Specialist I/II
UST Inspector ICC Certification # -



OFFICIAL INSPECTION REPORT
Santa Cruz County Environmental Health Service
701 Ocean St., Room 312
Santa Cruz, CA 95060
(831) 454-2022 - www.sceeh.com

Facility Name : Sun Land Garden Products
Site Address : 90 Pioneer Rd , Watsonville
Facility Phone : (831) 724-6500
Facility ID : FA0004490

Owner : Melissa Berger
Owner Address : 90 Pioneer Rd, Watsonville
Owner Phone : (418)862-4462
Inspection Date : 7/3/2018

CERTIFICATION OF RETURN TO COMPLIANCE

I certify that the violations cited on this report have been satisfactorily corrected. I have personally examined any documentation attached to the certification to establish that the violations have been corrected.

Signature: _____ Title: _____ Date: _____



OFFICIAL INSPECTION REPORT
Santa Cruz County Environmental Health Service
701 Ocean St., Room 312
Santa Cruz, CA 95060
(831) 454-2022 - www.scceh.com

Facility Name : Sun Land Garden Products Site Address : 90 Pioneer Rd , Watsonville Facility Phone : (831) 724-6500 Facility ID : FA0004490	Owner : Melissa Berger Owner Address : 90 Pioneer Rd, Watsonville Owner Phone : (418)862-4462 Inspection Date : 3/2/2017
--	---

Programs Inspected at this facility

Inspection #	Program Identifier	Record ID	Type of Inspection
DA3W2LFHM	Aboveground Petroleum Storage-Spcc Facility	PR0012785	Routine Inspection - Ongoing
DABUXONHG	Hazardous Waste Generator (Hmmp Std Form)	PR0009943	Routine Inspection - Ongoing
DAI0YDCTA	Hmmp Standard Form Filing Fee	PR0009738	Routine Inspection - Ongoing

An inspection of your facility revealed the following violations of the California Health and Safety Code, the California Code of Regulations, and/or Chapter 7.100 of the Santa Cruz County Code. A reinspection may occur at any time to verify correction of these violations. Please note the date for correction as listed per violation. Thank you for your cooperation.

Inspection Violations

Minor Violations

Regulatory Requirement:

Adequate secondary containment is provided for containers storing hazardous materials and/or wastes. - 25 21220107

Comply by 4/1/2017

Violation Description:

Failure to provide adequate secondary containment for all hazardous materials containers as required. [SCCC 7.100.160]

Inspector Comments:

There is oil in the secondary containment of the bulk oil containers in the mechanics shop. The diesel tank of the generator does not have adequate secondary containment. Remove oil from the secondary containment of the bulk oil. Get a small tank for the generator or increase the secondary containment.

Overall Inspection Comments

Overall housekeeping is very good. SPCC was reviewed onsite and was complete. Good work.

Received by:

Martin Reyes
Director

Signature:

Inspector: REBECCA SUPPLEE
 Environmental Health Specialist III
 UST Inspector ICC Certification # - 5247492

CERTIFICATION OF RETURN TO COMPLIANCE

I certify that the violations cited on this report have been satisfactorily corrected. I have personally examined any documentation attached to the certification to establish that the violations have been corrected.

Signature: _____ Title: _____ Date: _____

-
Facility HMMP



**CERTIFIED UNIFIED PROGRAM AGENCY (CUPA)
 HAZARDOUS MATERIALS MANAGEMENT PLAN (HMMP) INSPECTION REPORT**

FACILITY NAME: <u>Gun Land Garden Products</u>	DATE: <u>12/8/15</u>	INSPECTION TYPE <input checked="" type="checkbox"/> Routine <input type="checkbox"/> Reinspection <input type="checkbox"/> Complaint
ADDRESS: <u>90 Pioneer Rd</u>		

Inspection Report: The items checked in the "NO" column below are violations of the California Health & Safety Code (HSC); Title 19 of the California Code of Regulations (CCR); or Chapter 7.100 of the Santa Cruz County Code as referenced and must be corrected as described on the inspection summary page of this report:

YES	NO	Code	HAZARDOUS MATERIALS MANAGEMENT PLAN (HMMP)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	101	The business has a current Health Permit for storage of hazardous materials [SC County Code 7.100.060]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	102	HMMP information is complete, current, & available during inspection [HSC 25505; Title 19 CCR 2729]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	103	Inventory of hazardous materials is complete and accurate [HSC 25506 (a); Title 19 CCR 2729]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	104	Annual inventory reporting requirements have been met [HSC 25508 (c); HSC 25508.2]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	105	Site layout/facility maps are accurate [HSC 25505 (2); Title 19 CCR 2729]
YES	NO	Code	HANDLING AND STORAGE OF HAZARDOUS MATERIALS
<input checked="" type="checkbox"/>	<input type="checkbox"/>	106	Facility is operated and managed to prevent a release of hazardous materials [Title 19 CCR 2731 (c); SC County Code 7.100.170 and 7.100.180]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	107	Adequate secondary containment is provided for materials stored [SC County Code 7.100.160]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	108	Warning signs are posted in areas where hazardous materials are stored [SC County Code 7.100.170]
YES	NO	Code	EMERGENCY RESPONSE PLAN & TRAINING
<input checked="" type="checkbox"/>	<input type="checkbox"/>	109	Facility has an appropriate training program [Title 19 CCR 2732; 22 CCR 66265.16]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	110	Training documentation is maintained on site [Title 19 CCR 2732; 22 CCR 66265.16]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	111	Emergency Response plans are complete, updated, and maintained on site [HSC 25505 (3); Title 19 CCR 2731; 22 CCR 66265.53/54]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	112	Simplified emergency procedures posted in locations where hazardous materials are stored [SC County Code 7.100.220]
<input type="checkbox"/>	<input type="checkbox"/>	113	Other HMMP violation not listed above [SC County Code 7.100.170 or as referenced on summary page].

COMMENTS: _____



**CERTIFIED UNIFIED PROGRAM AGENCY (CUPA)
 HAZARDOUS WASTE GENERATOR INSPECTION REPORT**

FACILITY NAME: <u>San Land Garden</u>	DATE: <u>12/8/15</u>	INSPECTION TYPE <input checked="" type="checkbox"/> Routine <input type="checkbox"/> Reinspection <input type="checkbox"/> Complaint
ADDRESS: <u>90 Pioneer Rd.</u>		

Inspection Report: The items checked in the "NO" column below are violations of the California Health & Safety Code (HSC); Title 22 of the California Code of Regulations (CCR); or Chapter 7.100 of the Santa Cruz County Code as referenced and must be corrected as described on the inspection summary page of this report:

YES	NO	Code	EPA ID # - RECORDKEEPING – DOCUMENTATION (Generator ID# <u>CAL000159326</u>)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	133	Generator has an EPA ID# to treat, store, dispose, transport or transfer hazardous waste [Title 22CCR 66262.12]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	134	Hazardous waste determination conducted [Title 22 CCR 66262.11] <input checked="" type="checkbox"/> own knowledge <input type="checkbox"/> analysis
<input checked="" type="checkbox"/>	<input type="checkbox"/>	135	Hazardous waste analysis/test records are kept for at least 3 years [Title 22 CCR 66262.40.(c)]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	136	Hazardous wastes are shipped with manifest [Title 22 CCR 66262.20]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	137	Manifests and/or receipts are retained by generator for 3 years [Title 22 CCR 66263.42/ 66262.23]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	138	Hazardous wastes were transported to a facility with an EPA ID NO. and permit or authorization from DTSC [HSC 25189.5, Title 22 CCR 66262.12] Wastes transported by: <u>Boyd Safety Kleez</u>
YES	NO	Code	STORAGE AND MANAGEMENT OF CONTAINERS/TANKS
<input checked="" type="checkbox"/>	<input type="checkbox"/>	139	Hazardous wastes are accumulated on site for not more than 90/180/270 days dep. on quantity [T22 CCR 66262.34]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	140	Hazardous waste "satellite" collection is managed properly. [Title 22 CCR 66262.34(e)]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	141	Containers of hazardous waste are properly labeled (includes appropriate data, "HAZARDOUS WASTE," waste composition/physical state, haz properties, name/address of generator) [Title 22 CCR 66262.31-.33]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	142	Containers/tanks containing hazardous wastes are in good condition/handled to minimize release or reaction [Title 22 CCR 66265.171/.191, 66265.177(c)]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	143	Containers/tanks/liners are compatible with waste stored or transferred [Title 22 CCR 66265.172]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	144	Containers storing hazardous wastes are closed/sealed [Title 22 CCR 66265.173]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	145	Empty containers are properly labeled and managed within one year [Title 22 CCR 66261.7]
<input type="checkbox"/>	<input type="checkbox"/>	146	Weekly inspection conducted of areas where hazardous waste containers are stored [Title 22 CCR 66265.174]
YES	NO	Code	RECYCLABLE WASTES
<input checked="" type="checkbox"/>	<input type="checkbox"/>	147	Used oil is managed as hazardous waste until recycled (proper labeling, storage, etc) [HSC 25250.4]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	148	Used oil filters for recycling are managed properly (drained of free flowing liquid, stored in closed rainproof container, labeled "drained used oil filters," and transferred for metal reclamation) [Title 22 CCR 66266.130]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	149	Spent lead-acid batteries are transferred offsite under manifest or bill of lading for recycling, reuse, or reclamation [Title 22 CCR 66266.81]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	150	Solvents/other recyclable materials are managed as hazardous wastes until recycled [Title 22 CCR 66266.3]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	151	Universal Wastes (including electronic & CRT wastes) are properly managed [Title 22 CCR 66273.30-.39]
<input type="checkbox"/>	<input type="checkbox"/>	152	Other hazardous waste violation not listed above [SC County Code 7.100.170 or as referenced on summary page].

COMMENTS: _____



**CERTIFIED UNIFIED PROGRAM AGENCY (CUPA)
 ABOVEGROUND PETROLEUM STORAGE INSPECTION REPORT**

FACILITY NAME: <u>Sun Land Garden</u>		DATE: <u>12/8/15</u>	INSPECTION TYPE <input checked="" type="checkbox"/> Routine <input type="checkbox"/> Reinspection <input type="checkbox"/> Complaint
ADDRESS: <u>90 Pioneer Rd.</u>			
Facility Classification: <input type="checkbox"/> Conditionally Exempt <input type="checkbox"/> Non-Qualified Facility <input checked="" type="checkbox"/> Tier I Qualified Facility <input type="checkbox"/> Tier II Qualified Facility			
Inspection Report: The items checked in the "NO" column below are violations of Chapter 6.67 of the California Health & Safety Code (HSC); Title 40 of the Code of Federal Regulations; or Chapter 7.100 of the Santa Cruz County Code as referenced and must be corrected as described on the inspection summary page of this report:			
CONDITIONALLY EXEMPT FACILITIES (FARM, NURSERY, LOGGING SITE, OR CONSTRUCTION SITE)			
YES	NO	Code	
<input type="checkbox"/>	<input type="checkbox"/>	153	Facility meets the minimum storage capacity to qualify for conditional exemption from SPCC Plan. [HSC 25270.4.5 (b)]
<input type="checkbox"/>	<input type="checkbox"/>	154	Daily visual inspections of petroleum storage tanks are being conducted. [HSC 25270.4.5 (b)(1)]
<input type="checkbox"/>	<input type="checkbox"/>	155	Adequate secondary containment is provided for all petroleum storage tanks. [HSC 25270.4.5 (b)(3); SCC 7.100.160]
SPCC PLAN REQUIREMENTS			
YES	NO	Code	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	156	Owner/Operator has prepared a written SPCC Plan that includes required elements. [HSC 25270.4.5 (a); 40 CFR 112.3]
<input type="checkbox"/>	<input checked="" type="checkbox"/>	157	A complete copy of the SPCC Plan is available onsite for review [40 CFR 112.3 (e)]
<input type="checkbox"/>	<input type="checkbox"/>	158	The SPCC Plan has been reviewed and certified by a Professional Engineer (Non-Qualified Facilities) [40 CFR 112.3 (d)] or the owner/operator (Qualified Tier I or Tier II Facilities) [40 CFR 112.6 (a)(1) or 112.6 (b)(1)]
<input type="checkbox"/>	<input type="checkbox"/>	159	The SPCC Plan is reviewed and evaluated at least once every five years [HSC 25270.4.5 (a); 40 CFR 112.5 (d)]
<input type="checkbox"/>	<input type="checkbox"/>	160	Changes resulting from Plan reviews or amendments are implemented within 6 months [40 CFR 112.5 (a)]
<input type="checkbox"/>	<input type="checkbox"/>	161	Technical amendments to the Plan are properly certified. [40 CFR 112.5 (e); 112.6 (a)(2) or 112.6 (b)(2)]
<input type="checkbox"/>	<input type="checkbox"/>	162	Oil-handling personnel are trained in operation and maintenance of equipment and procedures to prevent discharges [HSC 25270.4.5 (a); 40 CFR 112.7 (f)(1)]
<input type="checkbox"/>	<input type="checkbox"/>	163	Annual spill prevention briefings are conducted [HSC 25270.4.5 (a); 40 CFR 112.7 (f)(3)]
<input type="checkbox"/>	<input type="checkbox"/>	164	Inspections and tests are conducted on containers, valves and piping in accordance with written procedures and signed records are kept with the SPCC Plan. [HSC 25270.4.5 (a); 40 CFR 112.7 (e)]
SPCC PLAN IMPLEMENTATION & FACILITY MAINTENANCE			
YES	NO	Code	
<input type="checkbox"/>	<input type="checkbox"/>	165	Facility has filed an annual tank facility statement or business plan within the past year. [HSC 25270.8]
<input type="checkbox"/>	<input type="checkbox"/>	166	Spills or other releases are properly reported and documented. [HSC 25270.8]
<input type="checkbox"/>	<input type="checkbox"/>	167	Mobile or portable containers are positioned to prevent a discharge [40 CFR 112.8 (c)(11)]
<input type="checkbox"/>	<input type="checkbox"/>	168	Facility drainage is properly functioning and visible discharges are promptly removed from secondary containment. [40 CFR 112.8 (b) and 112.8 (c)(10)]
<input type="checkbox"/>	<input type="checkbox"/>	169	Discharge control, prevention and cleanup supplies are adequate and available [40 CFR 112.8 (a)(3) and (c)]
<input type="checkbox"/>	<input type="checkbox"/>	170	Other APSA or SPCC violation not listed above [SC County Code 7.100.170 or as referenced on summary page].

COMMENTS:



FACILITY NAME: Sun Land Garden Products DATE: 12/8/15

INSPECTION SUMMARY AND OBSERVATIONS/VIOLATIONS

CONSENT TO INSPECT GRANTED BY: (Name/Title): Martin Reyes
 Inspection may involve obtaining photographs, review and copying of records, and determination of compliance with environmental regulations.

- No violations of underground tank, hazardous materials and/or hazardous waste laws, regulations, and requirements were discovered during the inspection.
- Violations were observed as listed below. All violations must be corrected by implementing the corrective action listed by each violation. You may request a meeting with the Program Manager to discuss the inspection findings and/or proposed corrective actions. The issuance of this Summary of Violations does not preclude Santa Cruz County Environmental Health Services from taking administrative, civil, or criminal action as a result of the violations noted.

ALL MINOR VIOLATIONS MUST BE CORRECTED WITHIN 30 DAYS OR AS SPECIFIED BELOW. A copy of this page with a completed *Certification of Return to Compliance* section may be forwarded to our department at 701 Ocean St, Room 312 in Santa Cruz along with any supporting documentation that the Inspector requires to certify that the violation(s) have been corrected. Your facility may be reinspected any time during normal business hours. Should a reinspection be necessary in order to verify compliance, a reinspection fee may be charged.

PROGRAMS INSPECTED: HMMP UST HW Generator Cal ARP Tiered Permits APSA

Violation Code	Violation Classification			VIOLATION DESCRIPTION AND CORRECTIVE ACTION(S) REQUIRED
	Class I	Class II	Minor	
156	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Complete a written SPCC Plan that includes all the required elements and have a completed copy available onsite review.
157	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Overall housekeeping and labeling are excellent!
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Inspected by: Rebecca Supplee Facility Rep Name: _____
 Signature: Rebecca Supplee Signature: _____

CERTIFICATION OF RETURN TO COMPLIANCE

I certify that the violations noted above on this report have been corrected. I have personally examined any documentation attached to this certification to establish that the violations have been satisfactorily corrected.

Signature: WR Title: Operation Manager Date: 12/8/15



ST

HMMP

**CERTIFIED UNIFIED PROGRAM AGENCY (CUPA)
 HAZARDOUS MATERIALS MANAGEMENT PLAN (HMMP) INSPECTION REPORT**

FACILITY NAME: <i>Sun Land Gardens Products</i>	DATE: <i>5/3/13</i>	INSPECTION TYPE <input checked="" type="checkbox"/> Routine <input type="checkbox"/> Reinspection <input type="checkbox"/> Complaint
ADDRESS: <i>90 Pioneer Rd.</i>		

Inspection Report: The items checked in the "NO" column below are violations of the California Health & Safety Code (HSC); Title 19 of the California Code of Regulations (CCR); or Chapter 7.100 of the Santa Cruz County Code as referenced and must be corrected as described on the inspection summary page of this report:

YES	NO	Code	HAZARDOUS MATERIALS MANAGEMENT PLAN (HMMP)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	101	The business has a current Health Permit for storage of hazardous materials [SC County Code 7.100.060]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	102	HMMP information is complete, current, & available during inspection [HSC 25503.5; Title 19 CCR 2729]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	103	Inventory of hazardous materials is complete and accurate [HSC 25504; Title 19 CCR 2729]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	104	Annual inventory reporting requirements have been met [HSC 25503.3]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	105	Site layout/facility maps are accurate [HSC 25504; Title 19 CCR 2729]
YES	NO	Code	HANDLING AND STORAGE OF HAZARDOUS MATERIALS
<input checked="" type="checkbox"/>	<input type="checkbox"/>	106	Facility is operated and managed to prevent a release of hazardous materials [Title 19 CCR 2731 (c); SC County Code 7.100.170 and 7.100.180]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	107	Adequate secondary containment is provided for materials stored [SC County Code 7.100.160]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	108	Warning signs are posted in areas where hazardous materials are stored [SC County Code 7.100.170]
YES	NO	Code	EMERGENCY RESPONSE PLAN & TRAINING
<input checked="" type="checkbox"/>	<input type="checkbox"/>	109	Facility has an appropriate training program [Title 19 CCR 2732; 22 CCR 66265.16]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	110	Training documentation is maintained on site [Title 19 CCR 2732; 22 CCR 66265.16]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	111	Contingency plan is complete, updated, and maintained on site [HSC 25504; Title 19 CCR 2731; 22 CCR 66265.53/54]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	112	Simplified emergency procedures posted in locations where hazardous materials are stored [SC County Code 7.100.220]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	113	Other HMMP violation not listed above [SC County Code 7.100.170 or as referenced on summary page].

COMMENTS: Facility has plans to reduce the quantities
of hazardous materials.



**CERTIFIED UNIFIED PROGRAM AGENCY (CUPA)
 HAZARDOUS WASTE GENERATOR INSPECTION REPORT**

FACILITY NAME: <u>Sun Land Garden Products</u>	DATE: <u>5/3/13</u>	INSPECTION TYPE <input checked="" type="checkbox"/> Routine <input type="checkbox"/> Reinspection <input type="checkbox"/> Complaint
ADDRESS: <u>90 Pioneer Rd.</u>		

Inspection Report: The items checked in the "NO" column below are violations of the California Health & Safety Code (HSC); Title 22 of the California Code of Regulations (CCR); or Chapter 7.100 of the Santa Cruz County Code as referenced and must be corrected as described on the inspection summary page of this report:

YES	NO	Code	EPA ID # - RECORDKEEPING – DOCUMENTATION (Generator ID# <u>CAL000158328</u>)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	133	Generator has an EPA ID# to treat, store, dispose, transport or transfer hazardous waste [Title 22CCR 66262.12]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	134	Hazardous waste determination conducted [Title 22 CCR 66262.11] <input checked="" type="checkbox"/> own knowledge <input type="checkbox"/> analysis
<input checked="" type="checkbox"/>	<input type="checkbox"/>	135	Hazardous waste analysis/test records are kept for at least 3 years [Title 22 CCR 66262.40.(c)]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	136	Hazardous wastes are shipped with manifest [Title 22 CCR 66262.20]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	137	Manifests and/or receipts are retained by generator for 3 years [Title 22 CCR 66263.42/ 66262.23]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	138	Hazardous wastes were transported to a facility with an EPA ID NO. and permit or authorization from DTSC [HSC 25189.5, Title 22 CCR 66262.12]] Wastes transported by: <u>Evergreen</u>
YES	NO	Code	STORAGE AND MANAGEMENT OF CONTAINERS/TANKS
<input checked="" type="checkbox"/>	<input type="checkbox"/>	139	Hazardous wastes are accumulated on site for not more than 90/180/270 days dep. on quantity [T22 CCR 66262.34]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	140	Hazardous waste "satellite" collection is managed properly. [Title 22 CCR 66262.34(e)]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	141	Containers of hazardous waste are properly labeled (includes appropriate date, "HAZARDOUS WASTE," waste composition/physical state, haz properties, name/address of generator) [Title 22 CCR 66262.31-.33]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	142	Containers/tanks containing hazardous wastes are in good condition/handled to minimize release or reaction [Title 22 CCR 66265.171/.191, 66265.177(c)]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	143	Containers/tanks/liners are compatible with waste stored or transferred [Title 22 CCR 66265.172]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	144	Containers storing hazardous wastes are closed/sealed [Title 22 CCR 66265.173]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	145	Empty containers are properly labeled and managed within one year [Title 22 CCR 66261.7]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	146	Weekly inspection conducted of areas where hazardous waste containers are stored [Title 22 CCR 66265.174]
YES	NO	Code	RECYCLABLE WASTES
<input checked="" type="checkbox"/>	<input type="checkbox"/>	147	Used oil is managed as hazardous waste until recycled (proper labeling, storage, etc) [HSC 25250.4]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	148	Used oil filters for recycling are managed properly (drained of free flowing liquid, stored in closed rainproof container, labeled "drained used oil filters," and transferred for metal reclamation) [Title 22 CCR 66266.130]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	149	Spent lead-acid batteries are transferred offsite under manifest or bill of lading for recycling, reuse, or reclamation [Title 22 CCR 66266.81]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	150	Solvents/other recyclable materials are managed as hazardous wastes until recycled [Title 22 CCR 66266.3]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	151	Universal Wastes (including electronic & CRT wastes) are properly managed [Title 22 CCR 66273.30-.39]
<input type="checkbox"/>	<input checked="" type="checkbox"/>	152	Other hazardous waste violation not listed above [SC County Code 7.100.170 or as referenced on summary page].

COMMENTS: There are approximately 50 gals of
of paint and other hazardous materials that are
no longer being used onsite and must be
properly disposed.



County of Santa Cruz
 Health Services Agency – Environmental Health Services
 701 OCEAN STREET, ROOM 312, SANTA CRUZ, CA 95060-4073
 (831) 454-2022 FAX: (831) 484-3128 http://www.co.santa-cruz.ca.us/

FACILITY NAME: Sun Land Garden Products DATE: 5/3/13

INSPECTION SUMMARY AND OBSERVATIONS/VIOLATIONS

CONSENT TO INSPECT GRANTED BY: (Name/Title): Martin Reyes
 Inspection may involve obtaining photographs, review and copying of records, and determination of compliance with environmental regulations.

- No violations of underground tank, hazardous materials and/or hazardous waste laws, regulations, and requirements were discovered during the inspection.
- Violations were observed as listed below. All violations must be corrected by implementing the corrective action listed by each violation. You may request a meeting with the Program Manager to discuss the inspection findings and/or proposed corrective actions. The issuance of this Summary of Violations does not preclude Santa Cruz County Environmental Health Services from taking administrative, civil, or criminal action as a result of the violations noted.

ALL MINOR VIOLATIONS MUST BE CORRECTED WITHIN 30 DAYS OR AS SPECIFIED BELOW. A copy of this page with a completed *Certification of Return to Compliance* section may be forwarded to our department at 701 Ocean St, Room 312 in Santa Cruz along with any supporting documentation that the inspector requires to certify that the violation(s) have been corrected. Your facility may be reinspected any time during normal business hours. Should a reinspection be necessary in order to verify compliance, a reinspection fee may be charged.

PROGRAMS INSPECTED: HMMP UST HW Generator Cal ARP Tiered Permits APSA

Violation Code	Violation Classification			VIOLATION DESCRIPTION AND CORRECTIVE ACTION(S) REQUIRED
	Class I	Class II	Minor	
<u>152</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>There are approximately 50 x 1 gal containers of paint and other hazardous materials that are no longer being used. Properly dispose these materials.</u>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Obtain a CERS online account and submit an updated Hazardous Materials Management Plan by online by Aug. 2013.</u>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Overall housekeeping has improved. Good work.</u>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Inspected by: Rebecca Supplee Facility Rep Name: Martin Reyes
 Signature: Rebecca Supplee Signature: [Signature]

CERTIFICATION OF RETURN TO COMPLIANCE
 I certify that the violations noted above on this report have been corrected. I have personally examined any documentation attached to this certification to establish that the violations have been satisfactorily corrected.
 Signature: _____ Title: _____ Date: _____



Handwritten initials

HMMP

**CERTIFIED UNIFIED PROGRAM AGENCY (CUPA)
 HAZARDOUS MATERIALS MANAGEMENT PLAN (HMMP) INSPECTION REPORT**

FACILITY NAME: <i>Sun Land Garden Products</i>		DATE: <i>4/10/12</i>	INSPECTION TYPE <input checked="" type="checkbox"/> Routine <input type="checkbox"/> Reinspection <input type="checkbox"/> Complaint
ADDRESS: <i>90 Pioneer</i>			

Inspection Report: The items checked in the "NO" column below are violations of the California Health & Safety Code (HSC); Title 19 of the California Code of Regulations (CCR); or Chapter 7.100 of the Santa Cruz County Code as referenced and must be corrected as described on the inspection summary page of this report:

YES	NO	Code	
HAZARDOUS MATERIALS MANAGEMENT PLAN (HMMP)			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	101	The business has a current Health Permit for storage of hazardous materials [SC County Code 7 100.050]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	102	HMMP information is complete, current, & available during inspection [HSC 25503.5; Title 19 CCR 2729]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	103	Inventory of hazardous materials is complete and accurate [HSC 25504; Title 19 CCR 2729]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	104	Annual inventory reporting requirements have been met [HSC 25503.3]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	105	Site layout/facility maps are accurate [HSC 25504; Title 19 CCR 2729]
HANDLING AND STORAGE OF HAZARDOUS MATERIALS			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	106	Facility is operated and managed to prevent a release of hazardous materials [Title 19 CCR 2731 (c); SC County Code 7 100.170 and 7.100.180]
<input type="checkbox"/>	<input checked="" type="checkbox"/>	107	Adequate secondary containment is provided for materials stored [SC County Code 7.100.160]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	108	Warning signs are posted in areas where hazardous materials are stored [SC County Code 7.100.170]
EMERGENCY RESPONSE PLAN & TRAINING			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	109	Facility has an appropriate training program [Title 19 CCR 2732; 22 CCR 66265.16]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	110	Training documentation is maintained on site [Title 19 CCR 2732; 22 CCR 66265.16]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	111	Contingency plan is complete, updated, and maintained on site [HSC 25504; Title 19 CCR 2731; 22 CCR 66265.53/54]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	112	Simplified emergency procedures posted in locations where hazardous materials are stored [SC County Code 7.100.220]
<input type="checkbox"/>	<input checked="" type="checkbox"/>	113	Other HMMP violation not listed above [SC County Code 7.100.170 or as referenced on summary page]

COMMENTS:



**CERTIFIED UNIFIED PROGRAM AGENCY (CUPA)
 HAZARDOUS WASTE GENERATOR INSPECTION REPORT**

FACILITY NAME: <u>Sun Land Garden Products</u>	DATE: <u>4/10/12</u>	INSPECTION TYPE <input checked="" type="checkbox"/> Routine <input type="checkbox"/> Reinspection <input type="checkbox"/> Complaint
ADDRESS: <u>90 Pioneer Rd.</u>		

Inspection Report: The items checked in the "NO" column below are violations of the California Health & Safety Code (HSC); Title 22 of the California Code of Regulations (CCR); or Chapter 7.100 of the Santa Cruz County Code as referenced and must be corrected as described on the inspection summary page of this report:

YES	NO	Code	EPA ID # - RECORDKEEPING – DOCUMENTATION (Generator ID# <u>CL200159326</u>)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	133	Generator has an EPA ID# to treat, store, dispose, transport or transfer hazardous waste [Title 22 CCR 66262.12]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	134	Hazardous waste determination conducted [Title 22 CCR 66262.11] <input checked="" type="checkbox"/> own knowledge <input type="checkbox"/> analysis
<input checked="" type="checkbox"/>	<input type="checkbox"/>	135	Hazardous waste analysis/test records are kept for at least 3 years [Title 22 CCR 66262.40.(c)]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	136	Hazardous wastes are shipped with manifest [Title 22 CCR 66262.20]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	137	Manifests and/or receipts are retained by generator for 3 years [Title 22 CCR 66263.42/ 66262.23]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	138	Hazardous wastes were transported to a facility with an EPA ID NO. and permit or authorization from DTSC [HSC 25189.5, Title 22 CCR 66262.12]] Wastes transported by: <u>Evergreen</u>
YES	NO	Code	STORAGE AND MANAGEMENT OF CONTAINERS/TANKS
<input checked="" type="checkbox"/>	<input type="checkbox"/>	139	Hazardous wastes are accumulated on site for not more than 90/180/270 days dep. on quantity [T22 CCR 66262.34]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	140	Hazardous waste "satellite" collection is managed properly. [Title 22 CCR 66262.34(e)]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	141	Containers of hazardous waste are properly labeled (includes appropriate date, "HAZARDOUS WASTE," waste composition/physical state, haz properties, name/address of generator) [Title 22 CCR 66262.31-.33]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	142	Containers/tanks containing hazardous wastes are in good condition/handled to minimize release or reaction [Title 22 CCR 66265.171, 191, 66265.177(c)]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	143	Containers/tanks/liners are compatible with waste stored or transferred [Title 22 CCR 66265.172]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	144	Containers storing hazardous wastes are closed/sealed [Title 22 CCR 66265.173]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	145	Empty containers are properly labeled and managed within one year [Title 22 CCR 66261.7]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	146	Weekly inspection conducted of areas where hazardous waste containers are stored [Title 22 CCR 66265.174]
YES	NO	Code	RECYCLABLE WASTES
<input checked="" type="checkbox"/>	<input type="checkbox"/>	147	Used oil is managed as hazardous waste until recycled (proper labeling, storage, etc) [HSC 25250.4]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	148	Used oil filters for recycling are managed properly (drained of free flowing liquid, stored in closed rainproof container, labeled "drained used oil filters," and transferred for metal reclamation) [Title 22 CCR 66266.130]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	149	Spent lead-acid batteries are transferred offsite under manifest or bill of lading for recycling, reuse, or reclamation [Title 22 CCR 66266.81]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	150	Solvents/other recyclable materials are managed as hazardous wastes until recycled [Title 22 CCR 66266.3]
<input checked="" type="checkbox"/>	<input type="checkbox"/>	151	Universal Wastes (including electronic & CRT wastes) are properly managed [Title 22 CCR 66273.30-.39]
<input type="checkbox"/>	<input type="checkbox"/>	152	Other hazardous waste violation not listed above [SC County Code 7.100.170 or as referenced on summary page].

COMMENTS: _____



FACILITY NAME: <u>Sun Land Gardley Products</u>	
ADDRESS: <u>90 Pioneer Rd., Watsonville</u>	
DATE: <u>4/10/12</u>	INSPECTOR:

CUPA INSPECTION REPORT - ~~CONTINUATION PAGE~~ Summary

COMMENTS: Permission to conduct the inspection granted by:
Martin Reyes.

Violations

107 (minor) - There is some water in the secondary containment
for the oil drums in the oil shed. Remove
and properly dispose the waste water.

113 (minor) - There is an unlabeled plastic jug with anti-freeze
in the auto shop area. Properly label anti-freeze
container.

Overall house keeping has improved. Good work.

Inspected by: Rebecca Supplee Facility Rep Name: Martin Reyes
 Signature: Rebecca Supplee Signature: [Signature]



County of Santa Cruz
 Health Services Agency – Environmental Health Services
 701 OCEAN STREET, ROOM 312, SANTA CRUZ, CA 95060-4073
 (831) 454-2022 FAX: (831) 454-3128 http://www.co.santa-cruz.ca.us/

27

FACILITY NAME: Sun Land Garden Products DATE: 7/15/11

INSPECTION SUMMARY AND OBSERVATIONS/VIOLATIONS

CONSENT TO INSPECT GRANTED BY: (Name/Title): _____
 Inspection may involve obtaining photographs, review and copying of records, and determination of compliance with environmental regulations.

- No violations of underground tank, hazardous materials and/or hazardous waste laws, regulations, and requirements were discovered during the inspection.
- Violations were observed as listed below. All violations must be corrected by implementing the corrective action listed by each violation. You may request a meeting with the Program Manager to discuss the inspection findings and/or proposed corrective actions. The issuance of this Summary of Violations does not preclude Santa Cruz County Environmental Health Services from taking administrative, civil, or criminal action as a result of the violations noted.

ALL MINOR VIOLATIONS MUST BE CORRECTED WITHIN 30 DAYS OR AS SPECIFIED BELOW. A copy of this page with a completed *Certification of Return to Compliance* section may be forwarded to our department at 701 Ocean St, Room 312 in Santa Cruz along with any supporting documentation that the inspector requires to certify that the violation(s) have been corrected. Your facility may be reinspected any time during normal business hours. Should a reinspection be necessary in order to verify compliance, a reinspection fee may be charged.

PROGRAMS INSPECTED: HMMP UST HW Generator Cal ARP Tiered Permits APSA

Violation Code	Violation Classification			VIOLATION DESCRIPTION AND CORRECTIVE ACTION(S) REQUIRED
	Class I	Class II	Minor	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	- The facility has a new business owner. Complete the enclosed forms to Environmental Health Services within 30 days and ensure that your Hazardous Materials Management Plan is accurate.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	- The new owner must obtain a Health Permit for Hazardous Materials Storage.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Inspected by: Rebecca Supplee Facility Rep Name: sent to: Martin Reyes
 Signature: Rebecca Supplee Signature: _____

CERTIFICATION OF RETURN TO COMPLIANCE

I certify that the violations noted above on this report have been corrected. I have personally examined any documentation attached to this certification to establish that the violations have been satisfactorily corrected.

Signature: _____ Title: _____ Date: _____

Former UST Records

-

Water Board No Further Acton Letter (July 2000)
County Health No Further Acton Letter (June 2000)

-

Sampson Engineering Sampling Report (May 2000)
Tank Removal (Jan-2000)

L

2100

90 PIONEER RD, WATS, SUN LAND GARDEN PROD, SITE MIT, CLOSED

L

K. Keeling
7/20/00

W. H. Hickox



Winston H. Hickox
Secretary for
Environmental
Protection

California Regional Water Quality Control Board Central Coast Region



Gray Davis
Governor

Internet Address: <http://www.swrcb.ca.gov/~rwqcb3>
81 Higuera Street, Suite 200, San Luis Obispo, California 93401-5411
Phone (805) 549-3147 • FAX (805) 543-0397

July 17, 2000

Mr. Al Williamson
SunLand Garden Products
90 Pioneer Road
Watsonville, CA 95076

JUL 19 2000
HEALTH SERVICES

Dear Mr. Williamson:

90- PIONEER ROAD, WATSONVILLE, SANTA CRUZ COUNTY - SUNLAND GARDEN PRODUCTS; NO FURTHER ACTION

Regional Board staff has reviewed Sampson Engineering, Inc.'s May 2, 2000, *Environmental Investigation* report for the subject site. The report documents the advancement of three Geoprobe borings in the vicinity of a former 1,000 gallon underground gasoline tank for the collection of soil and ground water samples. Soil and ground water samples were analyzed for:

- Total Petroleum Hydrocarbons (gasoline);
- aromatic compounds (benzene, toluene, ethylbenzene, and xylenes);
- the gasoline additive, methyl tertiary butyl ether (MTBE);
- ground water samples were additionally sampled for ethylene dibromide (EDB) and 1,2-dichloroethane (1,2-DCA).

Laboratory results of grab ground water samples taken from all three borings were below this Board's water quality objectives for the analytes listed above. Based on this information, the site appears to pose an insignificant threat to ground water quality and we have no further requirements for ground water investigation and/or cleanup. Although this concludes the Regional Board's regulatory oversight of this case, other regulatory agencies may continue to have jurisdiction and may require further work. This letter does not relieve you of other agencies' requirements. As with any real property, additional or previously unidentified contamination at the site may require additional investigation and cleanup. Thank you for your diligence in protecting water quality in the central coast region.

If you have questions regarding this matter, please call Matthew Keeling at (805) 549-3685.

Sincerely,

Harvey Packard
By Roger W. Briggs
Executive Officer

See next page for list of cc's

California Environmental Protection Agency



Recycled Paper

Mr. Al Williamson

-2-

July 17, 2000

cc:

Ms. Rebecca Supplee
Santa Cruz County Health Services Agency
701 Ocean Street, Room 312
Santa Cruz, CA 95060

Mr. Douglas Cook
Sampson Engineering, Inc.
6 Hanger Way
Watsonville, CA 95076

MK: S:\USA\MKeeling\No Further Action\90 Pioneer Rd 062900.doc

California Environmental Protection Agency



Recycled Paper



ENVIRONMENTAL HEALTH

County of Santa Cruz

HEALTH SERVICES AGENCY

701 OCEAN STREET, ROOM 312, SANTA CRUZ, CA 95060-4073
(831) 454-2022 FAX: (831) 454-3128 TDD: (831) 454-4123

June 14, 2000

Al Williamson
SunLand Garden Products
90 Pioneer Road
Watsonville, CA 95076

Re: Underground Storage Tank Closure at 90 Pioneer Road, Watsonville

I have received analytical soil and groundwater sample results taken on April 11, 2000 and reviewed the Environmental Investigation for Sunland Garden Products conducted by your consultant, Sampson Engineering Inc. This investigation suggests that further assessment is not needed at this time. Please note this determination does not relieve you of other agencies' requirements, not does it relieve you or future owners or operators of having to perform additional work should future information indicate that a contamination problem exists or should assessment or cleanup standards change.

Thank you for your work in bringing this project to completion. If you have questions or need additional assistance, please contact me (831) 454-2738 any weekday morning from 8:00 a.m. to 9:30 a.m.

Sincerely,

REBECCA SUPPLEE, R.E.H.S.
Senior Environmental Health Specialist

cc: Matthew Keeling, RWQCB
Douglas Cook, Sampson Engineering Inc.

2-5-18

ENVIRONMENTAL INVESTIGATION

SunLand Garden Products
90 Pioneer Road
Watsonville, California

May 2, 2000

RECEIVED
MAY 03 2000
ENVIRONMENTAL
HEALTH SERVICES

Prepared for:

Mr. AJ Williamson
SunLand Garden Products
90 Pioneer Road
Watsonville, California 95076

Prepared by:

SAMPSON ENGINEERING INC.
6 Hangar Way
Watsonville, California 95076
(831) 761-6222
SEI Project No. 00045

2-5-18

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APPENDIX A

APPENDIX B

1.0 INTRODUCTION

Sampson Engineering, Inc. (SEI) is pleased to present this Environmental Investigation report for an Underground Storage Tank (UST) previously located at SunLand Garden Products (hereinafter, SunLand), 90 Pioneer Road in Watsonville, California. This report summarizes work performed by SEI as outlined in our Work Plan dated March 9, 2000, and revised on April 6, 2000.

2.0 BACKGROUND

A 1,000 gallon underground fuel tank was used on the SunLand property until about 1994-95. This tank was used to store gasoline, and was first installed about 1985. On January 13, 2000, the UST was removed, and SEI acted as a third party sampling agent for collection of soil samples from beneath the tank and dispenser areas.

Visual observations of the tank and the excavation included the following:

- a. The tank was in good condition, although there were two holes noted (one on the upper surface near the fill neck, one on the side).
- b. The excavation was somewhat discolored beneath the tank at the fill/dispenser end, and some water appeared to be entering the excavation from the bottom of the excavation (especially at the fill/dispenser end). Some of the water "puddles" had a slight sheen near the bottom of the excavation (approximately 6-7 feet below grade).

At the direction of Mr. Rolando Charles, a representative of the County of Santa Cruz, Health Services Agency, Environmental Health Services department (SCCEHS), a total of three (3) soil samples was obtained from the tank excavation. Two samples (from depths approximately 2 feet and 4 feet below the tank bottom) were obtained from native soil at the bottom of the tank excavation at the fill/dispenser end of the excavation, and one sample (from about 2 feet below the tank bottom) was obtained from the vent end of the tank excavation. No samples were collected from the excavation walls. The vent end sample tested non-detect for all analyses performed. The two samples at the fill/dispenser end of the tank tested non-detect for methyl tert butyl ether (MTBE). However, the two samples at the fill/dispenser end of the excavation contained total petroleum hydrocarbons (TPH) as gasoline ranging from 82 to 250 parts per million (ppm), and benzene, toluene, ethylbenzene and xylenes (BTEX) constituents ranging from 0.10 to 14 ppm.

The relatively low concentrations of TPH (as gasoline) and BTEX constituents detected within the two samples above, combined with SEI's visual observations, appeared to indicate that the contamination was confined to a very limited area of the tank excavation. However, based on the sheen observed in the water seeping into the excavation, it was believed (at the time of UST removal) that there was a possibility that shallow groundwater was present, which may have been impacted.

The tank excavation was backfilled with the material excavated and clean sand fill shortly after sampling was completed to maximize safety and to minimize water infiltration into the hole from anticipated weather conditions (predicted rain) and the location of the excavation in a surface drainage path and under the building eaves.

SEI submitted a Third Party Environmental Sampling Letter, dated January 25, 2000, to SCCEHS, which summarized the results of the three soil samples obtained from the tank excavation. Mr. Charles, on behalf of SCCEHS, responded to this report in a letter dated February 9, 2000. That letter requested SunLand Garden Products to obtain the services of an engineering/consulting firm to assist in establishing the extent of contamination and provide professional recommendations for remedial actions. The letter requested that a Work Plan and schedule for this investigation be submitted no later than March 10, 2000.

The requested Work Plan (with an associated Site Safety Plan) was submitted March 9, 2000 and proposed three soil borings to below the groundwater interface, which would then be developed into three temporary groundwater monitoring wells to facilitate evaluation of potential groundwater impacts. After discussions between SCCEHS and SEI, and after review of the Work Plan by staff from the California Regional Water Quality Control Board, Central Coast Region (RWQCB), SCCEHS rejected the concept of temporary monitoring wells in a letter dated March 30, 2000.

Subsequently, SEI submitted a revised Work Plan (and revised Site Safety Plan) to incorporate the use of Geoprobe[®] soil sample and groundwater sample collection technology, consistent with comments from SCCEHS and RWQCB. The revised Work Plan was submitted to SCCEHS on April 6, 2000. The revised Work Plan was approved in a telephone conversation with Mr. Rolando Charles of SCCEHS on April 26, 2000; a confirming letter has not yet been received.

3.0 SCOPE OF WORK

Our scope of work for the Environmental Investigation was limited to the following:

1. A Work Plan and Site Safety Plan was prepared and submitted to SCCEHS for review and approval prior to beginning of on-site work. As noted above, both documents were revised and resubmitted to be consistent with SCCEHS and RWQCB guidance and direction.
2. Well permit applications were submitted to SCCEHS, but were subsequently withdrawn once the decision to use Geoprobe[®] technology rather than temporary wells was made, at the request of SCCEHS and RWQCB.
3. SEI contacted Underground Service Alert (USA) a minimum of 48 hours prior to on-site Geoprobe[®] activities. In addition, a private underground locator was subcontracted to assist in clearing proposed Geoprobe[®] soil boring locations.
4. SEI explored, sampled, and classified surface and subsurface soils by using a Geoprobe[®] system to perform three (3) test borings at or near the dispenser end of the former UST. The test borings were installed to depths of 16 to 24 feet.

We used Environmental Testing and Management (ETM), a licensed C-57 subcontractor, for all boring and groundwater sample collection activities. Test borings were advanced using the Geoprobe[®] system and soil samples were obtained using internal poly sleeves. All boring and sampling equipment was steam-cleaned prior to coming to the site and cleaned using Alconox detergent and a clean water rinse prior to use at each boring location.

The limited amount of soil removed from each test boring location, in excess of the analytical samples, was screened in the field using a photo-ionization detector (PID), and PID readings are included on the test boring logs. Other indications of contamination such as odor or discoloration were also noted on the test boring logs. The work was performed under the supervision of a staff engineer who is OSHA-SARA certified in accordance with 29 CFR 1910.120.

Upon completion of soil and groundwater sample collection, the soil borings were grouted with a neat cement slurry to preclude the vertical or horizontal migration of potential contamination. The limited excess soil cuttings were placed on plastic sheeting and stored on-site, pending sample analytical results. If deemed contaminated by virtue of PID readings, site observation, or subsequent laboratory analysis, the excess soil was to be disposed offsite with appropriate manifesting, or remediated onsite. The disposal and/or remediation of the soil cuttings were the responsibility of the property owner.

5. Soil samples were collected at five feet (or less) intervals including one sample from, or just below, the groundwater interface (a total of three samples from each test boring, except for Boring 5). At Boring 3, an additional two samples (at 16 and 23 feet below ground surface, or bgs, respectively) were collected due to the inability to obtain a groundwater sample at that location (see also item 5 below). Soil samples were screened in the field for total volatile hydrocarbons (TVH) using the PID meter. These samples were obtained in pre-cleaned poly sleeves, with the ends covered with Teflon® tape and sealed with plastic end caps. Soil samples were immediately placed on ice for preservation.

6. Each of the three (3) test borings completed in Task 4 were utilized as groundwater monitoring collection devices using the Geoprobe® Screenshot 15 system.

After very limited well development, groundwater samples were obtained from Borings B-1 and B-2 for analysis. In each case, a sample consisted of three (3) 40 milliliter Volatile Organic Analysis (VOA) vials filled directly from the sampler. The VOA vials were immediately placed on ice for preservation. We were unable to obtain a groundwater sample from Boring B-3; it was a "dry hole." [NOTE: At B-2, we also obtained an additional five (5) VOA vials which were set aside (on ice) to allow settlement of the significant fine particles in the sample. The clear substrate from these five vials was later decanted into three (3) clean VOA vials, identified as Sample W-2-Decant, for analysis; the intent of this effort was to determine if there was any impact on the water analysis from the significant quantity of fine particles in the original W-1 and W-2 samples.]

7. The analytical testing program was as follows:

- 3 Soil samples from B-1
- 3 Soil samples from B-2
- 5 Soil samples from B-3
- 1 Groundwater sample from B-1
- 1 Groundwater sample from B-2
- 1 Decanted groundwater sample from B-2
- 14 Total Samples

All samples were tested for TPH (as gasoline), BTEX, and MTBE. In addition, the groundwater samples were tested for 1,2-dichloroethane (1,2-DCA) and ethylene dibromide (EDB) using EPA Method 8010.

These samples were submitted to McCampbell Analytical, a state-certified laboratory.

8. SEI prepared this report which summarizes the field and laboratory findings, and the potential impacts to groundwater. The report includes: 1) a scaled site map showing general site features (roads, buildings, fences, soil stockpile, well locations), 2) lithologic description of soils, 3) tabulated data summaries, 4) certified laboratory analytical reports, and 5) chain of custody documentation.

4.0 HYDROGEOLOGIC SETTING

The subject site is located within an area comprising older flood plain deposits which include semi-consolidated moderately to poorly sorted silt, sand, silty clay, and gravel. These deposits can be as much as 200 feet thick (Brabb, Earl E., *Geologic Map of Santa Cruz County*, 1989). The depth to groundwater of the uppermost aquifer is located approximately 12 to 14 feet below ground surface (bgs). Separate aquifers may be present at depth. Based on regional topography and the locations of nearby streams and lakes, the groundwater flow direction is believed to be toward the south or southeast (U.S.G.S., *Watsonville West Quadrangle, 7.5 Minute Series (Topographic)*, Photorevised 1980). However, the groundwater flow direction at the subject site could not be confirmed in the field.

5.0 FIELD PROCEDURES

On April 11, 2000, Sampson Engineering Inc. initiated the field investigation program by using Geoprobe® technology to install a total of three test borings. Test boring B-1 was located approximately 12 feet east from the non-fill/dispenser end of the former UST. Test boring B-2 was installed approximately 14 feet north from the approximate centroid of the former UST location. Test boring B-3 was installed approximately 9 feet west from the fill/dispenser end of the former UST. Refer to the "Investigation Findings" section for a general description of the surface and subsurface soil conditions encountered. Refer to the Site Plan, Figure 2 within Appendix A, for a graphical representation of the test borings locations.

Soil boring location B-1 was continuously sampled over the full depth of the boring for visual examination, using the poly sleeve inserts. Samples for laboratory analysis were collected approximately every five feet using the same poly sleeve inserts. The sampler was driven approximately 24-inches beyond the total depth of the borehole into undisturbed native soils. The poly sleeve inserts were cut at desired locations (approximately a 12" long sample) and sealed with Teflon® sheeting and plastic end caps, labeled, and immediately placed on iced storage. Approximately 6 inches of the soil column above and below the sample sleeve was placed in an airtight Ziploc bag, placed in a shady location for approximately five minutes prior to field screening for total volatile hydrocarbons (TVH) with a Photovac MicroTip photoionization detector (PID). These same soils (after PID sensing) and the remaining soils in the poly sleeve inserts were used for soil classification, recognizing that the top may have contained disturbed soils (which were not used for field evaluation purposes). Borings B-2 and B-3 were not continuously sampled, but the same general approach was used for analytical sample collection, PID screening, and soil classification.

All down hole-drilling equipment was steam cleaned prior to use. The soil sampling equipment was cleaned by scrubbing with an Alconox and tap water mixture, followed by a tap water rinse and a distilled water final rinse. Excess soils were collected on plastic sheets on site, pending appropriate disposal.

All observations, measurements and evaluations were recorded by the on-site engineer.

Three soil samples (except for B-3 where five samples were taken) from each boring were selected for analysis at McCampbell Analytical, Inc., a state certified laboratory. The soil samples were transported to the laboratory in iced storage under chain of custody documentation and analyzed for TPH (as gasoline), BTEX and MTBE. Refer to the Analytical Test Results located within Appendix B for specific test methods used.

Groundwater sample collection at Borings B-1, B-2 and B-3 was attempted using the Geoprobe[®] Screencpoint 15 groundwater system, using oscillation of a tubing bottom check valve. As noted previously, a groundwater sample(s) was only able to be sampled at Borings B-1 and B-2. Boring B-3 was a "dry hole." At both Borings B-1 and B-2, a relatively limited amount of very turbid, silty water was able to be collected. However, at Boring B-2, sufficient groundwater was collected to allow duplicate sample collection from which only the decant (i.e., clear water in the upper two thirds of the collection bottles) was analyzed. As might be expected from the above discussion, there was no (or very limited) monitoring well development by purging, prior to sampling. In a typical monitoring well (permanent or temporary), well development serves to restore the groundwater properties disturbed during the drilling process, to improve the hydraulic characteristics of the filter pack, and hydraulic communication between the well and the hydrologic unit adjacent to the well. In general, then, SEI considers the water samples obtained using the Geoprobe[®] system to be "qualitative" rather than "quantitative" samples, and believes them to be more prone to a "false positive" result given the presence of significant sediment and lack of well development.

The water samples retrieved from the two borings noted above were placed in hydrochloric acid preserved 40 milliliter VOA vials. The VOA vials were completely filled to prevent a headspace of air being trapped within the sample. All groundwater samples were immediately chilled on ice and transported within 24 hours to McCampbell Analytical, a state-certified laboratory.

6.0 INVESTIGATION FINDINGS

Surface Soil Conditions

In the area of test boring B-1, the surface soils were composed of brown and gray gravelly sand which was dry and appeared dense. This material was characterized as fill material on the test boring logs. The areas around test borings B-2 and B-3 were "paved" with approximately a 1/2 inch thick layer of asphalt and gravel ("chip seal") over gravelly sand.

Subsurface Soil Conditions

Underlying the surface soils and "chip seal" pavement in test borings B-1, B-2, and B-3 was a layer of silty sand, which was brown to brownish gray and damp to moist. This material extended to a depth of approximately 6 to 8 feet bgs (please note that test borings B-2 and B-3 were located on a higher ground level facility road approximately 1.5 to 2 feet above the elevation of the ground

surface of the UST area and B-1). Underlying this layer in B-3 was a very thin (less than 2 inches) layer of cemented fine sand that was grey and damp. In each of the three borings, from approximately 6 to 8 feet bgs to the approximately 11 to 14 feet bgs was a layer of gravelly sand to silty sand, with increasing gravels and moisture at the lower levels. From the 11 to 14 feet bgs levels above to the test boring bottoms (in B-1 and B-2) at 16 feet bgs and to approximately 20 feet bgs in B-3 was a layer of grayish brown (with orange mottling) silty clay which was moist to wet. Underlying this layer in test boring B-3, to the bottom of the boring at 24 feet bgs, was a layer of brown (with orange mottling) sandy clay which was damp.

Groundwater was encountered in test borings B-1 and B-2 at the interface of the gravelly sand/silty clay interface at 12 to 15 feet bgs; no groundwater was encountered at test boring B-3, although it had the same interface and the gravelly sand was characterized as wet immediately above the interface. No groundwater elevation measurements were taken from test borings B-1, B-2 or B-3 due to the temporary nature of the Geoprobe[®] borings. However, based on surface elevations near the sampling area and surrounding regional topography, it is believed that the groundwater flow direction is toward the south or southeast at a relatively shallow gradient.

Please refer to the Site Plan and Area Plan (Figures 2 and 3 within Appendix A), for the general locations of the test borings performed by SEI. Materials encountered during subsurface exploration are described on the Test Boring Logs located within Appendix A. The logs depict subsurface conditions at the locations and on the date the test boring was installed. Subsurface conditions at other locations are expected to differ. Stratification lines shown on the logs represent the approximate boundaries between soil types; the actual transitions from one soil type to another may be gradual.

Analytical Test Results

All soil and water samples obtained from test borings B-1, B-2 (two sets of samples) and B-3 (no water sample collected) tested non-detect above the practical quantization limit (PQL) for TPH (as gasoline), BTEX (except for benzene in the deepest two soil samples in test boring B-3, see below) and MTBE. In addition, water samples obtained from B-1 and both water samples obtained at B-2 also tested non-detect above the PQL for the volatile hydrocarbons 1,2-DCA and EDB under EPA test Method 8010; no water sample was collected at B-3.

As noted above, soil sample test results from test boring B-3 samples collected at depths of 16 and 23 feet bgs indicated benzene was detected at concentrations of 0.011 milligrams per kilogram (mg/kg; also parts per million, or ppm) and 0.008 ppm, respectively.

Refer to Tables 1 and 2 located within Appendix A for a summary of the laboratory test data for soil and groundwater, respectively. Appendix B contains the certified analytical laboratory report and the chain-of-custody records.

7.0 CONCLUSIONS

The groundwater flow direction at the subject site is toward the south to southeast at a very shallow gradient.

Laboratory test results indicate that there is no contamination of groundwater in the immediate vicinity (i.e., at a distance of approximately 8 to 15 feet) of the former UST. In addition, soil

samples obtained from above the groundwater surface at the above-noted short distances from the historical tank tested non-detect for all analyses performed. Only samples obtained from below the groundwater surface in test boring B-3 contained detectable levels of contamination, and then only for benzene at approximately one one-hundredth (0.01) of a part per million levels. In fact, the concentrations of benzene detected (0.011 and 0.008 ppm) are two orders of magnitude less than concentrations acceptable to the U.S. Environmental Protection Agency (EPA) for contaminated site cleanups. Those levels are 1.5 ppm (EPA, Region 9; Preliminary Remediation Goals [PRLGs] for Industrial Soil, February 2000) and 2.5 ppm (Table 9, Superfund Proposed Soil Screening Levels [SSLs], 1993; as reported in *Cleanup Criteria for Contaminated Soil and Groundwater*, Anthony J. Buonicore, Editor, ASTM, 1995).

In addition, as noted previously from samples collected at the time of the UST removal, the vent end sample tested non-detect for all analyses performed. The two samples at the fill/dispenser end of the tank tested non-detect for methyl tert butyl ether (MTBE). However, the two samples at the fill/dispenser end of the excavation contained total petroleum hydrocarbons (TPH) as gasoline ranging from 82 to 250 parts per million (ppm), and benzene, toluene, ethylbenzene and xylenes (BTEX) constituents ranging from 0.10 to 14 ppm. These concentrations are considered relatively low.

Finally, the source (i.e., the tank) of gasoline-based contamination has been removed.

Considering all of the data collected at the site to date, SEI concludes that a release of gasoline (likely from an overflow or dispenser leaks/spills) had occurred from the former UST and dispenser operations. The limited quantity of the release has been absorbed by the soils beneath the tank. Given that the tank has not been used for several years, and that the source has now been removed, we believe it is likely that bioremediation of the gasoline constituents in the soil column will occur.

Given the non-detect nature of contaminants in groundwater and the very limited concentrations of gasoline-based contaminants in subsurface soil (at depths of over 8 feet) within a very short distance of the now-removed UST, the industrial nature of the site, the distance to the nearest water well (more than 700 feet), and the relatively large size of the 90 Pioneer Road parcel, it is our strong opinion that:

- The contaminant plume (if any exists) has not moved off site.
- The remaining limited soil impacts (within a few feet from the fill/dispenser end of the former UST) will biodegrade over time.
- There is not currently, nor will there be, any threat to human health, the environment, or groundwater resources from the low concentrations of benzene in soil.

8.0 RECOMMENDATIONS

Based on the results of our environmental investigation, SEI makes the following recommendations:

1. Benzene impacts in Boring B-3 on the west side of the former UST location are extremely low, and several orders of magnitude below Federal remediation goals for soil. We do not

believe further investigation of petroleum impacts within this specific area is warranted, nor is any specific remediation activity.

2. In the case of the previously identified, limited level and extent of soil contamination beneath the dispenser/fill end of the former UST, the soil beneath the former UST (i.e., below approximately 7 feet bgs) is not expected to impact human receptors and apparently has not impacted shallow groundwater at the site. Its low levels of organic constituents can be expected to biodegrade without any further intervention, over a period of months to (possibly) years. Therefore, we recommend no further investigation in this area and no active remediation.
3. A very limited quantity of excess soil (less than one cubic foot) from the test boring activities at the site was placed on plastic sheeting and left on site. Since all samples from test borings B-1, B-2 and B-3 (except those two samples with minor benzene concentrations) tested non-detect for all analyses performed, and the benzene concentrations in the two deep samples from Boring B-3 were extremely low, the excess soil from these borings (stored on plastic) should be considered non-hazardous and can be disposed of (on-site or elsewhere) at the client's discretion. This should be verified by SCCEHS prior to disposal.
4. We further recommend that the area of the former UST be graded to drain away from the area and be paved with a non-porous surface (concrete or asphalt); both recommendations, when implemented, will limit further infiltration of water (rainfall and surface drainage) in this area, thus further reducing any remaining concerns about any potential for contaminant transport.

9.0 LIMITATIONS

Sampson Engineering Inc. has used the customary standard of care and skill in performing its environmental services. SEI cannot and will not certify whether or not a certain property is or is not free of environmental impairment. This is in lieu of all other warranties, express or implied.

We appreciate the opportunity to be of service. Please contact our office at (831) 761-6222 should you have any questions regarding this report.

Very truly yours,

SAMPSON ENGINEERING INC.

Prepared by:

Douglas A. Cook

Douglas A. Cook
Staff Engineer

DAC/MDK/rmm

Reviewed by:

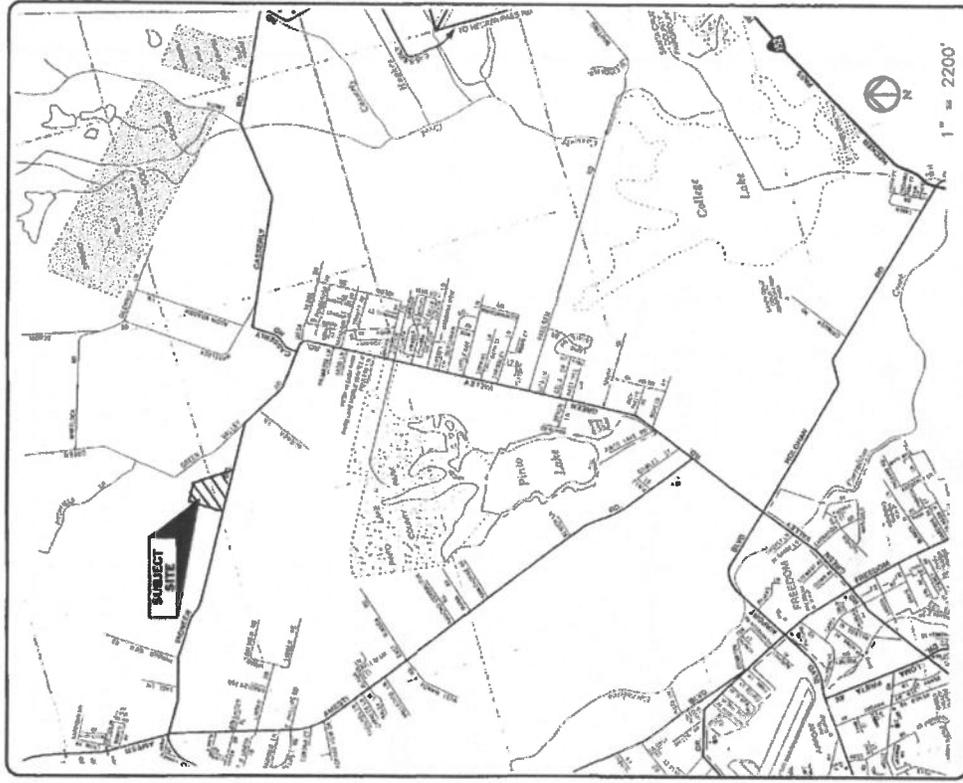
Michael D. Kleames,
GE 2204
Expires 3/31/04



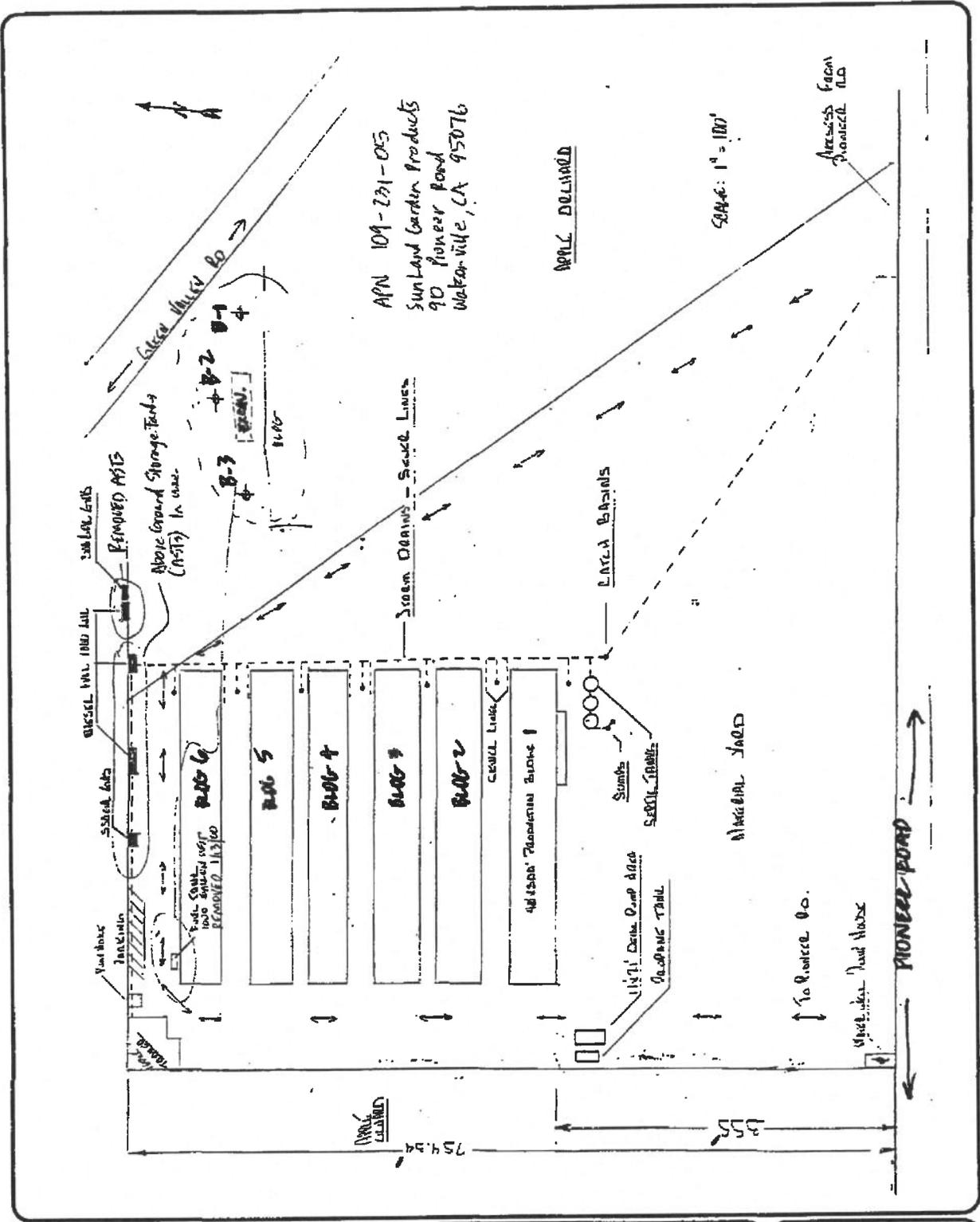
cc: Mr. Rolando Charies, SCCEHS
Mr. Matthew Keeting, RWQCB

APPENDIX A

- Vicinity Map (Figure 1)
- Site Plan (Figure 2)
- Area Plan (Figure 3)
- Summary of Laboratory Test Results - Soil (Table 1)
- Summary of Laboratory Test Results - Water (Table 2)
- Key to Test Boring Logs
- Test Boring Logs



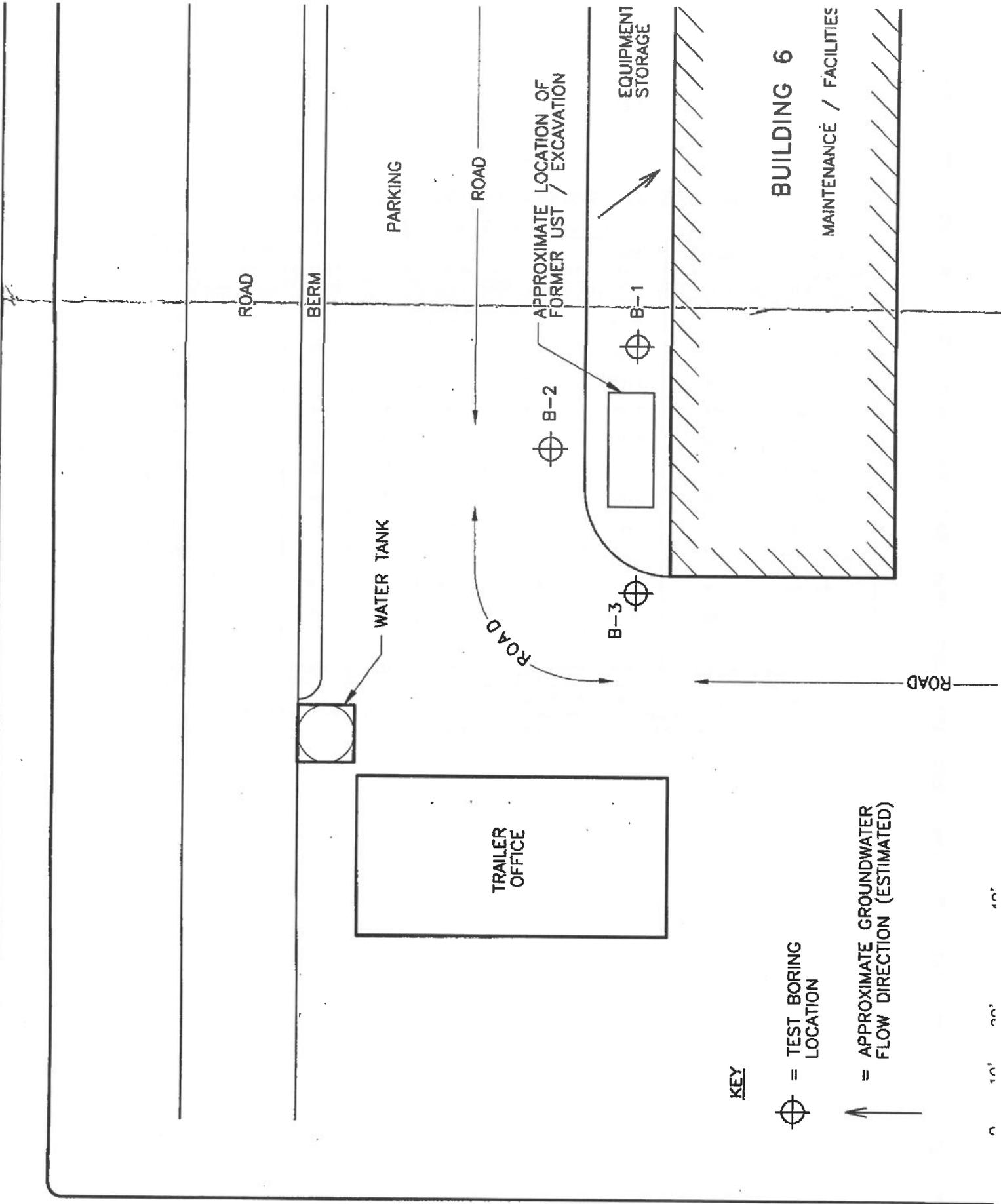
 SAMPSON ENGINEERING INC. 6 HANGAR WAY WATSONVILLE, CA 95076 TEL (831) 761-6222	VICINITY MAP SUNLAND GARDEN PRODUCTS 90 PIONEER ROAD WATSONVILLE, CALIFORNIA	FIGURE NO. 1 PROJECT 00045
---	--	--



SAMPSON ENGINEERING INC.
 6 HANGAR WAY
 WATSONVILLE, CA 95076 TEL (831) 761-6222

SITE PLAN
SUNLAND GARDEN PRODUCTS
 90 PIONEER ROAD
 WATSONVILLE, CALIFORNIA

FIGURE NO.
2
PROJECT 00045



KEY

⊕ = TEST BORING LOCATION

↖ = APPROXIMATE GROUNDWATER FLOW DIRECTION (ESTIMATED)

SAMPSON ENGINEERING INC.

TABLE 1

SUMMARY OF LABORATORY TEST RESULTS - SOIL

SunLand Garden Products, 90 Pioneer Road, Watsonville

Sample Identification	Sample Matrix	Sample Date	TPH Gasoline	MTBE	Benzene	Toluene	Ethyl-benzene	Total Xylenes
B-1-1 @ 4.0'	SOIL	4/11/00	ND _{1,2}	ND	ND	ND	ND	ND
B-1-2 @ 9.0'	SOIL	4/11/00	ND	ND	ND	ND	ND	ND
B-1-3 @ 15.0'	SOIL	4/11/00	ND	ND	ND	ND	ND	ND
B-2-1 @ 4.0'	SOIL	4/11/00	ND	ND	ND	ND	ND	ND
B-2-2 @ 9.0'	SOIL	4/11/00	ND	ND	ND	ND	ND	ND
B-2-3 @ 14.0'	SOIL	4/11/00	ND	ND	ND	ND	ND	ND
B-3-1 @ 4.0'	SOIL	4/11/00	ND	ND	ND	ND	ND	ND
B-3-2 @ 9.0'	SOIL	4/11/00	ND	ND	ND	ND	ND	ND
B-3-3 @ 12.0'	SOIL	4/11/00	ND	ND	ND	ND	ND	ND
B-3-4 @ 16.0'	SOIL	4/11/00	ND	ND	0.011	ND	ND	ND
B-3-5 @ 23.0'	SOIL	4/11/00	ND	ND	0.008	ND	ND	ND
Soil Action Level 4			NONE	NONE	NONE	NONE	NONE	NONE

- NOTE: 1. All results are in mg/kg (parts per million, ppm) except where indicated
 2. ND = Non-detect at or above the laboratory detection limit (see lab results in Appendix for detection limits)
 3. No action levels are set by SCEEHS for these compounds in soil

SAMPSON ENGINEERING INC.

TABLE 2

SUMMARY OF LABORATORY TEST RESULTS - WATER

SunLand Garden Products, 90 Pioneer Road, Watsonville

Sample Identification	Sample Matrix	Sample Date	TPH as Gasoline	MTBE	Benzene	Toluene	Ethyl-benzene	Total Xylenes	EDB	1,2-DCA
W-1	WATER	4/11/00	ND ^{1,2}	ND	ND	ND	ND	ND	ND	ND
W-2	WATER	4/11/00	ND	ND	ND	ND	ND	ND	ND	ND
W-2-Decant	WATER	4/11/00	ND	ND	ND	ND	ND	ND	ND	ND
ACTION LEVEL (MCL)₃			NONE	NONE	1	100	680	1,750	NONE	NONE

- NOTE: 1. All results are in ug/L (parts per billion, or ppb)
 2. ND = Non-detect at or above the laboratory detection limit (see lab results in Appendix for detection limits)
 3. Action levels are the Maximum Allowable Contaminant Level (MCL) for the listed compounds

TEST BORING LOG										No. B-1		
PROJECT: SUNLAND GARDEN PRODUCTS					DATE: 4/11/00			LOGGED BY: DAC				
DRILL COMPANY: ENVIRONMENTAL TESTING & MGMT					BORING DIA.: GEOPROBE			BORING ELEV.: --				
GROUNDWATER DEPTH: 11.5' BGS (APPROX.)					SAMPLER: L=3" O.D.; M=2" O.D.; * = SPT; S=SLOUGH; G=GEOPROBE;							
DESCRIPTION	USCS SOIL TYPE	DEPTH (feet)	SAMPLE	BLOWS PER FOOT	POCKET PEN. (tsf)	PID READING (ppm)	DRY DENSITY (pcf)	WATER CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	DIRECT SHEAR	
											FRIC. ANG. ϕ (deg.)	COHESION, c (ksf)
SILTY SAND; Brown, dry, loose; well graded sand;	SM	1										
		2										
		3										
POORLY GRADED SAND; Brown, damp; subangular fine sand; 10-20% fines;	SP	4										
SANDY SILT; Brownish gray, moist, plastic; 30-40% fine sand;	ML	5	G			15.4						
		6	G									
WELL GRADED GRAVELLY SAND; Brown, moist, clasts up to 0.5"; 30-40% gravel;	SW	7				15.4						
SILTY SAND; Light brown, moist, poorly graded fine sand; 15-25% fines;	SM	8										
		9										
Increasing moisture to wet; orange tinge also;		10	G			11.2						
		11	G									
SILTY CLAY; Grayish brown with orange mottling, wet, plastic; 5-10% fine sand; 20-30% silt;	CL	12				27.3						
		13										
		14										
		15										
		16	G			2.4						
Boring Terminated at 16.0';		17										
		18										
		19										
		20										

TEST BORING LOG							No. B-2							
PROJECT: SUNLAND GARDEN PRODUCTS				DATE: 4/11/00		LOGGED BY: DAC								
DRILL COMPANY: ENVIRONMENTAL TESTING & MGMT				BORING DIA.: GEOPROBE		BORING ELEV.: --								
GROUNDWATER DEPTH: 13.5' BGS (APPROX.)				SAMPLER: L=3" O.D.; M=2" O.D.; * = SPT; S=SLOUGH; G=GEOPROBE;										
DESCRIPTION	USCS SOIL TYPE	DEPTH (feet)	SAMPLE	BLOWS PER FOOT	POCKET PEN. (tsf)	PID READING (ppm)	DRY DENSITY (pcf)	WATER CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	DIRECT SHEAR		UNCONFINED SHEAR STRENGTH (ksf)	
											FRIC. ANG. ϕ (deg.)	COHESION, c (ksf)		
SILTY SAND; Brown, dry, loose; well graded sand;	SM	1												
		2												
		3												
Material Consistent; Grayish brown, damp; 10-20% fines; gravel clasts present;		4												
		5	G			0.5								
GRAVELLY SAND; Brown, moist; fine sand; 25-40% subangular gravel;	SW	6	G											
		7												
		8												
Decreasing gravel;		9												
POORLY GRADED SAND; Brown, moist to wet; fine sand;	SP	10	G			3.1								
		11	G											
GRAVELLY SAND; Brown with orange mottling, wet; well-graded sand; 30-50% gravel;	SW	12												
		13												
		14												
		15	G											
SILTY CLAY; Grayish brown with orange mottling, wet, plastic; 5-15% fine sand;	CL	15	G			1.8								
		16												
Boring Terminated at 16.0';		17												
		18												
		19												
		20												

TEST BORING LOG										No. B-3			
PROJECT: SUNLAND GARDEN PRODUCTS					DATE: 4/11/00			LOGGED BY: DAC					
DRILL COMPANY: ENVIRONMENTAL TESTING & MGMT					BORING DIA.: GEOPROBE			BORING ELEV.: --					
GROUNDWATER DEPTH:					SAMPLER: L=3" O.D.; M=2" O.D.; * = SPT; S=SLOUGH; G=GEOPROBE;								
DESCRIPTION	USCS SOIL TYPE	DEPTH (feet)	SAMPLE	BLOWS PER FOOT	POCKET PEN. (tsf)	PID READING (ppm)	DRY DENSITY (pcf)	WATER CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	DIRECT SHEAR		UNCONFINED SHEAR STRENGTH (ksf)
											FRIC. ANG. ϕ (deg.)	COHESION, c (ksf)	
SILTY SAND; Brown, dry, loose; Material Consistent; Grayish brown with orange mottling, damp, fine sand; 30-40% fines;	SM	1											
		2											
		3											
		4		G									
		5		G		1.4							
		6											
		7											
		8											
FINE SAND; Gray, damp; cemented;	SP												
SILTY SAND; Reddish brown, moist, 15-25% fine subangular to subrounded gravel (to 0.5");	SM	9											
		10		G		2.6							
		11											
GRAVELLY SAND; Dark to reddish brown, wet; 20-35% fine gravel (to 1/4"); well-graded sand; trace fines;	SW	12											
		13		G		3.9							
SILTY CLAY; Grayish brown with orange mottling, moist to wet, plastic; 5-10% fine sand; Boring initially terminated at 17.0', however, drilling recommenced after no water could be collected;	CL	13											
		14											
		15											
		16		G									
		17		G		3							
		18											
		19											
		20											

TEST BORING LOG

No. B-3

PROJECT: SUNLAND GARDEN PRODUCTS

DATE: 4/11/00

LOGGED BY: DAC

DRILL COMPANY: ENVIRONMENTAL TESTING & MGMT

BORING DIA.: GEOPROBE

BORING ELEV.: —

GROUNDWATER DEPTH: Not Encountered

SAMPLER: L=3" O.D.; M=2" O.D.; * = SPT;
S=SLOUGH; G=GEOPROBE;

DESCRIPTION	USCS SOIL TYPE	DEPTH (feet)	SAMPLE	BLOWS PER FOOT	POCKET PEN. (tsf)	PID READING (ppm)	DRY DENSITY (pcf)	WATER CONTENT (%)	LIQUID LIMIT	PLASTICITY INDEX	DIRECT SHEAR	
											FRIC. ANG. ϕ (deg.)	COHESION, c (ksf)
SANDY CLAY; Brown with orange mottling; damp, semi-plastic; 10-20% fine sand; 5-15% fines;	CL	21	G G			3.7						
		22										
		23										
		24										
Boring Terminated at 24.0';		25										
		26										
		27										
		28										
		29										
		30										
		31										
		32										
		33										
		34										
		35										
		36										
		37										
		38										
		39										
		40										



County of Santa Cruz

HEALTH SERVICES AGENCY

701 OCEAN STREET, ROOM 312, SANTA CRUZ, CA 95060-4073
(831) 454-2022 FAX: (831) 454-3128 TDD: (831) 454-4123

ENVIRONMENTAL HEALTH

February 9, 2000

Mr. Al Williamson
Sun Land Garden Products
90 Pioneer Road
Watsonville, CA 95076

RE: Unauthorized Release at 90 Pioneer Road, Watsonville, CA 95076

Soil and/or groundwater analysis data from samples collected on January 13, 2000, indicates contamination above acceptable levels requiring completion of a site investigation. Therefore, you are hereby directed to take the following actions:

1. Complete and submit to Santa Cruz County Environmental Health Service (EHS) the form: "Underground Storage Tank Unauthorized Release (Leak)/Contamination Site Report". This report must be filed with EHS within five days from date of this letter. Please find blank form enclosed.
1. Obtain professional services from a reputable engineering/consulting firm with expertise in hazardous materials contamination site investigations. All required reports shall be prepared by a registered engineer, geologist, or certified engineering geologist.

The responsibility of your consultant is to establish the extent of contamination and provide professional judgment/recommendations, based on scientific data, of the remedial actions needed. General Requirements for a Site Investigation are attached/available for your use. A work plan and a time schedule for investigation shall be submitted to Environmental Health Service within thirty (30) days from the date of this letter.

Should you have any questions, please contact this office at (831) 454-2756, 8:00 a.m. to 9:30 a.m. Tuesday through Friday.

Very truly yours,

ROLANDO CHARLES, R.E.H.S.
Senior Environmental Health Specialist

RC:lv

Enclosures: Leak Investigation Guidelines
Leak Report Form



Sampson Engineering Inc.

Watsonville

Tulare

Sunnyvale

6 Hangar Way
Watsonville, CA 95076-2456
Ph: (831)761-6222
Fax: (831)761-1121
www.sampsoneng.com

January 25, 2000

Mr. Al Williamson
Sun Land Garden Products
90 Pioneer Road
Watsonville, CA 95076

RECEIVED
JAN 27 2000
ENVIRONMENTAL
HEALTH SERVICES

Subject: Third Party Environmental Sampling Summary Letter
Removal of an Underground Storage Tank
90 Pioneer Road, Watsonville, California
SEI Project No. 99120

Dear Al:

In accordance with the Scope of Work outlined in Sampson Engineering Inc. (SEI) Proposal No. M9142, dated May 24, 1999, signed by you on approximately June 3, 1999, and subsequently updated by SEI Financial Letter No. 1 (August 13, 1999), SEI conducted a third party environmental sampling at the subject site located at 90 Pioneer Road in Watsonville, California.

The single 1,000 gallon tank was partially excavated prior to the time SEI arrived on site on January 13, 2000 at approximately 10 am. SEI directed Sun Land Garden Products (hereinafter, Sun Land) personnel to add dry ice to the tank via the fill neck and lightly replace the cap. A total of 20 pounds of dry ice was broken into small pieces and added to the tank.

At approximately 10:40 am, the tank hauler (Ecology Control Industries, or ECI) arrived on-site, as did the Santa Cruz County Environmental Health Service (SCCEHS) staff member, Rolando Charles, assigned to the tank removal. Shortly thereafter, the tank was lifted from the excavation and placed on the ECI truck. SEI took oxygen (O₂) concentration and lower explosive limit (LEL) readings of the atmosphere inside the tank using an O₂ /LEL meter; the readings were within acceptable ranges.

Visual observations of the tank and the excavation included the following:

- the tank was in good condition, although there were two holes noted (one on the upper surface near the fill neck, one on the side)
- the excavation was somewhat discolored beneath the tank at the fill/dispenser end
- some water appeared to be entering the excavation from the bottom of the excavation (especially at the fill/dispenser end)
- some of the water "puddles" had a slight sheen.

At the direction of Mr. Charles, a total of three soil samples were obtained. Two samples (from depths approximately 2 feet and 4 feet below the tank bottom) were obtained from native soil at the bottom of the tank excavation at the fill/dispenser end of the excavation, and one sample was obtained from the vent end of the tank excavation. No samples were collected from the excavation walls. Refer to the attached Site Plan for a graphical representation of sample locations.

The soil samples were placed in pre-cleaned brass liners, with the ends sealed with Teflon[®] tape and plastic end caps. They were placed immediately on ice for preservation, and submitted to McCampbell Analytical Inc., a state-certified laboratory, using appropriate chain-of-custody documentation. The samples were tested for Total Petroleum Hydrocarbons (TPH) as gasoline, and benzene, toluene, ethylbenzene and xylenes (BTEX). The samples were also tested for the gasoline additives methyl tert butyl ether (MTBE).

The vent end sample tested non-detect for all analyses performed. The two samples at the fill/dispenser end of the tank tested non-detect for MTBE. However, the two samples at the fill/dispenser end of the excavation contained TPH as gasoline and BTEX constituents at concentrations (in milligrams per kilogram [mg/Kg], or parts per million [ppm] units) as documented in the following table.

Sample ID	TPH (g)	Benzene	Toluene	Ethylbenzene	Xylenes
Fill-1	82	0.11	1.3	1.6	9.7
Fill-2	250	0.10	2.1	2.1	14

The analytical test results and chain-of-custody documentation are attached.

The relatively low concentrations of TPH (as gasoline) and BTEX constituents detected within the two samples above, combined with the visual observations noted above, appears to indicate that the contamination was confined to a very limited area of the tank excavation.

As we agreed, the tank excavation was backfilled with the material excavated and clean sand fill shortly after sampling was completed to minimize safety (i.e., falls) concerns and to minimize water infiltration into the hole from anticipated weather conditions (predicted rain) and the location of the excavation in a surface drainage path and under the building eaves.

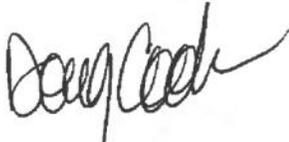
Sun Land Garden Products
SEI Project No. 99120

Page 3
January 25, 2000

If you have any questions, please feel free to contact us at (831) 761-6222.

Sincerely,

SAMPSON ENGINEERING INC.



Douglas A. Cook
Staff Engineer



Michael D. Kleames, P.E.
Project Manager
Registered Geotechnical Engineer
Expires 03/31/00

DAC/MDK/js

Attachments (Site Plan, Analytical Test Results, Chain-of-Custody Documentation)

cc: Rolando Charles, REHS/REA, SCCEHS

1355



Apple Valley Rd

APPLE DELAWARE

1" = 100'

Access from MONROE CO.

WHEEL TIRE TANK

SEWER LINES

REMOVED AST'S Above Ground Storage Tanks (ASTs)

Pool Cont. 1000 gal. LUST TO BE REMOVED

Storm Drains - Sewer Lines

SEWER LINES

ADJACENT PROVISIONAL BUILDING

AST - 1000 GAL. 11/11/11 Diesel Comp Area

SUMPS

SEWER TANKS

LATCH BASINS

Water 1-1-11/11/11

WATER TANK

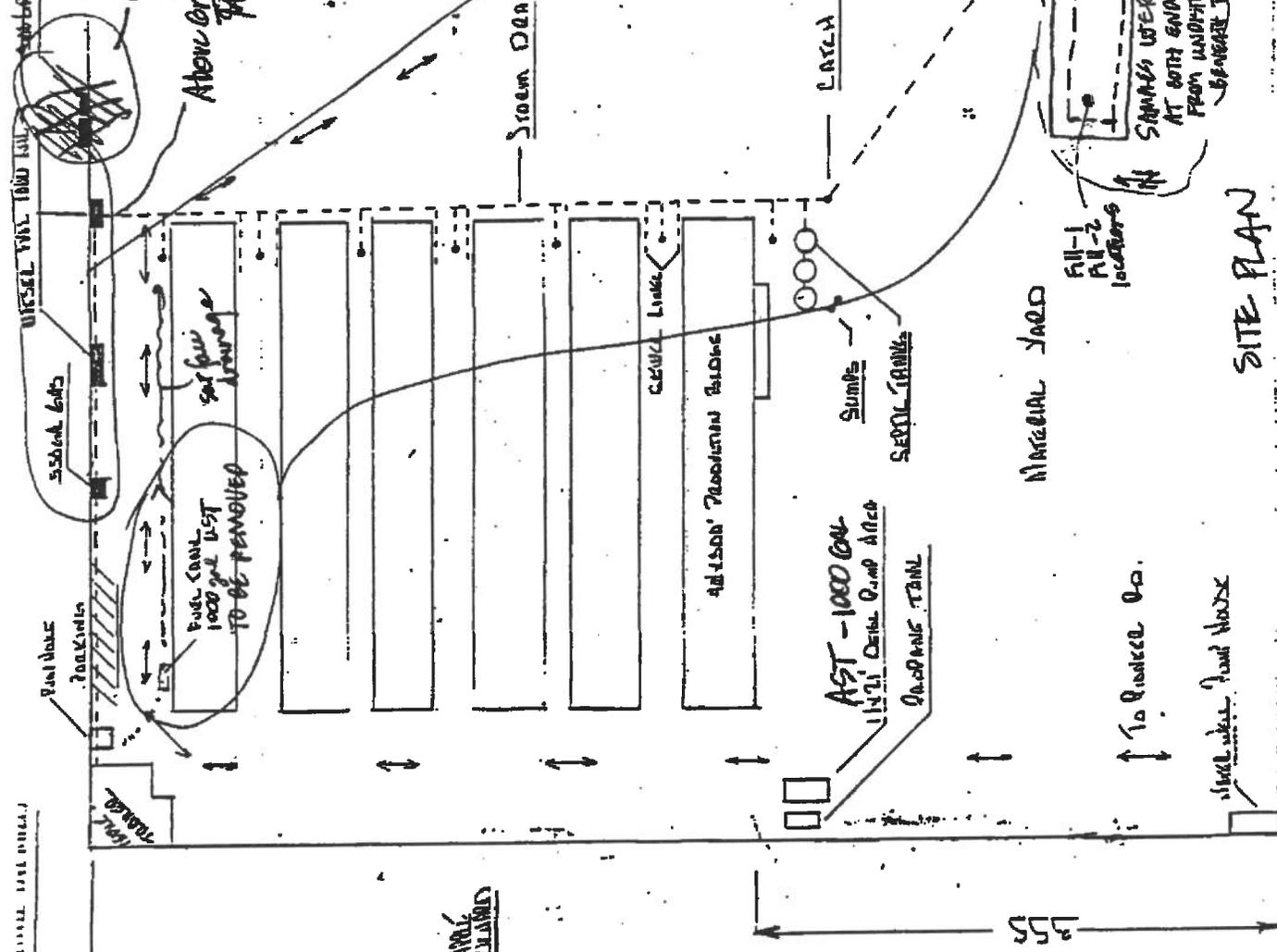
SAMPLES WERE COLLECTED AT BOTH ENDS OF TANK FROM UNDERNEATH SOILS

FILL-1 FILL-2 locations

STREET LIGHT. PAVED WALK

To Route 60.

SITE PLAN





McCAMPBELL ANALYTICAL INC.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
<http://www.mccampbell.com> E-mail: main@mccampbell.com

Sampson Engineering Inc. 6 Hangar Way Suite C Watsonville, CA 95076	Client Project ID: #99120; Surland Garden Products	Date Sampled: 01/14/00
		Date Received: 01/14/00
	Client Contact: Doug Cook	Date Extracted: 01/14/00
	Client P.O:	Date Analyzed: 01/14/00

01/22/00

Dear Doug:

Enclosed are:

- 1). the results of 3 samples from your #99120; Surland Garden Products project,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.
If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in
quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Edward Hamilton, Lab Director



McCAMPBELL ANALYTICAL INC.

110 2nd Ave. South, # Pacheco, CA 94553-5560
Telephone: 925-798-1620 Fax: 925-798-1622
<http://www.mccampbell.com> E-mail: main@mccampbell.com

QC REPORT

Date: 01/14/00-01/15/00 Matrix: Soil
Extraction: N/A

Compound	Concentration: mg/kg			%Recovery		RPD
	Sample	MS	MSD	Amount Spiked	MS	

SampleID: 19790

Instrument GC-7

Xylenes	0.000	324.0	320.0	300.00	108	107	1.2
Ethyl Benzene	0.000	106.0	103.0	100.00	106	103	2.9
Toluene	0.000	109.0	107.0	100.00	109	107	1.9
Benzene	0.000	103.0	99.0	100.00	103	99	4.0
MTBE	0.000	104.0	93.0	100.00	104	93	11.2
GAS	0.000	998.0	975.4	1000.00	100	98	2.3

SampleID: 19190

Instrument GC-2 B

TPH (diesel)	0.000	271.0	278.0	300.00	90	93	2.6
--------------	-------	-------	-------	--------	----	----	-----

$$\% \text{ Recovery} = \frac{(MS - \text{Sample})}{\text{Amount Spiked}} \cdot 100$$

$$RPD = \frac{(MS - MSD)}{(MS + MSD)} \cdot 2100$$

RPD means Relative Percent Deviation

**COUNTY OF SANTA CRUZ HEALTH SERVICES AGENCY
 ENVIRONMENTAL HEALTH SERVICE
 701 Ocean Street, Rm. 312, Santa Cruz, CA 95060 (408) 454-2022**

UNDERGROUND TANK REMOVAL INSPECTION FORM

SITE ADDRESS: 90 Pioneer Rd., West 95076 DATE 1-
 FACILITY NAME: Sunland Garden Products NO. OF TANKS 1
 OWNER/OPERATOR: " " " PHONE 724-6500
 PROPERTY OWNER: " " " PHONE " "

Y = YES N = NO TANK NUMBER

SAFETY PROCEDURES

1. Permit on site?
2. Minimum 20BC fire extinguisher on-site?
3. Welding, smoking and other ignition sources prohibited?
4. Removal equipment of adequate size and condition?
5. Tanks and piping contents removed?
6. Tank atmosphere(s) rendered inert with dry ice?
Time: icing 10:20 A.M. pulling 11:00 A.M.
7. All openings capped except for vent?

EXCAVATION (Note Observations/comments below)

1. Pipelines removed or securely capped?
2. Tank(s) removed, checked for leaks, holes?
3. Tank and pipeline excavations check for product
(visual , odor , meter)?
 - a. Product found in tank excavation?
 - b. Product found in pipeline excavation?
4. Soil/water samples taken as per permit application,
location noted on plot plan?
5. Tank(s), piping loaded on carrier, transported to
pre-approved destination within 12 hours of removal?
6. Tank excavation backfilled or suitably protected from
unauthorized entry?

OBSERVATIONS/COMMENTS: see attached PHD-28

INSPECTIONS (DATE/INSPECTOR):

1-13-00 / Rolando

SANTA CRUZ COUNTY HEALTH SERVICES AGENCY
 ENVIRONMENTAL HEALTH SERVICE

FIELD NOTE DATA SHEET

SUBJECT: UST - Closure

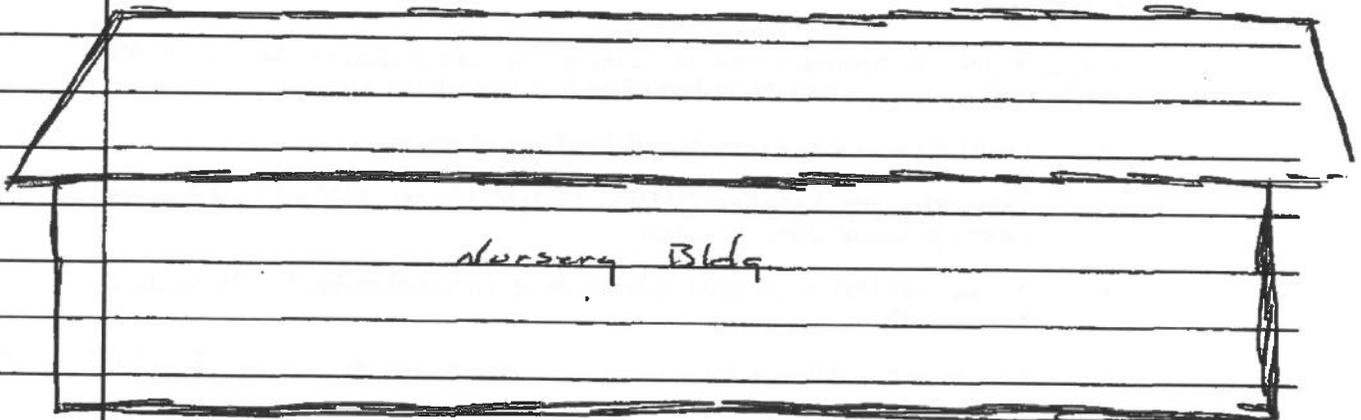
FILE 90 Pioneer Rd.

BY: Rolando

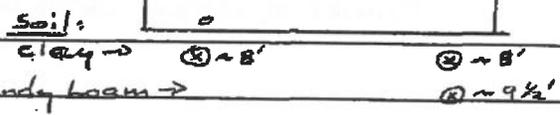
Page

DATE

1-13-00 1,000 gal UST = 20lbs of dry ice
 ECI Manifest # 9955 4347



⇒ H₂O in excavation coming
 in from (R) side. H₂O
 gone when digging
 went past clay & into sandy soil (groundwater??)



⇒ Soils @ fill-end had odor & discoloration
 Soils @ opposite end - mottled & appeared clay.
 ⇒ UST - Rust; Pitting & apparent holes.



ENVIRONMENTAL HEALTH

County of Santa Cruz

HEALTH SERVICES AGENCY

701 OCEAN STREET, ROOM 312, SANTA CRUZ, CA 95060-4073
(831) 454-2022 FAX: (831) 454-3128 TDD: (831) 454-4123

July 16, 1999

Sunland Garden Products
Attention: Al Williamson
90 Pioneer Road
Watsonville, CA 95076

RE: Application for Permit to Remove/Safeguard Underground Hazardous Materials Storage Tank (UST) for 90 Pioneer Road, Watsonville

Dear Mr. Williamson:

On July 9, 1999, this department received the above referenced application. We are not able to process the application at this time due to lack of the following information:

1. Contractor who will be removing UST and type of licensing.
2. The sampling map shows three (3) UST's (550 gal.; 300 gal.; 1000 gal.) and does not indicate proposed sample locations.
3. Are the other UST's, not included in the above referenced application also going to be removed?
4. Completed A & B Forms (blank forms enclosed). *Need Board of Equalization th*

Once this department has received the above necessary information, we can process your permit application.

If you have any questions regarding this letter, you may contact me at (831) 454-2756.

Sincerely,

Rolando Charles, R.E.H.S.
Sr. Registered Environmental Health Specialist

RC:lv

Enclosure

OFFICIAL INSPECTION REPORT

DBA/NAME <u>Sun-Land Garden</u>						DATE <u>7/8/99</u>		
ADDRESS <u>90 Pioneer Rd.</u>						RECHECK DATE <u>8/1/99</u>		
OWNER/OPERATOR						PERMIT # <u>No #</u>		
TIME-IN	TIME-OUT	TANK #	TANK #					
<input type="checkbox"/> 27. Change in Conditions <input type="checkbox"/> 28. Precision Testing <input type="checkbox"/> 29. Monitoring System <input type="checkbox"/> 30. Written Monitoring Procedures <input type="checkbox"/> 31. Operational/Frequency <input type="checkbox"/> 32. Piping <input type="checkbox"/> 33. Records Maintenance <input type="checkbox"/> 34. Casing Secured <input type="checkbox"/> 35. Sampling <input type="checkbox"/> 36. Inv. Reconciliation/Gauging <input type="checkbox"/> 37. Unauthorized Releases <input type="checkbox"/> 38. Overfill Protection <input type="checkbox"/> 39. Safety Hazard								

The violations noted above for your underground storage facilities shall be corrected as follows:

Facility has a contract with Simpson Eng. to remove underground storage tank. Permit to remove tank must be submitted by 8/1/99.

A reinspection fee will be charged if the violations noted are not corrected prior to the recheck date noted above.

Inspector: <u>Robert Dupple</u>	Received By: <u>Al Hill, owner</u>
Phone # <u>454-2738</u>	Title: <u>Facility MGR</u>



County of Santa Cruz

HEALTH SERVICES AGENCY

701 OCEAN STREET, ROOM 312, SANTA CRUZ, CA 95060-4073
(831) 454-2022 FAX: (831) 454-3128 TDD: (831) 454-4123

ENVIRONMENTAL HEALTH

May 5, 1999

Jackie and Edward Minasian
90 Pioneer Road
Watsonville, CA 95076

Re: Underground Storage Tank at 90 Pioneer Road, Watsonville.

Dear Mr. and Mrs. Minasian:

In October of 1998 it was brought to my attention that there is an underground storage gasoline tank on your property at 90 Pioneer Road. At that time, Al Williamson of Sun and Land Garden Products, indicated that he was planning to have the tank removed. I gave him an underground storage tank removal packet. I have not yet received an application to have the tank removed. I am writing to inform you that you are in violation of the California Health and Safety Code (Chapter 6.7, Section 25298), and Santa Cruz County Code (Chapter 7.100.060). Therefore you are directed to do the following:

1. Submit a completed permit to remove an underground storage tank. Once the permit is approved, it will be valid for 6 months. The underground storage tank must be removed within that 6 month period. **The application to remove must be completed within 60 days of the date of this letter.**

Please contact me any weekday morning from 8:00 a.m. to 9:30 a.m. at 454-2738 if you have any questions or need any assistance. Thank you for your attention to this matter.

Sincerely,

Rebecca Supplee, Senior Environmental Health Specialist

encl: UST Closure Packet

SANTA CRUZ COUNTY HEALTH SERVICES AGENCY
ENVIRONMENTAL HEALTH SERVICE

FIELD NOTE DATA SHEET

SUBJECT: UST

Sun-Land Garden Products
FILE 90 Pioneer Road
Watsonville, CA 95076
Page

BY: R. Supplee

DATE	
10/16/98	<p>Al Williamson of Sun & Land Garden Products came to the counter to get an UST Closure packet. He reported that there is a UST (gasoline) which is approximately 1,000 gal on the property. I gave him a UST removal packet and list of consultants. He discussed the possibility of removing the tank himself. I explained that he would have to have a qualified 3rd party to sample and the tank would be hazardous waste and would have to be transported and disposed of properly.</p>

R. Supplee

Stormwater Management Analysis Report

Application Number 181155

Attachment 5

August 27, 2019

Grace Gurreri
Design Evolution
P.O. Box 946
Boulder Creek, CA 95006
gracedesignevolution@gmail.com

**Subject: Stormwater Management Analysis Report, Application #181155
Sun Land Garden Products, 90 Pioneer Road, Watsonville, California
APN: 109-231-09**

Dear Ms. Gurreri:

On behalf of Sun Land Garden Products, Sherwood Design Engineers, Inc. (SDE), formerly Fall Creek Engineering (FCE), respectfully presents this updated drainage analysis for the proposed improvements at 90 Pioneer Road in Watsonville, California. The purpose of this letter is to present our evaluation of the existing drainage conditions at the site and recommend drainage mitigations for the proposed improvements.

PROJECT DESCRIPTION

Sun Land Garden Products (Sun Land) is an approximately 6-acre facility that processes soil, compost, and other materials into horticultural growing media sold in bags or bulk to commercial nurseries and retail stores. The facility plans to install improvements which consist of a canopy structure over Mix Line 2 equipment and paving of a 2,900 sf area within the currently paved area surrounding and under the proposed canopy. The project adds approximately 10,725 square foot of roof area to the site and approximately 2900 sf of impervious surface. The canopy is a mitigation designed to reduce transport of pollutants in runoff from the site.

In July 2017, FCE prepared plans for a recommended Stormwater Management strategy (see Attachment 1) for Sun Land based upon evaluation of the existing stormwater facilities at the site and providing upgrades and additional mitigations designed for stormwater management and treatment. Sun Land Garden Products worked with the California Regional Water Quality Control Board to agree upon a schedule to complete the improvements in stages, to be complete by 2020. A portion of the recommended upgrades have been completed and are reflected as existing conditions on the Stormwater Conveyance and Detention Facilities plan set, prepared by FCE, dated May 2017 and updated by SDE on 08/20/19 (2019 Design Plans).

Under the 2019 Santa Cruz County (SCC) Design Criteria, the addition of 2,900 square feet of impervious area is classified as a Medium Project because it creates between 500 and 5,000 square feet of new impervious area. Medium Projects must incorporate Best Management Practices (BMP's) to minimize and mitigate pollutant and hydrologic impacts due to development. Specifically, the proposed BMP's shall "prevent runoff in excess of the pre-development conditions and to minimize the transport of pollutants" (2019 SCC Design Criteria). Refer to Attachment 2 for the Project and Threshold Determination Form.

SDE evaluated the existing drainage improvements and future proposed drainage improvements inclusive of the additional impervious area created by the project. These improvements were evaluated for conformance with the 2019 SCC Design Criteria to retain, detain, and effectively convey stormwater from the 2-year 24-hour, 85th percentile 24-hour and 10-year 15-minute storm events, respectively. The results of the drainage calculations are presented below.

A summary of existing and proposed BMP's for the site is presented in Figure 1. The BMP's include 10 vegetated channels (Channels 1-10), 16 storm drainage pipes (Pipes 1-16), 20 silt fences, erosion control blankets, 1 faircloth skimmer, 1 concrete valley gutter, and 2 detention basins (Basins 1-2)

BACKGROUND

SITE

Sun Land Garden Products is an approximately 6 acre facility located southwest of Corralitos and north of Amesti Road. The plant processes soil, compost, and other materials into horticultural growing media to be sold in bags or bulk to commercial nurseries and retail stores.

WATER QUALITY CONDITIONS

The client has conducted storm water quality tests throughout the site. The tests, dated January 31st, 2017, indicate that site runoff contains elevated concentrations of alkalinity, iron, nitrogen, potassium, phosphorus, sulfate, aluminum, and sodium, in exceedance of EPA Numeric Action Levels. In the Industrial Storm Water Pollution Prevention Plan (SWPPP) for the facility, Sidera Environmental, Inc. reports that runoff from the site also exceeded TSS levels and that these pollutants potentially originate from growing media material, bulk piles, leachate, leaks from trucks/forklifts, tracking of sediment by vehicles, fuel spills and rusted metal bin leakages. Refer to Attachment 3 for Water Quality Testing Results, Attachment 4 for Exceedance Response Action Level 1 Evaluation and Attachment 5 for the facility's Industrial SWPPP.

SOIL CONDITIONS

SDE obtained information on the soils on site from the United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) Soil Survey. According to the soil survey, the primary soil type at the site is Watsonville loam, characterized by a very low to moderately low permeability (Ksat) ranging from 0.00 – 0.06 inches/hour. SDE assumed an average capacity of 0.03 inches/hour for the infiltration calculations. A Geotechnical Study prepared by Central Coast Agri-Buildings, dated September 28, 2018, identified the site soils as belonging to hydrologic soil group D, which is consistent with the findings in the USDA NRCS Soil Survey. Refer to Attachment 6 for the USDA Soil Survey and Attachment 7 for the Geotechnical Engineering Study.

EXISTING CONDITIONS

WATERSHED

The watershed (the extent of land that contributes to the runoff that flows across the site) encompasses approximately 849,000 square feet (sf). This watershed includes approximately 686,000 sf of impervious surfaces and 161,000 sf of pervious surfaces. The impervious areas consist of paved and unpaved roadways as well as rooftops. The pervious areas consist of orchards and undeveloped grassland areas.

To evaluate the existing and proposed BMP's, the watershed was divided into 17 sub-watersheds. Stormwater flow volumes and rates were calculated for each sub-watershed (S-WSHD) and used for analysis of the mitigation features serving each sub-watershed or combination thereof. Refer to Figure 1 for the delineation of the watershed, sub-watersheds, and location of mitigation features.

Table 2 provides a list of the sub-watersheds with their respective mitigation features and pollutants of concern based on stormwater sampling discussed in the previous section.

EXISTING DRAINAGE BMP'S

The existing drainage system includes seven storm drain catch basins, twelve vegetated channels, silt fencing and two drainage basins, and is provided on Sheet 0.0 of the Stormwater Conveyance and Detention Facilities Plan provided as Attachment 1.

The storm drain catch basins capture runoff and convey it through underground storm drain pipes either to the drainage basins or landscaped areas along Pioneer Road.

Vegetated Channels – Twelve vegetated channels on the site are designed to collect runoff from stockpiles of materials and convey it to the existing drainage basins. The channel cross-sectional areas and slopes have been sized to adequately convey the 10-yr, 15-min storm and to slow flow, facilitating sedimentation. They have been designed to provide sufficient room for maintenance and cleaning. Table 1 provides the existing channel dimensions used to analyze their capacity to convey stormwater runoff.

Table 1. Existing Vegetated Channel Dimensions

Channel	Depth (ft)	Top Width (ft)	Bottom Width (ft)
CH-1 TO CH-7	1.5	5.5	1
CH-8	2.25	10	3
CH-9	1.5	5	1
CH-10	1.75	7	1.5
CH-11	1.75	7	1.5
CH-12	2.5	12	5

Silt Fence - Silt fences are located between the redwood piles and channels. The fences are designed to capture sediment from stockpile runoff and reduce sediment transport into downstream drainage facilities.

Existing Drainage Basins – There are two existing drainage basins on the site, both located adjacent to the easternmost access driveway from Pioneer Road. Basin 1 is approximately 5 feet (ft) wide by 10 ft long by 4 ft deep. Basin 2 is approximately 10 ft wide by 15 ft long and 7-8 ft deep. Due to large amounts of sediment in the bottom, the basins do not percolate runoff into the soil and need pumped during wet weather. According to the Storm Water Pollution Prevention Plan prepared by Sidera Environmental, Inc. and dated July 20, 2016, Drainage Basin 1 was designed with the capacity to retain 2,386 cubic feet (cf) of runoff and Drainage Basin 2 has the capacity to retain 1,970 cf.

Table 2. Sub-Watershed Area Summary

Sub-Watershed Area	Receptient Flood Control Mitigation(s)	Pollutants of Concern
1A	P-1 P-2	Iron
		Potassium
		Aluminum
		Oil and Grease
1B	VG-1	Iron
		Potassium
		Aluminum
		Oil and Grease
2	P-5	Iron
		Potassium
		Zinc
		Aluminum
		TSS
		Oil and Grease
		Nitrogen
Oil and Grease		
3A	P-6 CH-5	Iron
		Potassium
		Aluminum
		Oil and Grease
3B	CH-5 CH-6 CH-7	Iron
		Potassium
		Aluminum
		Oil and Grease
4	P-10	TSS Oil and Grease
5	P-3	Alkalinity
		Phosphorus
		Potassium
		Aluminum
		TSS
		Oil and Grease
6	P-4 CH-1 CH-2 CH-3 CH-4	Alkalinity
		Nitrogen
		Phosphorus
		Potassium
		Sulfate
		Iron
Aluminum		

Sub-Watershed Area	Receptient Flood Control Mitigation(s)	Pollutants of Concern
7	--	n/a
8	P-9 P-10 CH-11	TSS
		Nitrogen
		Phosphorus
9	P-9 CH-10	TSS
		Nitrogen
		Phosphorus
10	P-8	TSS
		Nitrogen
		Phosphorus
11	P-7 CH-8 CH-9	Iron
		Nitrogen
		Phosphorus
		Oil and Grease
12	P-14 P-16 W-1	Iron
		TSS
		Nitrogen
		Phosphorus
13	P-15	Oil and Grease
		TSS
		TSS
		TSS
14	--	TSS
		TSS
		TSS
		TSS
15	P-4 CH-1 CH-2 CH-3 CH-4	TSS
		Nitrogen
		Phosphorus
		Oil and Grease
16	CH-5 CH-6 CH-7 CH-12	TSS
		Nitrogen
		Phosphorus
		Oil and Grease
17	P-12 P-16	TSS
		Oil and Grease

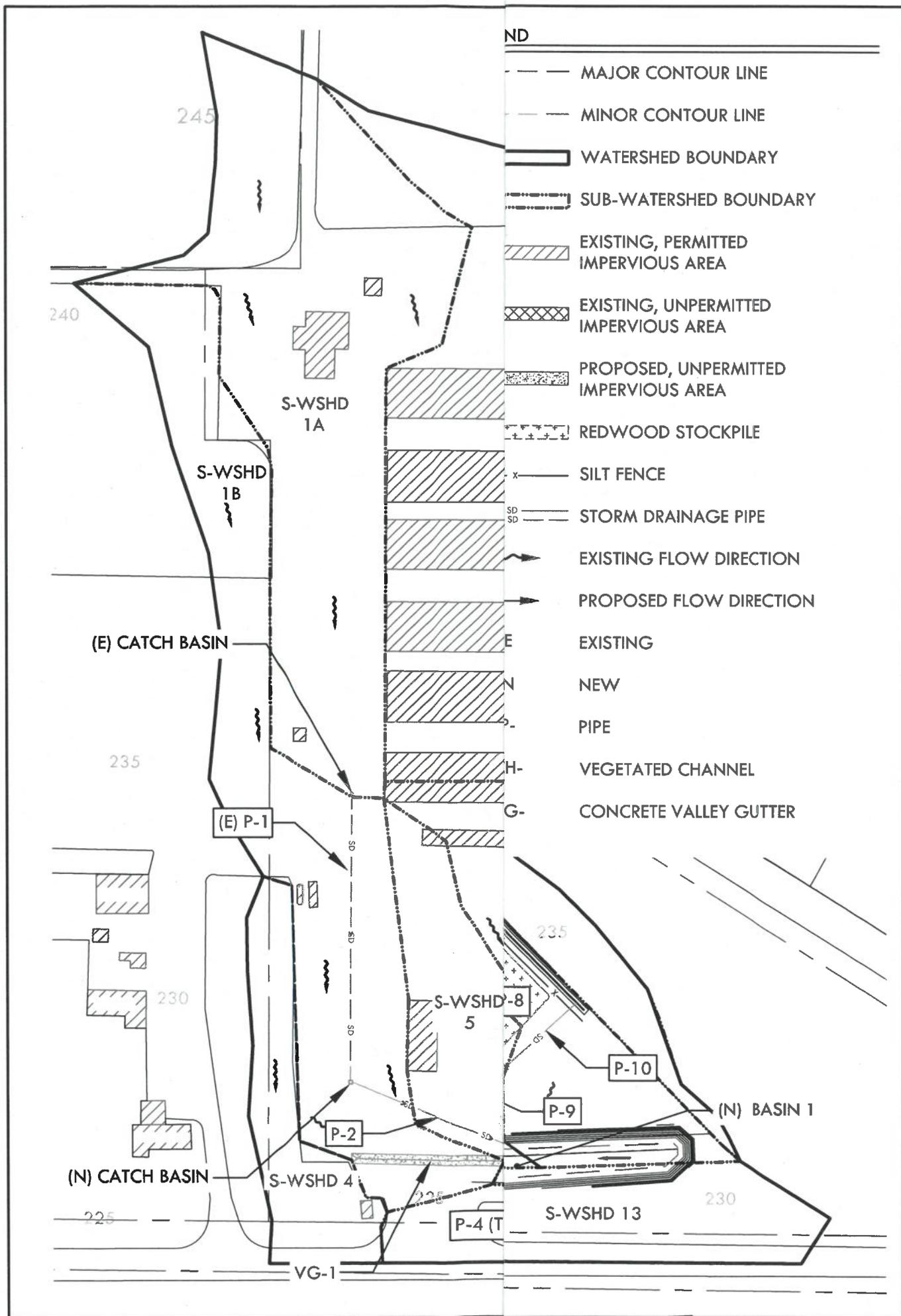


FIGURE 1: OVERALL WATERSHED, SUB-WATERSHEDS AND RECIPIENT MITIGATION FEATURES

Table 2. Sub-Watershed Area Summary

Sub-Watershed Area	Receptient Flood Contol Mitigation(s)	Pollutants of Concern
1A	P-1 P-2	Iron
		Potassium
		Aluminum
		Oil and Grease
1B	VG-1	Iron
		Potassium
		Aluminum
		Oil and Grease
2	P-5	Iron
		Potassium
		Zinc
		Aluminum
		TSS
		Oil and Grease
		Nitrogen
Oil and Grease		
3A	P-6 CH-5	Iron
		Potassium
		Aluminum
		Oil and Grease
3B	CH-5 CH-6 CH-7	Iron
		Potassium
		Aluminum
		Oil and Grease
4	P-10	TSS
		Oil and Grease
5	P-3	Alkalinity
		Phosphorus
		Potassium
		Aluminum
		TSS
		Oil and Grease
6	P-4 CH-1 CH-2 CH-3 CH-4	Alkalinity
		Nitrogen
		Phosphorus
		Potassium
		Sulfate
		Iron
Aluminum		

Sub-Watershed Area	Receptient Flood Contol Mitigation(s)	Pollutants of Concern
7	--	n/a
8	P-9 P-10 CH-11	TSS
		Nitrogen
		Phosphorus
9	P-9 CH-10	TSS
		Nitrogen
		Phosphorus
10	P-8	TSS
		Nitrogen
		Phosphorus
11	P-7 CH-8 CH-9	Iron
		Nitrogen
		Phosphorus
		Oil and Grease
12	P-14 P-16 W-1	Iron
		TSS
		Nitrogen
		Phosphorus
13	P-15	Oil and Grease
		TSS
14	--	TSS
15	P-4 CH-1 CH-2 CH-3 CH-4	TSS
		Nitrogen
		Phosphorus
		Oil and Grease
16	CH-5 CH-6 CH-7 CH-12	TSS
		Nitrogen
		Phosphorus
		Oil and Grease
17	P-12 P-16	TSS
		Oil and Grease

SDE calculated retention volumes required under existing conditions and determined that the existing drainage basins are undersized and do not have enough capacity to retain the 2-yr, 24-hr storm or detain the 10-yr, 15-min storm volumes in accordance with the 2019 SCC Design Criteria. One twelve-inch PVC and five six-inch outlet pipes convey overflow from Basin 1 and Basin 2, respectively, to a small catchment basin located in the Pioneer Road landscaping. The overflow pipes are located approximately two feet below the top of the basins. These pipes were analyzed for capacity and determined to have capacity to convey runoff at rates exceeding the pre-development 10-yr, 15-min flows.

SOURCE CONTROL MEASURES

Sun Land currently executes source control measures to reduce the transport of pollutants in stormwater runoff. Refer to Attachment 5 for the facility's Industrial SWPPP.

PROPOSED DRAINAGE IMPROVEMENTS

SDE analyzed the existing stormwater management features on the site and the features proposed by FCE in 2017 and determined that the drainage improvements as presented on the Stormwater Conveyance and Detention Facilities plan set, prepared by FCE, dated May 2017 and updated by SDE on 08/20/19 (2019 Plan Set) are sized to meet the requirements of the 2019 SCC Design Criteria, and furthermore, can mitigate the runoff created by the additional 2900 sf of impervious surface proposed.

Due to the slow infiltration rate of the onsite soils, SDE recommends that improvements be designed to detain the 2-yr 24-hr return storm volumes and the 10-yr 15-min return storm volumes, and to release the runoff at pre-development 10-yr 15-min return storm rates. Additionally, SDE recommends that the drainage basins be sized to detain the 85th percentile, 24-hr runoff volumes from all surfaces within the overall watershed to treat all stormwater before exiting the site. Proposed drainage improvements include additional catch basins and storm drain piping, renovation of existing drainage basins, a new valley gutter to divert runoff from leaving the site and redirect it to the drainage basins for treatment, and new storm drain overflow pipes to convey runoff from the drainage basins to the offsite catchment and maintain pre-development rates.

PROPOSED DRAINAGE BASINS

SDE recommends that the existing drainage basins be infilled and renovated to increase volume and reduce the depth of the basins. Additionally, the basins shall each provide primary and secondary treatment.

The primary treatment area will be immediately upstream of the secondary treatment area and will facilitate settling of solids through the installation of vinyl sheet piles. The sheet piles will partition the primary treatment area effectively increasing the flow path from the basin's inlet to its overflow weir, thereby providing sufficient time for settling of solids. The overflow weir will also prevent settled solids from migrating into the secondary treatment area. In situations when the water level within the primary treatment area does not reach beyond the weir bottom, a faircloth skimmer will skim the water surface, collecting the cleaner filtered water and conveying it to the secondary treatment area.

The secondary treatment area will contain a small wetland vegetated with plants such as juncus, limonium and reeds. The plants will further settle out solids and treat nutrients through the processes of biofiltration and plant uptake. The secondary treatment area is equipped with an adjustable water

level control structure to maintain a sufficient water level throughout the wetland and allowing it to be drained if required at pre-development rates.

STORM DRAIN PIPING

SDE evaluated the existing storm drain pipe system and is proposing upgrades, which include re-rerouting runoff captured from building roofs to Basin 1, and replacing storm drain pipes to match flows to basin capacity and the outlet pipes from the drainage basins to maintain pre-development flow rates.

ADDITIONAL CONVEYANCE FACILITIES

To prevent untreated runoff from exiting the site at the southwest driveway, SDE recommends a concrete valley gutter be installed to capture and direct flows to the channel system, and eventually the drainage basin, via a drivable channel drain.

SOURCE CONTROL MEASURES

SDE proposes that Sun Land continues executing current source control measures to reduce the transport of pollutants in stormwater runoff.

DRAINAGE ANALYSIS

All existing and proposed stormwater mitigation features have been evaluated to meet the on-site detention, hydrological and hydraulic requirements as defined in the 2019 Design Criteria for both the existing and proposed site improvements. The following sections present the methodology and parameters used in the analysis.

HYDROLOGIC ANALYSIS

SDE applied the rational method to evaluate the overall watershed and sub-watersheds and calculate the volume of water that would need to be conveyed through the existing and proposed drainage features under three design storm events (2-yr, 24-hr, 10-yr, 15-min, and 85th percentile, 24-hr).

Figure SWM-2 was utilized to determine the site's P60 isopleth (1.43 in/hr), which was used in SWM-3 to determine the rainfall intensity for the 2-yr, 24-hr and 10-yr, 15-min. SWM 17 was employed to estimate the required detention volumes, as well as the pre-development and post-development flow rates of the 10-yr, 15-min storm event. SWM-23 was used to estimate the required retention volume for the 2-yr, 24-hr return storm. The required retention volume for the 85th percentile, 24-hr was calculated by determining the site's 85th percentile isopleth through the California Water Board's 85th percentile rainfall depth map. Refer to Table 3 for a summary of rainfall runoff coefficient values for each storm event and land type, Table 4 for the rainfall intensity/depth per storm event, and Table 5 for the required retention and detention volumes, as well as the storage provided. SWM-17, SWM-24 and the 85th percentile rainfall depth map with the site location indicated is provided in Attachments 8, 9, and 10, respectively.

Table 3. Runoff Coefficient Per Return Period and Land Type

Land Type*	Runoff Coefficient			
	85th	2-year	10-year	25-year
Pervious	0.35	0.35	0.41	0.44
Impervious	0.75	0.75	0.83	0.88

*Runoff coefficient values are taken from *Applied Hydrology*¹ where "impervious" represents concrete and roofed areas and "pervious" represents cultivated areas with average slopes (2-7%)

Table 4. Rainfall Intensity/Depth Per Storm Event

Storm Event	Rainfall Intensity/Depth
85th percentile, 24-hour	1.05 in
2-year, 24-hour	0.15 in/hr
10-yr, 15-minute	1.72 in/hr

Table 5. Summary of Storage Capacity Required and Provided

	Basin 1 Volume Required (cf)	Basin 1 Volume Provided (cf)	Basin 2 Volume Required (cf)	Basin 2 Volume Provided (cf)
85th percentile, 24-hr Detention Volume	23,138		23,444	
2-yr, 24-hr Retention Volume	10,695		10,700	
10-yr, 15-min Detention Volume	8,057		6,180	
Drainage Basin 1		25,019		
Drainage Basin 2				22,214
Channel 12				3,240
Total Volume Provided		25,019		25,454

HYDRAULIC ANALYSIS

The 2019 SCC Design Criteria requires that drainage facilities be sized to convey the 10-year, 15 minute return storm event, and that flows from the site be maintained at pre-development rates.

Using SWM 17, SDE estimated the pre-development flow from the site for a 10-yr 15 minute storm to be approximately 10.1 cfs. Pipes 14 and 12, which convey water detained in the drainage basins, to the offsite catchment area are sized to maintain pre-development flow rates from the site. The pipes restrict the flow from to 5.37 cfs in Pipe 12, and 1.99 cfs in Pipe 14. The combined flow of 6.47 cfs is less than the pre-development rate of 10.1 cfs, thereby complying with the 2019 SCC. Design Criteria requiring maintenance of pre-development flows

Channels and pipes conveying runoff through the site were evaluated using the Manning's n values, slopes and dimensions input into Hydra flow Express, an extension of Autodesk Civil 3D. Facilities

¹ Chow, V. T., Maidment, D. R., and Mays, L. W. (2013). *Applied hydrology*. McGraw-Hill Professional, New York.

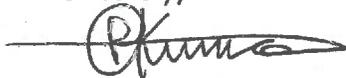
onsite were designed to convey the , was used to evaluate 10-yr, 15-min duration design storm rates noted previously. The Hydraflow Express results are provided in Attachment 11.

CONCLUSION

Using the procedures outlined in the 2019 SCC Design Criteria, SDE has analyzed the existing and proposed drainage improvements, as illustrated on the 2019 Design Plans and has determined that the proposed system can adequately detain and convey runoff from a 2-year, 24-hr and 10-year, 15-minute return storm events, mitigate the increased runoff from the proposed improvements, and maintain runoff from the site at pre-development flow rates. In addition, the system as designed provides significant treatment of runoff to mitigate pollutants of concern at the site.

Thank you for the opportunity to assist you with this project. If you have any questions or require additional information, please contact us at (831) 426-9054.

Sincerely,



ONOMEWERIKE OKUMO, E.I.T.
Design Engineer



JANICE WESTLAKE, P.E.
Project Manager

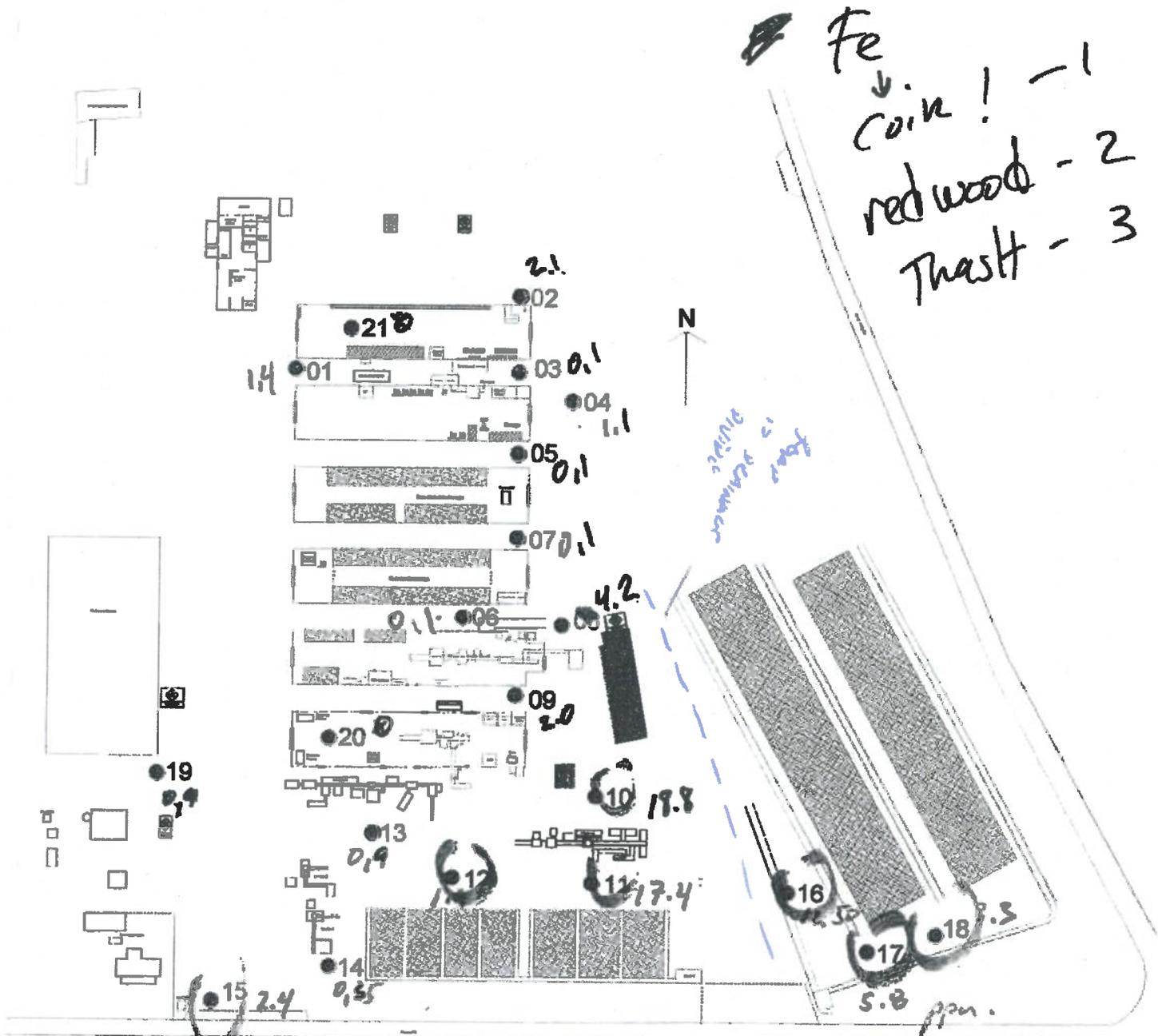
ATTACHMENTS

- Attachment 1. Stormwater Management Plan
- Attachment 2. Project Information and Threshold Determination Form
- Attachment 3. Water Quality Testing Results
- Attachment 4. Exceedance Response Action Level 1
- Attachment 5. Storm Water Pollution Prevention Plan, prepared by Sidera Environmental, Inc., dated July 20, 2016
- Attachment 6. USDA Soil Survey
- Attachment 7. Geotechnical Engineering Study prepared by Central Coast Agri-Buildings, dated September 28, 2018
- Attachment 8. Figure SWM-17 Runoff Detention by Modified Rational Method
- Attachment 9. Figure SWM-24 Runoff Retention by Storage Percolation Method
- Attachment 10. 85th percentile rainfall depth map
- Attachment 11. Hydraflow Express Results for 10-year, 15-minute storm event
- Attachment 12. Hydraflow Express Results for 25-year flood event

**Attachment 1. Stormwater Management Plan
refer to Stormwater Conveyance and Detention
Facilities Plan Sheets**

**Attachment 2. Project Information and Threshold
Determination Form**

Attachment 3. Water Quality Testing Results



- | | |
|----------------------------------|--|
| 1. Between B6 & B5 | 12. Scattered samples from Mix Yard |
| 2. Drainage outside B6 | 13. Scattered samples from ML1 |
| 3. Drainage between B6 & B5 | 14. Scattered samples from Grinders |
| 4. Outside Garage | 15. Before Pioneer Road |
| 5. Drainage between B5 & B4 | 16. Channel left of sand pile |
| 6. Drainage between B3 & B2 | 17. Channel left of RW Pile #2 |
| 7. Drainage between B4 & B3 | 18. Channel between both RW Piles |
| 8. After trash cans and palettes | 19. Drainage from Peat Moss Storage area |
| 9. Drainage between B2 & B1 | 20. Directly from B1 roof |
| 10. After Coir pile | 21. Directly from B6 roof |
| 11. Scattered samples from ML2 | |

1. adding better fencing between piles to reduce/retain soil product



BERGER - CERTIFICATE OF ANALYSIS

121 Terrang Saint-Medeste QC G6L 3W0 T: 1 800 463-5532 F: 418 867-3929 berger.ca

REPORT NO.
7210

PROJECT NO: INTERNE / INTERNAL
PRODUCT TYPE: INTERNE
WAREHOUSE: TEX

LOGGED DATE: 2017/01/26
COMPLETED DATE: 2017/01/27
DATE REPORTED: 2017/01/31

ATTN:
REQUESTER: Nicolas Morin

			084680 WATER 1- BETWEEN B6 &	084681 WATER 2- DRAINAGE	084682 WATER 3- DRAINAGE	084683 WATER 4- OUTSIDE
Water analysis	Spec min	Spec max				
Alkalinity (ppm)	0	50	27.50	30.00	15.00	42.50
Chloride (ppm)	0	50	3.60	10.00	31.99	30.99
pH	-	-	5.78	6.30	5.68	6.46
Soluble Salts (mmhos/cm)	0	1	0.13	0.07	0.14	0.20
Nitrate Nitrogen (N-NO3) (ppm)	0	5	< 0.6	< 0.6	< 0.6	< 0.6
Ammonium Nitrogen (N-NH4) (ppm)	0	5	0.8	0.5	0.6	0.5
Phosphorus (ppm)	0	5	< 0.21	< 0.21	0.9	< 0.21
Potassium (ppm)	0	5	↑ 17.8	2.7	↑ 16.3	↑ 14.6
Calcium (ppm)	0	120	5.0	4.7	2.2	15.3
Magnesium (ppm)	0	25	1.6	1.4	0.7	1.7
Sulfate (ppm)	0	100	5.9	6.9	4.8	12.3
Boron (ppm)	-	-	0.02	0.02	0.02	0.02
Copper (ppm)	0	0.2	< 0.03	< 0.03	< 0.03	< 0.03
Iron (ppm)	0	0.5	↑ 1.43	↑ 2.09	0.09	↑ 1.16
Manganese (ppm)	0	1	0.03	< 0.03	< 0.03	< 0.03
Molybdenum (ppm)	0	0.05	< 0.02	< 0.02	< 0.02	< 0.02
Zinc (ppm)	0	0.5	< 0.03	< 0.03	↑ 0.83	< 0.03
Aluminum (ppm)	0	0.5	↑ 2.03	↑ 3.19	0.06	↑ 1.49
Sodium (ppm)	0	30	14.1	8.2	14.9	14.3
SAR	-	-	1.42	0.86	2.24	0.90

			084684 WATER 5- DRAINAGE	084685 WATER 6- DRAINAGE	084686 WATER 7- DRAINAGE	084687 WATER 8- AFTER TRASH
Water analysis	Spec min	Spec max				
Alkalinity (ppm)	0	50	15.00	27.50	20.00	↑ 157.50
Chloride (ppm)	0	50	7.00	6.00	10.00	39.99
pH	-	-	6.28	6.56	6.33	6.87
Soluble Salts (mmhos/cm)	0	1	0.05	0.07	0.06	0.41
Nitrate Nitrogen (N-NO3) (ppm)	0	5	< 0.6	< 0.6	< 0.6	< 0.6
Ammonium Nitrogen (N-NH4) (ppm)	0	5	0.5	0.4	0.5	3.3
Phosphorus (ppm)	0	5	< 0.21	< 0.21	< 0.21	0.3
Potassium (ppm)	0	5	2.4	1.2	1.4	↑ 27.7
Calcium (ppm)	0	120	0.9	6.0	2.7	52.6
Magnesium (ppm)	0	25	0.4	0.7	0.8	5.1
Sulfate (ppm)	0	100	2.2	4.7	4.4	35.9
Boron (ppm)	-	-	0.01	0.02	0.01	0.06



BERGER - CERTIFICATE OF ANALYSIS

121 Teranga Saint-Modeste QC G0L 3W0 T 1 500 463-5582 F 418 867-3929 berger.ca

REPORT NO.
7210

PROJECT NO: INTERNE / INTERNAL
PRODUCT TYPE: INTERNE
WAREHOUSE: TEX

LOGGED DATE: 2017/01/26
COMPLETED DATE: 2017/01/27
DATE REPORTED: 2017/01/31

ATTN:
REQUESTER: Nicolas Morin

Water analysis	Spec min	Spec max	084684	084685	084686	084687
			WATER 5- DRAINAGE	WATER 6- DRAINAGE	WATER 7- DRAINAGE	WATER 8- AFTER TRASH
Copper (ppm)	0	0.2	< 0.03	< 0.03	< 0.03	< 0.03
Iron (ppm)	0	0.5	0.16	0.06	0.07	↑ 4.20
Manganese (ppm)	0	1	< 0.03	< 0.03	< 0.03	0.69
Molybdenum (ppm)	0	0.05	< 0.02	< 0.02	< 0.02	< 0.02
Zinc (ppm)	0	0.5	0.37	0.40	0.22	< 0.03
Aluminum (ppm)	0	0.2	↑ 0.25	0.08	0.08	↑ 5.61
Sodium (ppm)	0	30	6.4	5.9	7.4	18.9
SAR	-	-	1.43	0.60	1.02	0.67

Water analysis	Spec min	Spec max	084688	084689	084690	084691
			WATER 9- DRAINAGE	WATER 10- AFTER COIR	WATER 11- SCATTERED	WATER 12- SCATTERED
Alkalinity (ppm)	0	50	42.50	40.00	↑ 80.00	↑ 75.00
Chloride (ppm)	0	50	25.99	16.99	11.00	4.00
pH	-	-	6.38	6.23	6.37	5.85
Soluble Solids (milligrams/liter)	0	1	0.19	0.45	0.53	0.48
Nitrate Nitrogen (N-NO3) (ppm)	0	5	0.8	< 0.6	< 0.6	< 0.6
Ammonium Nitrogen (N-NH4) (ppm)	0	5	1.3	↑ 6.3	↑ 7.7	↑ 8.1
Phosphorus (ppm)	0	5	< 0.21	1.9	2.7	↑ 11.5
Potassium (ppm)	0	5	↑ 13.6	↑ 62.0	↑ 72.0	↑ 37.2
Calcium (ppm)	0	120	16.2	18.4	42.1	33.0
Magnesium (ppm)	0	25	2.1	6.7	12.2	13.7
Sulfate (ppm)	0	100	17.2	46.7	78.2	↑ 159.5
Boron (ppm)	-	-	0.03	< 0.01	0.01	0.02
Copper (ppm)	0	0.2	< 0.03	< 0.03	< 0.03	< 0.03
Iron (ppm)	0	0.5	↑ 1.99	↑ 18.80	↑ 17.44	↑ 1.92
Manganese (ppm)	0	1	0.03	0.32	0.79	0.38
Molybdenum (ppm)	0	0.05	< 0.02	< 0.02	< 0.02	< 0.02
Zinc (ppm)	0	0.5	0.12	0.12	0.12	< 0.03
Aluminum (ppm)	0	0.2	↑ 2.56	↑ 26.84	↑ 24.91	↑ 2.37
Sodium (ppm)	0	30	13.2	↑ 36.5	↑ 33.2	19.7
SAR	-	-	0.82	1.85	1.16	0.73

084692	084693	084694	084698
WATER 13- SCATTERED	WATER 14- SCATTERED	WATER 15- BEFORE	WATER 16- CHANNEL LEFT



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REPORT NO.
7210

PROJECT NO: INTERNE / INTERNAL
PRODUCT TYPE: INTERNE
WAREHOUSE: TEX

LOGGED DATE:
COMPLETED DATE:
DATE REPORTED:

2017/01/26
2017/01/27
2017/01/31

ATTN:
REQUESTER: Nicolas Morin

Water analysis	Spec min	Spec max	084692	084693	084694	084695
			WATER 13-SCATTERED	WATER 14-SCATTERED	WATER 15-BEFORE	WATER 16-CHANNEL LEFT
Alkalinity (ppm)	0	50	↑ 72.50	↑ 55.00	50.00	45.00
Chloride (ppm)	0	50	16.00	12.00	14.00	10.00
pH	-	-	6.43	5.87	6.30	6.28
Soluble Salts (mmhos/cm)	0	1	0.67	0.11	0.17	0.12
Nitrate Nitrogen (N-NO3) (ppm)	0	5	↑ 9.4	< 0.6	< 0.6	< 0.6
Ammonium Nitrogen (N-NH4) (ppm)	0	5	↑ 12.0	1.6	2.3	3.9
Phosphorus (ppm)	0	5	↑ 11.4	↑ 5.3	0.9	1.4
Potassium (ppm)	0	5	↑ 75.5	↑ 19.6	↑ 7.0	↑ 8.8
Calcium (ppm)	0	120	33.1	4.6	9.2	9.7
Magnesium (ppm)	0	25	19.8	4.8	2.5	4.0
Sulfate (ppm)	0	100	↑ 177.8	6.5	27.6	18.0
Boron (ppm)	-	-	0.02	0.02	0.01	0.01
Copper (ppm)	0	0.2	< 0.03	< 0.03	< 0.03	< 0.03
Iron (ppm)	0	0.5	↑ 0.84	0.35	↑ 2.37	↑ 12.50
Manganese (ppm)	0	1	0.20	0.10	0.03	0.09
Molybdenum (ppm)	0	0.05	< 0.02	< 0.02	< 0.02	< 0.02
Zinc (ppm)	0	0.5	0.04	< 0.03	< 0.03	0.04
Aluminum (ppm)	0	0.2	↑ 1.00	↑ 0.42	↑ 0.34	↑ 2.09
Sodium (ppm)	0	30	14.4	10.5	18.8	10.6
SAR	-	-	0.49	1.12	1.41	0.72

Water analysis	Spec min	Spec max	084697	084698	084699	084700
			WATER 17-CHANNEL LEFT	WATER 18-CHANNEL	WATER 19-DRAINAGE	WATER 20-DIRECTLY
Alkalinity (ppm)	0	50	50.00	↑ 100.00	↑ 52.50	12.50
Chloride (ppm)	0	50	1.00	1.00	13.00	2.00
pH	-	-	5.79	6.07	6.82	6.22
Soluble Salts (mmhos/cm)	0	1	0.19	0.28	0.14	0.02
Nitrate Nitrogen (N-NO3) (ppm)	0	5	4.7	1.2	< 0.6	< 0.6
Ammonium Nitrogen (N-NH4) (ppm)	0	5	↑ 13.2	↑ 10.6	1.5	0.8
Phosphorus (ppm)	0	5	↑ 9.1	↑ 5.8	< 0.21	< 0.21
Potassium (ppm)	0	5	↑ 43.5	↑ 43.7	1.5	< 0.3
Calcium (ppm)	0	120	8.1	18.3	15.8	< 0.02
Magnesium (ppm)	0	25	3.5	7.4	1.5	< 0.02
Sulfate (ppm)	0	100	8.0	7.7	13.8	0.6
Boron (ppm)	-	-	0.04	0.08	0.02	< 0.01



BERGER - CERTIFICATE OF ANALYSIS

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REPORT NO.
7210

PROJECT NO: INTERNE / INTERNAL
PRODUCT TYPE: INTERNE
WAREHOUSE: TEX

LOGGED DATE: 2017/01/26
COMPLETED DATE: 2017/01/27
DATE REPORTED: 2017/01/31

ATTN:
REQUESTER: Nicolas Marin

Water analysis	Spec min	Spec max	084697	084698	084699	084700
			WATER 17- CHANNEL LEFT	WATER 18- CHANNEL	WATER 19- DRAINAGE	WATER 20- DIRECTLY
Copper (ppm)	0	0.2	< 0.03	< 0.03	< 0.03	< 0.03
Iron (ppm)	0	0.5	↑ 5.83	↑ 3.30	↑ 0.90	< 0.05
Manganese (ppm)	0	1	0.85	↑ 2.67	< 0.03	< 0.03
Molybdenum (ppm)	0	0.05	↑ 0.02	< 0.02	< 0.02	< 0.02
Zinc (ppm)	0	0.5	< 0.03	< 0.03	< 0.03	< 0.03
Aluminum (ppm)	0	0.2	↑ 8.30	↑ 2.31	↑ 1.81	< 0.01
Sodium (ppm)	0	30	9.2	11.5	15.8	2.4
SAR	-	-	0.68	0.58	1.02	-

Water analysis	Spec min	Spec max	084702
			WATER 21- DIRECTLY
Alkalinity (ppm)	0	50	15.00
Chloride (ppm)	0	50	1.00
pH	-	-	6.24
Soluble Salts (mmhos/cm)	0	1	0.01
Nitrate Nitrogen (N-NO3) (ppm)	0	5	< 0.6
Ammonium Nitrogen (N-NH4) (ppm)	0	5	0.7
Phosphorus (ppm)	0	5	< 0.21
Potassium (ppm)	0	5	< 0.3
Calcium (ppm)	0	120	< 0.02
Magnesium (ppm)	0	25	< 0.02
Sulfate (ppm)	0	100	< 0.21
Boron (ppm)	-	-	< 0.01
Copper (ppm)	0	0.2	< 0.03
Iron (ppm)	0	0.5	< 0.05
Manganese (ppm)	0	1	< 0.03
Molybdenum (ppm)	0	0.05	< 0.02
Zinc (ppm)	0	0.5	< 0.03
Aluminum (ppm)	0	0.2	< 0.01
Sodium (ppm)	0	30	1.0

NOTES



BERGER - CERTIFICATE OF ANALYSIS

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REPORT NO.
7210

PROJECT NO: INTERNE / INTERNAL
PRODUCT TYPE: INTERNE
WAREHOUSE TEX

LOGGED DATE: 2017/01/26
COMPLETED DATE: 2017/01/27
DATE REPORTED: 2017/01/31

ATTN
REQUESTER: Nicolas Morin

084680	WATER 1- BETWEEN B6 & B5
084681	WATER 2- DRAINAGE OUTSIDE B6
084682	WATER 3- DRAINAGE BETWEEN B6 & B5
084683	WATER 4- OUTSIDE GARAGE
084684	WATER 5- DRAINAGE BETWEEN B5 & B4
084685	WATER 6- DRAINAGE BETWEEN B3 & B2
084686	WATER 7- DRAINAGE BETWEEN B4 & B3
084687	WATER 8- AFTER TRASH CANS AND PALLETS
084688	WATER 9- DRAINAGE BETWEEN B2 & B1
084689	WATER 10- AFTER COIR PILE sample is dark and cloudy making it hard to read alkalinity and chloride
084690	WATER 11- SCATTERED SAMPLES FROM ML2 sample is dark and cloudy making it hard to read alkalinity and chloride
084691	WATER 12- SCATTERED SAMPLES FROM MIX YARD
084692	WATER 13- SCATTERED SAMPLES FROM ML1
084693	WATER 14- SCATTERED SAMPLES FROM GRINDERS
084694	WATER 15- BEFORE PIONEER ROAD
084696	WATER 16- CHANNEL LEFT OF SAND PILE
084697	WATER 17- CHANNEL LEFT OF RW PILE #2 sample is dark making it hard to read alkalinity and chloride
084698	WATER 18- CHANNEL BETWEEN BOTH RW PILES sample is dark making it hard to read alkalinity and chloride
084699	WATER 19- DRAINAGE FROM PEAT MOSS STORAGE AREA
084700	WATER 20- DIRECTLY FROM B1 ROOF
084702	WATER 21- DIRECTLY FROM B6 ROOF

- < :Value lower than the method's limit of quantification
- ↓ :Value lower than specification
- ↑ :Value higher than specification

The results of this report are only related with the samples subjected to the analysis and should not be reproduced without the written authorization of the laboratory. Other methods of analysis can produce different results and should not be compared.

Sabrina Potvin
Chemist

SOIL CONTROL LAB

42 HANGAR WAY
WATSONVILLE
CALIFORNIA
95076
USA

Sunland Garden Products - Berger
90 Pioneer Road
Watsonville, CA 95076
Attn: Martin Reyes

Work Order #: 6120355
Reporting Date: December 27, 2016

Date Received: December 12, 2016
Project # / Name: None / Storm Water Monitoring
Sample Identification: Storm Water, sampled 12/11/2016 9:00:00AM
Sampler Name / Co.: Martin Reyes / Sunland Garden Products
Matrix: Water
Laboratory #: 6120355-01

	Results	Units	MDL	RL	Analysis Method	Date Analyzed	Flags
pH	7.1	pH Units	0.1	0.1	SM4500-H+ B	12/12/16	
Total Organic Carbon	78	mg/L	1.0	10	SM 5310B	12/22/16	
Oil & Grease (total)	7.1	mg/L	0.98	4.9	EPA 1664	12/22/16	
Specific Conductance (EC)	380	uS/cm	1.0	1.0	SM2510B	12/12/16	
Nitrate as N	ND	mg/L	0.020	0.10	EPA 300.0	12/13/16	
Nitrite as N	ND	mg/L	0.020	0.10	EPA 300.0	12/13/16	
Total Phosphorus (as P)	1.5	mg/L	0.010	0.10	SM4500-P E	12/12/16	
Total Suspended Solids	22	mg/L	1.2	4.2	SM 2540D	12/16/16	
Total Iron (Fe)	1800	ug/L	10	25	EPA 200.7	12/13/16	
Total Lead (Pb)	0.72	ug/L	0.032	0.20	EPA 200.8	12/14/16	
Total Zinc (Zn)	49	ug/L	0.10	1.0	EPA 200.8	12/14/16	

NAL

0.68

2.0

100

1000

260

RL - are levels down to which we can quantify with reliability, a result below this level is reported as "ND" for Not Detected.

Mike Gallaway

SOIL CONTROL LAB



Sunland Garden Products - Berger
90 Pioneer Road
Watsonville, CA 95076
Attn: Martin Reyes

Work Order #: 6120579
Reporting Date: January 9, 2017

Date Received: December 16, 2016
Project # / Name: None / Storm Water Monitoring
Sample Identification: Storm Water, sampled 12/15/2016 4:00:00PM
Sampler Name / Co.: Martin Reyes / Sunland Garden Products
Matrix: Water
Laboratory #: 6120579-01

	Results	Units	MDL	RL	Analysis Method	Date Analyzed	Flags
pH	6.7	pH Units	0.1	0.1	SM4500-H+ B	12/16/16	
Total Organic Carbon	21	mg/L	1.0	10	SM 6310B	12/22/16	
Oil & Grease (total)	ND	mg/L	0.99	5.0	EPA 1664	12/29/16	
Specific Conductance (EC)	220	uS/cm	1.0	1.0	SM2510B	12/16/16	
Nitrate as N	0.32	mg/L	0.020	0.10	EPA 300.0	12/16/16	
Nitrite as N	ND	mg/L	0.020	0.10	EPA 300.0	12/16/16	
Total Phosphorus (as P)	1.0	mg/L	0.010	0.10	SM4500-P E	01/03/17	
Total Suspended Solids	48	mg/L	2.4	8.1	SM 2540D	12/21/16	
Total Iron (Fe)	9400	ug/L	10	25	EPA 200.7	12/21/16	
Total Lead (Pb)	5.3	ug/L	0.032	0.20	EPA 200.8	12/22/16	
Total Zinc (Zn)	150	ug/L	0.10	1.0	EPA 200.8	12/22/16	

RL - are levels down to which we can quantify with reliability, a result below this level is reported as "ND" for Not Detected.

Mike Gallaway

SOIL CONTROL LAB

42 HANGAR WAY
 WATSONVILLE
 CALIFORNIA
 95076
 USA

Sunland Garden Products - Berger
 90 Pioneer Road
 Watsonville, CA 95076
 Attn: Martin Reyes

Work Order #: 7010055
 Reporting Date: January 25, 2017

Date Received: January 4, 2017
 Project # / Name: None / Stormwater Monitoring
 Sample Identification: Storm Water, sampled 1/4/2017 8:15:00AM
 Sampler Name / Co.: Martin Reyes / Sunland Garden Products
 Matrix: Water
 Laboratory #: 7010055-01

NAL

	Results	Units	MDL	RL	Analysis Method	Date Analyzed	Flags
pH	6.8	pH Units	0.1	0.1	SM4500-H+ B	01/04/17	
Total Organic Carbon	29	mg/L	0.50	5.0	SM 5310B	01/23/17	
Oil & Grease (total)	ND	mg/L	1.0	5.0	EPA 1664	01/13/17	
Specific Conductance (EC)	120	uS/cm	1.0	1.0	SM2510B	01/04/17	
Nitrate as N	ND	mg/L	0.020	0.10	EPA 300.0	01/05/17	
Nitrite as N	ND	mg/L	0.020	0.10	EPA 300.0	01/05/17	
Total Phosphorus (as P)	0.82	mg/L	0.0050	0.050	SM4500-P E	01/18/17	
Total Suspended Solids	25	mg/L	0.80	2.7	SM 2540D	01/05/17	
Total Iron (Fe)	2000	ug/L	10	25	EPA 200.7	01/06/17	
Total Lead (Pb)	1.1	ug/L	0.032	0.20	EPA 200.8	01/06/17	
Total Zinc (Zn)	140	ug/L	0.10	1.0	EPA 200.8	01/06/17	

> 0.165

2.0

100

1000

260

RL - are levels down to which we can quantify with reliability, a result below this level is reported as "ND" for Not Detected.

Mike Gallaway

**Attachment 4. Exceedance Response Action Level 1
prepared by Sidera Environmental, Inc.**

**Sun-Land
Garden Products, Inc.**

Watsonville, CA

**Exceedance Response Action (ERA)
Level 1 Evaluation**



SIDERA
ENVIRONMENTAL, INC

est 1995



1.0 SUMMARY OF NUMERIC ACTION LEVEL (NAL) EXCEEDANCES

The following table summarizes the NAL exceedance(s) being addressed in this Level 1 ERA Evaluation. NAL exceedances summarized in this table should be consistent with SMARTS. When evaluating NAL exceedances, particularly annual NAL exceedances, the results for each discharge location will be considered when evaluating potential pollutant sources.

Table 1 - Annual NAL Exceedance(s)

ANALYTICAL RESULTS - ANNUAL NAL EXCEEDANCE (average of all sample results in a reporting year)					
Parameter Exceeded	Annual NAL	Annual Average	Individual Results	Sample Date	Discharge Location
Nitrate and Nitrite Nitrogen (N+N)	0.68	1.93	2.1	11/2/15	direct from Basin 2
			4.33	11/9/15	direct from Basin 2
			0.9	12/22/15	direct from Basin 2
			0.37	3/7/16	direct from Basin 2
Total Phosphorous (P)	2.0	6.8	7.8	11/2/15	direct from Basin 2
			13	11/9/15	direct from Basin 2
			3.3	12/22/15	direct from Basin 2
			3.1	3/7/16	direct from Basin 2
Total Suspended Solids (TSS)	100	2593	3900	11/2/15	direct from Basin 2
			6000	11/9/15	direct from Basin 2
			140	12/22/15	direct from Basin 2
			130	3/7/16	direct from Basin 2
Iron (Fe)	1.0	90.4	94	11/2/15	direct from Basin 2
			240	11/9/15	direct from Basin 2
			25	12/22/15	direct from Basin 2
			2.4	3/7/16	direct from Basin 2
Zinc (Zn)	0.26	0.31	0.43	11/2/15	direct from Basin 2
			0.71	11/9/15	direct from Basin 2
			0.052	12/22/15	direct from Basin 2
			0.055	3/7/16	direct from Basin 2

Table 2 - Instantaneous NAL Exceedance(s)

ANALYTICAL RESULTS - INSTANTANEOUS NAL EXCEEDANCE (two or more sample results exceed instantaneous NAL in a reporting year of the same parameter)				
Parameter Exceeded	NAL	Result	Sample Date	Discharge Location
Total Suspended Solids (TSS)	400	3900	11/2/15	direct from Basin 2
		6000	11/9/15	direct from Basin 2



2.0 FINDINGS

The extremely high levels of Total Suspended Solids (TSS) and Iron (Fe) in storm water samples collected during the previous permit year is a direct result of improper sampling methods. Water sampled directly from the pond does not represent storm water discharge from the facility. When the ponds do not fill and there is no discharge from the facility, sampling is not required. Even though the samples were taken from standing water in the basin, results from these samples indicate that a large amount of sediment is being eroded at the facility.

The high levels of TSS and Fe are likely a result of eroded sediment from the unlined storm water channels and containment ponds. The side slopes of the unlined channels and basins are unlined and steep (nearly vertical in most places) and easily eroded during storm events. The design of storm water channels and basins must be conducted by registered professional engineers who will determine the volume and velocity of flow expected in the channels, the slopes of channels and soil type (to determine appropriate side slope angle and liner).

Although Fe naturally occurs in soil, the high levels indicate an additional source. We need to determine if the source is industrial or background (from disturbed soils on site). Soil disturbance may be reduced with the application of gravel on all unpaved surfaces where vehicles and equipment are used. These additional erosion control measures, in addition to implementing thorough good housekeeping practices, will reduce the potential for exceedances of TSS and Fe when sampling during future Qualifying Storm Events (QSEs).

The exceedances of Nitrate and Nitrite Nitrogen (N+N) and Total Phosphorous (P) can be attributed to the large amount of organic materials (redwood bark) stored outdoors at the facility. The leachate from these organic materials will contribute to these exceedances. The installation of silt fences around all storage piles will reduce the discharge of debris from these areas, but silt fences will not remove any dissolved nutrients (N+N and P) from discharges that mobilize leachate. The proposed additional containment basin capacity can greatly reduce the potential of any discharge from the facility and additional good housekeeping and structural Best Management Practices (BMPs) will reduce the mobilization of contaminants.



3.1 STORM DESIGN STANDARDS FOR ADDITIONAL SEDIMENTATION BASINS

Section X.H.6 of the Industrial General Permit states that all new treatment control BMPs employed by the Discharger and new sediment basins installed after the effective date of the permit shall be designed to comply with design storm standards set forth in the general permit. *All hydrologic calculations shall be certified by a California licensed professional engineer.*

Section X.6.A of the general permit gives three methods for determining the volume to be treated. It states that for volume-based BMPs, the Discharger, at a minimum, shall calculate the volume to be treated using one of the following methods.

- The volume of runoff produced from an 85th percentile 24-hour storm event, as determined from local, historical rainfall records;
- The volume of runoff produced by the 85th percentile 24-hour storm event, determined as the maximized capture runoff volume for the facility, from the formula recommended in the Water Environment Federations Manual of Practice; or,
- The volume of annual runoff required to achieve 80% or more treatment, determined in accordance with methodology set forth in the latest edition of California Stormwater Best Management Practices Handbook, using local, historical rainfall records.

The calculations we have provided are only an estimate and are not meant as the final design capacity. The method used is the most conservative of the three methods available to determine volume. It is recommended to be conservative when sizing the detention basins; with the 85th percentile calculations, there is still a 15 percent chance that there will be bypass. If you do not want any bypass during storm events, a large size is recommended. As it states in the permit, this is a minimum design standard.

Two separate calculations have been provided for each method used; one using the site size listed in the original SWPPP (945,000 ft²), and another value using measurements from Google Earth (765,000 ft²).

Volume of runoff produced from an 85th percentile 24-hour storm event, as determined from local, historical rainfall records.

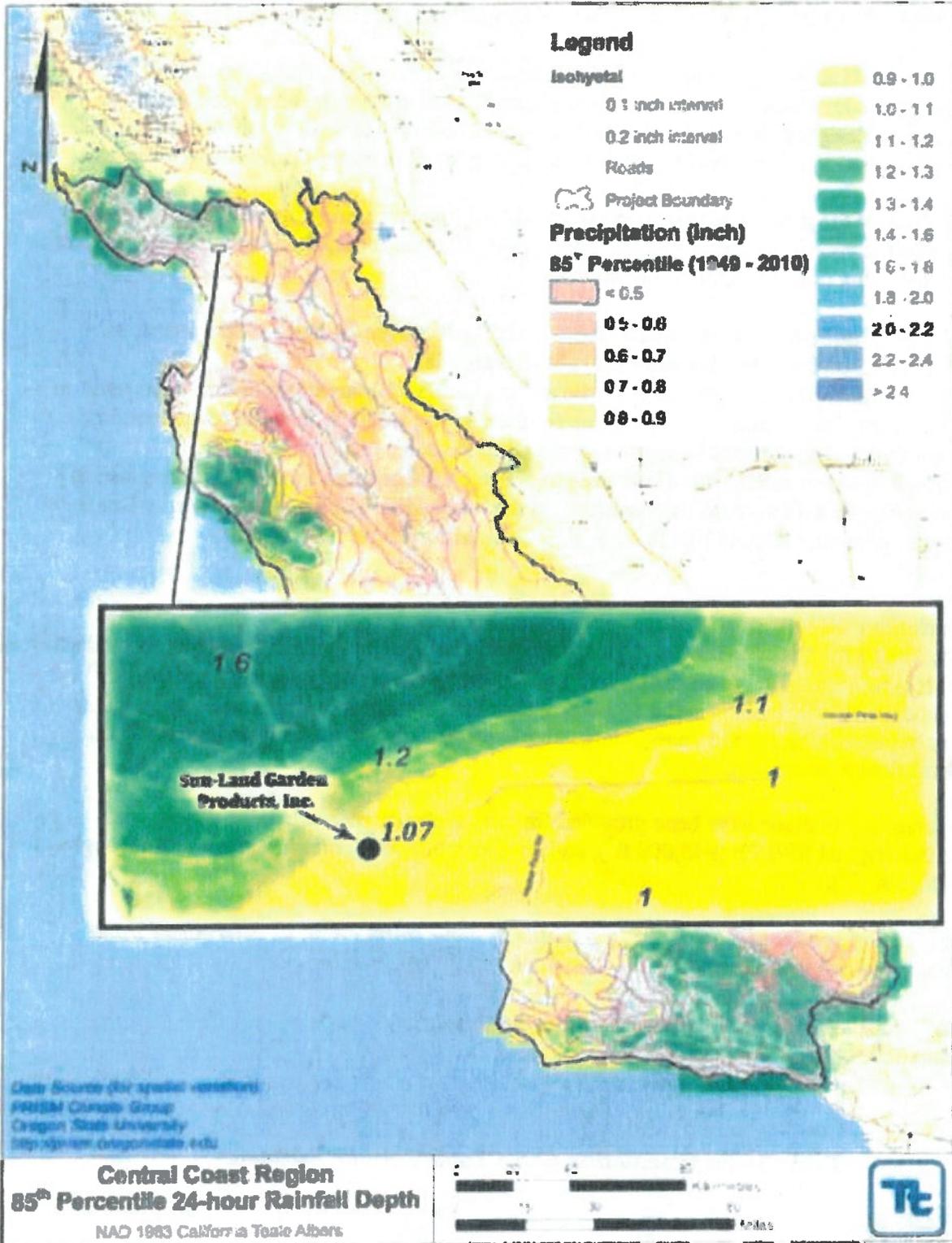
P_{85} = 85th percentile 24-hour storm event volume, watershed (inches)

A = Facility Size

$WQ_v = AP_{85}$ = Detention Storage Volume

Table 3 – Sedimentation Basin Total Volume Estimates

Facility Size	P_{85}	WQ_v (ft ³)	WQ_v (m ³)
945,000 ft ²	1.07	84,263	2,386
765,000 ft ²	1.07	68,213	1,931





4.1 STORM WATER CHANNELS

Exposure Concerns:

- Mobilization of sediment from unlined channels.
- Mobilization of sediment from unstable side slopes.

Observations:

- Channels are unlined and erosion is evident.
- Side slopes of channels are steep and easily eroded.
- Silt fences have not been installed along the channels in all storage areas.

Recommendations:

- Redesign side slopes of channels and install appropriate liner with the assistance of a California licensed professional engineer hired for hydrologic calculations for new sedimentation basins.
- Install silt fences along all storage piles and along storm water channel where appropriate. Fiber rolls may be used in conjunction with silt fences to help and reduce TSS entering the sedimentation basins.





5.1 SEDIMENTATION BASINS

Exposure Concerns:

- Mobilization of sediment from unlined sedimentation basins.
- Mobilization of sediment from unstable side slopes.

Observations:

- The existing sedimentation basins are unlined and erosion is evident.
- Side slopes of basins are steep (nearly vertical) and easily eroded.

Recommendations:

- Redesign side slopes of existing basins and install appropriate liner with the assistance of a California licensed professional engineer hired for hydrologic calculations for new sedimentation basins.
- Ensure that the capacity of all sedimentation basins meets the criteria of the new design standards set forth by the Industrial General Permit.





6.1 ADDITIONAL AREAS OF CONCERN

Exposure Concerns:

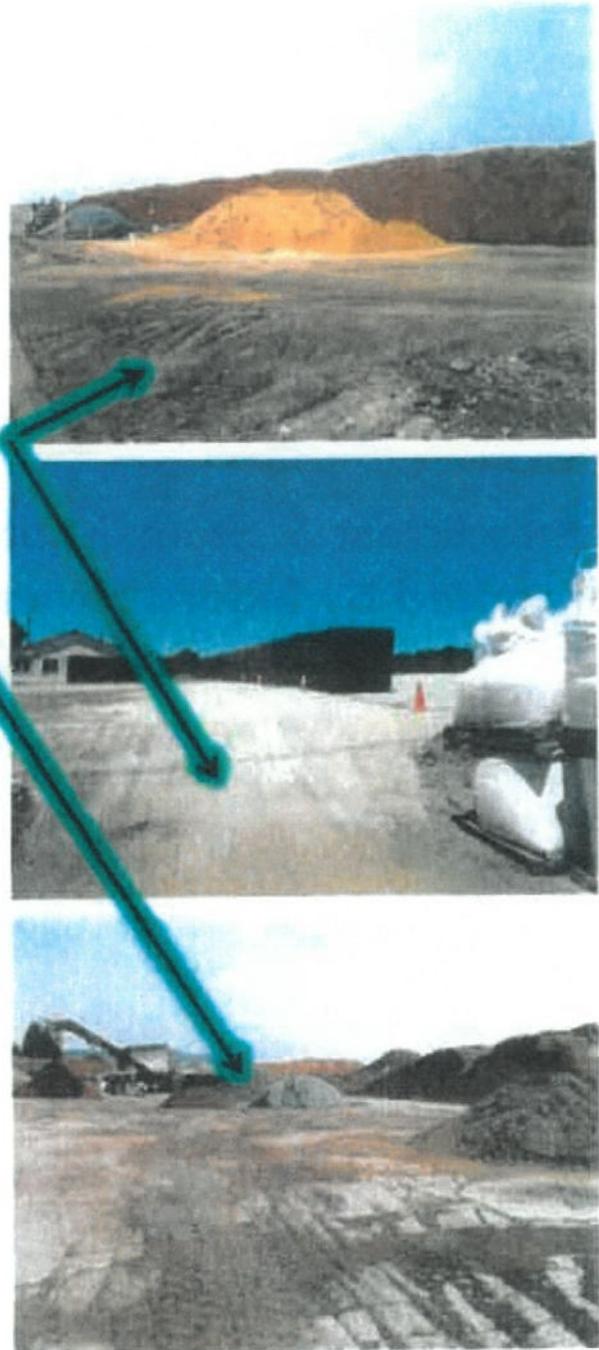
- Mobilization of sediment from unpaved driveways and work areas.
- Mobilization of organic debris from paved areas around mix lines and grinder.

Observations:

- Unpaved driveways throughout the facility are easily disturbed by traffic and sediment is easily mobilized from these areas during storm events.
- Exposed materials on paved surfaces are easily mobilized by storm water. Covering small piles with tarps prior to storm events is an excellent BMP.

Recommendations:

- Use gravel to cover driveways with loose soil that is easily mobilized.
- Ensure daily sweeping and additional good housekeeping measures are implemented in paved work areas. Cover small piles of exposed materials with tarps to prevent contact with storm water.



**Attachment 5. Storm Water Pollution Prevention Plan
prepared by Sidera Environmental, Inc., dated July 20,
2016**

Storm Water Pollution Prevention Plan

**Sun-Land Garden
Products, Inc.**

Watsonville, CA

Prepared July 20, 2016



Prepared by

Sidera
Environmental, Inc.

STORM WATER POLLUTION PREVENTION PLAN

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1. Introduction

1.1 Background

On November 16, 1990, the U.S. Environmental Protection Agency (EPA) promulgated Phase I storm water regulations in compliance with section 402(p) of the Clean Water Act. (55 Fed. Reg. 47990, codified at 40 C.F.R §§ 122.26.) These regulations require operators of facilities subject to storm water permitting (Dischargers), that discharge storm water associated with industrial activities, to obtain coverage under a National Pollutant Discharge Elimination System (NPDES) Permit. Section 402(p)(3)(A) of the Clean Water Act also requires that permits for discharges associated with industrial activity include requirements necessary to meet water quality standards.

The California State Water Resources Control Board (SWRCB) adopted Industrial Activities Storm Water General Permits in 1991 (91-013-DWQ), 1997 (97-03-DWQ) and 2014 (2014-0057-DWQ) in accordance with the Phase I regulations, and requires facilities to obtain coverage under and comply with the requirements of the Industrial Activities Storm Water General Permit No. CAS000001. This General Permit regulates industrial storm water discharges and authorized non storm water discharges (NSWDs) from specific categories of industrial facilities identified in Attachment A of the General Permit, and industrial storm water discharges and authorized NSWDS from facilities designated by the regional Water Boards to obtain coverage under the General Permit.

The General Permit authorizes discharges of industrial storm water to waters of the United States, so long as those discharges comply with all requirements, provisions, limitations, and prohibitions of the General Permit. The purpose of the regulations is to protect water quality by preventing or reducing pollutants associated with industrial activities in storm water discharges. The Industrial Activities Storm Water General Permit requires facility operators to: (1) eliminate unauthorized non-storm water discharges, (2) develop and implement a Storm Water Pollution Prevention Plan (SWPPP), and (3) perform monitoring of storm water discharges and conduct monthly visual observations for non-storm water discharges.

1.2 Electronic Submittal

The General Permit requires that the Discharger certify and submit all Permit Registration Documents (PRDs) for Notice of Intent (NOI) and No Exposure Certification (NEC) coverage via the State Water Board's Storm Water Multiple Application and Report Tracking System (SMARTS) website. (See Attachment D of the General Permit for an example of the information required to be submitted in the PRDs via SMARTS). All other documents required by the General Permit to be electronically certified and submitted via SMARTS can be submitted by the Discharger, by a designated Duly Authorized Representative on behalf of the Discharger, and by Authorized Data Submitters. Electronic reporting is required to reduce the state's reliance on paper, to improve efficiency, and to make such General Permit documents more easily accessible to the public and the Water Boards.

1.3 Storm Water Pollution Prevention Plan (SWPPP) Performance Standards

The Industrial Activities Storm Water General Permit requires the development and implementation of a site specific Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must include the information needed to demonstrate compliance with the requirements of the General Permit. This SWPPP has been prepared in accordance with all applicable SWPPP requirements in Section X of the General Permit. The SWPPP must be submitted electronically via SMARTS, and a copy must be kept at the facility. Storm Water Pollution Prevention Plans are considered a record available to the public pursuant to Section 308(b) of the Clean Water Act, and therefore available to the public at the State Water Resources Control Board via (SMARTS).

The SWPPP has three major objectives as described in Section X.C of the General Permit: (1) to identify and evaluate all sources of pollutants that may affect the quality of industrial storm water discharges and authorized non-storm water discharges (NSWDs) from the facility, (2) to identify and describe the minimum Best Management Practices (BMPs) (Section X.H.2) implemented to reduce or prevent pollutants in industrial storm water discharges and authorized NSWDs. BMPs shall be selected to achieve compliance with the General Permit, and (3) Identify and describe conditions or circumstances that may require future revisions to be made to the SWPPP. SWPPP revisions shall be completed whenever necessary, in accordance with Section X.B of the General Permit.

1.4 Storm Water Pollution Prevention Team and Contact Information

Section X.D.1 of the General Permit requires identification of the members of the Storm Water Pollution Prevention Team responsible for assisting with the implementation of the requirements in the General Permit. The Storm Water Pollution Prevention Team shall be responsible for developing, implementing and revising, when necessary, the Storm Water Pollution Prevention Plan (SWPPP) and Best Management Practices (BMPs) and conducting all Storm Water Monitoring Implementation Plan requirements required by Section XI of the Industrial Activities Storm Water General Permit. Section X.D.1 of the General Permit requires detailed information about the Pollution Prevention Team, including:

- (1) The positions within the facility organization (collectively, team members) who assist in implementing the SWPPP and conducting all monitoring requirements in the General Permit,
- (2) The responsibilities, duties, and activities of each team member, and
- (3) The procedures to identify alternate team members to implement the SWPPP and conduct required monitoring when the regularly assigned team members are temporarily unavailable.

Employee Storm Water Training shall be provided to selected facility personnel. Alternate Pollution Prevention team members shall be available at all times and will be assigned by the Operations Manager when regularly assigned team members listed below are temporarily unavailable.

Table 1 – Storm Water Pollution Prevention Team

Name/Title	Responsibilities, Duties, and Activities	Contact Information
Sidera Environmental, Inc. Consultant	<ul style="list-style-type: none"> -Preparation of the SWPPP; -Data Submitter on SMARTS; -Significant Revisions to the SWPPP; -Development and oversight of the Monitoring Implementation Plan; -Preparation of ERA Reports and Action Plans; -Facilitate storm water sampling and laboratory analysis (twice during each half of the permit year); -Perform Annual Comprehensive Facility Compliance Evaluation (Annual Evaluation); -Complete and submit Annual Report; -Consult facility operator and assist in BMP implementation and General Permit compliance; 	<p style="text-align: center;">(800)-336-3039 engineering@siderah2o.com</p>
Martin Reyes, Operations Manager	<ul style="list-style-type: none"> -Certify Annual Compliance Report (to be completed and submitted by July 15 of each year); -Certify inspection and training records and reports; -Assist development of the SWPPP; -Assign responsibility for implementation of the SWPPP; -Perform storm water sampling and facilitate laboratory analysis (twice during each half of the permit year) or assign to trained facility personnel or qualified contractor; -Perform and document sampling event visual observations or assign to trained facility personnel or qualified contractor; -Conduct Monthly Visual Observations or assign to trained facility personnel or qualified contractor; -Maintain Monthly Visual Observation records; -Implement BMPs/ eliminate discharges other than storm water into the storm drains; -Implement and document employee training; -Maintain SWPPP records; 	<p style="text-align: center;">(831)-724-6500 martinr@sunlandgarden.com</p>
All Trained Facility Personnel	<ul style="list-style-type: none"> -Implement BMPs/ eliminate discharges other than storm water into storm water conveyance system; -Conduct daily visual observations while on the job; -Spill response; -Sweeping and all other housekeeping procedures; 	<p style="text-align: center;">N/A</p>

Day-to-day storm water compliance activities are the responsibility of each employee, and specifically the members of the Storm Water Pollution Prevention Team listed in Table 1. Trained facility personnel shall be assigned specific tasks by the facility Operations Manager.

1.5 Revision of the SWPPP

Storm Water Pollution Prevention Plan (SWPPP) revisions shall be completed whenever necessary, in accordance with Section X.B of the General Permit. The SWPPP shall be revised, as appropriate, and implemented prior to changes in industrial activities which may significantly increase the quantities of pollutants in storm water discharge from the facility, cause a new area of industrial activity at the facility to be exposed to storm water, or begin an industrial activity which would introduce a new pollutant source at the facility. Storm Water Personnel shall:

1. Revise the on-site SWPPP whenever necessary.
2. Certify and submit via SMARTS the SWPPP within 30 days whenever the SWPPP contains significant revision(s); and;
3. With the exception of significant revisions, dischargers are not required to certify and submit via SMARTS their SWPPP revisions more than once every three (3) months in a reporting year.

Section X.A of the General Permit requires that this SWPPP include the date that it was prepared and the date of each subsequent SWPPP amendment, when significant revisions were required.

Table 2 – SWPPP Revision Log

Originally Prepared On	Prepared By	Required Revisions
7/20/16	Sidera Environmental, Inc.	N/A
Revision Date	Prepared By	Required Revisions

2. FACILITY DESCRIPTION AND GENERAL ACTIVITIES

2.1 Facility Location

The facility is located at 90 Pioneer Rd. in Watsonville. The facility occupies an approximately 22-acre site located three quarters of a mile north of Pinto Lake and one mile east of Corralitos Creek. The area surrounding the facility is primarily agricultural and residential. A map of the location of the facility is presented in Figure 1.



Figure 1

2.2 Facility Description

There are six buildings in use at the facility related to industrial activities, which cover approximately fifteen percent of the site. Approximately fifteen percent of the site consists of paved areas adjacent to the south and west sides of the buildings, including the driveway to the west of the buildings. The remaining areas of the facility are unpaved and consist of compacted soil and gravel. The primary activities at the facility include the receiving of raw materials, stockpiling materials, mixing and blending of materials, and packaging/load out of materials. The administrative offices of the company are located in a building located in the northwest corner of the site.

The majority of the facility is relatively flat, with an approximately 2.5% slope to the south. Discharge from industrial activities areas are conveyed by drain inlets and storm water channels to detention ponds located on the south side of the facility. When filled to capacity, the outfalls of the detention ponds may convey storm water to outfall pipes south of Basin 2, which discharge to the municipal storm sewer system, city of Watsonville. A topographic map of the area is presented in Figure 2.



Figure 2

2.3 Site Map

Section X.E of the Industrial Activities Storm Water General Permit requires the preparation of a Site Map. The Site Map shall include: (1) The facility boundary, storm water drainage areas within the facility boundary, and portions of any drainage area impacted by discharges from surrounding areas. Include the flow direction of each drainage area, on facility surface water bodies, areas of soil erosion, and location(s) of nearby water bodies (such as rivers, lakes, wetlands, etc.) or municipal storm drain inlets that may receive the facility's industrial storm water discharges and authorized NSWDS; (b) Locations of storm water collection and conveyance systems, associated discharge locations, and direction of flow. Include any sample locations if different than the identified discharge locations; (c) Locations and descriptions of structural control measures that affect industrial storm water discharges, authorized NSWDS, and/or run-on; (d) Identification of all impervious areas of the facility, including paved areas, buildings, covered storage areas, or other roofed structures; (e) Locations where materials are directly exposed to precipitation and the locations where identified significant spills or leaks (Section X.G.1.d of the General Permit) have occurred; and (f) Areas of industrial activity subject to the General Permit. Identify all industrial storage areas and storage tanks, shipping and receiving areas, fueling areas, vehicle and equipment storage/maintenance areas, material handling and processing areas, waste treatment and disposal areas, dust or particulate generating areas, cleaning and materials reuse areas, and other areas of industrial activity that may have potential pollutant sources. The Facility Site Map is presented in Appendix A.

2.4 Facility Operating Hours

Regular facility operating hours are Monday through Friday, 7:30 am to 3:30 pm. The facility is closed on Saturdays, Sundays, and on scheduled holidays.

Table 3 – Hours of Operation

Days	Hours	Exceptions
Monday through Friday	7:30 am – 3:30 pm	Scheduled Holidays
Saturday and Sunday	Closed	None

2.5 Description of Facility General Activities

The primary industrial activities of Sun-Land Garden Products, Inc. consist of the dynamic mixing and storage of soil amendment materials. Activities at the facility related to the mixing operations consist of grinding, screening, and bagging operations, including equipment maintenance, and truck fueling. Based upon these site activities, the facility is included in Standard Industrial Classification (SIC) Code 2875, Fertilizers, Mixing Only. This code applies to facilities that mix organic-based compost materials into a soil amendment blend, but do not produce any of their own compost.

Drainage Area A – South Side of Facility

- **Mix Lines 1 and 2:** These areas of the facility, located to the south of Building 1, contain the mechanical equipment for the mixing of soil amendment materials prior to bagging.
- **Grinder:** This area of the facility, located south of Mix Line 1, contains mechanical equipment for grinding down organic soil amendment material including redwood bark and coir.
- **Metal Bin Storage:** This area of the facility, located east of Building 2, contains metal storage bins used for the disposal of organic yard waste and empty fertilizer bags.
- **Lava Rock and Coir Storage:** This area of the facility, located east of Building 1, contains bins used for the storage of lava rocks and coir used in soil amendment blends. Storage and transfer operations are conducted in this area.
- **Processed Coir Storage:** This area of the facility, located east of Building 1, contains a bin used for the storage of processed coir used in soil amendment blends. Storage and transfer operations are conducted in this area.
- **Redwood Bark Storage:** This area of the facility, located south of the paved area, is used for the bulk storage of fine-ground, plain-ground, and unground redwood bark used in soil amendment blends.

Drainage Area B – East Side of Facility

- **Redwood Piles #1 and #2:** These areas of the facility, located on the east side of the facility, are used for the bulk storage of unground redwood bark from lumber mills, used in soil amendment blends.
- **Materials Storage:** This area of the facility located north of the redwood piles, is used for the storage of bagged peat moss and trailers.

Drainage Area C – Buildings – Northwest Side of Facility

- **Buildings 1 and 2 - Bagging:** These areas of the facility, located inside Buildings 1 and 2, contain mechanical equipment used for bagging soil amendment blends prior to shipment from the facility. Finished, bagged materials are stored in these areas.
- **Buildings 3 – Fertilizer Storage:** This area of the facility, located inside Building 3, is used for the storage of bagged fertilizer. All fertilizer is dry and bagged. No liquid fertilizers are stored or transferred at the facility.
- **Buildings 4 – Coir Storage:** This area of the facility, located inside Building 4, is used for the storage of bagged blocks of unprocessed coir (coconut shell fiber).
- **Buildings 5 – Mechanics Shop:** This area of the facility, located inside Building 5, contains the mechanics shop used for the maintenance and repair of mechanical equipment and materials used at the facility. Hazardous materials storage is also conducted in this building.
- **Buildings 6 – Maintenance Shop:** This area of the facility, located inside Building 6, contains the maintenance shop. This area is used for the storage of equipment and materials used in facility maintenance operations.
- **Truck Fueling – Above Ground Storage Tanks (ASTs):** This area of the facility, located north of Building 6, contains two ASTs used for truck fueling operations. Diesel and gasoline fueling are conducted in this area. An additional diesel AST is located southwest of Building 1, and is used for the diesel fueling of equipment.
- **Peat Moss Storage:** These areas of the facility, located around the north and west sides of the facility, is used for the storage of bagged peat moss used in soil amendment blends. The materials in these areas are bagged and not exposed to storm water.
- **Materials Staging:** This area of the facility, located in the paved area to the west side of the building, is used for the storage of bagged, mixed soil amendment products ready for shipment from the facility. The materials in this area are bagged and not exposed to storm water.

3. STORM WATER BEST MANAGEMENT PRACTICES (BMPs)

3.1 Minimum Best Management Practices

Sun-Land Garden Products, Inc. facility personnel shall, to the extent feasible, implement and maintain all of the following minimum BMPs to reduce or prevent pollutants in industrial storm water discharges, as required by Section X.H.1 of the Industrial Activities Storm Water General Permit.

Good Housekeeping

- Observe all outdoor areas associated with industrial activity; including storm water discharge locations, drainage areas, conveyance systems, waste handling/disposal areas, and perimeter areas impacted by off-facility materials or storm water run-on to determine housekeeping needs. Any identified debris, waste, spills, tracked materials, or leaked materials shall be cleaned and disposed of properly.
- Minimize or prevent material tracking;
- Minimize or prevent dust generated from industrial materials or activities;
- Ensure that all facility areas impacted by rinse/wash waters are cleaned as soon as possible;
- Cover all stored industrial materials that can be readily mobilized by contact with storm water;
- Contain all stored non-solid industrial materials or wastes (e.g., particulates, powders, shredded paper, etc.) that can be transported or dispersed by the wind or contact with storm water;
- Prevent disposal of any rinse/wash waters or industrial materials into the storm water conveyance system;
- Minimize storm water discharges from non-industrial areas (e.g., storm water flows from employee parking area) that contact industrial areas of the facility; and,
- Minimize authorized NSWDS from non-industrial areas (e.g., potable water, fire hydrant testing, etc.) that contact industrial areas of the facility.

Preventative Maintenance

- Identify all equipment and systems used outdoors that may spill or leak pollutants;
- Observe the identified equipment and systems to detect leaks or identify conditions that may result in the development of leaks;
- Establish an appropriate schedule for maintenance of identified equipment and systems; and,
- Establish procedures for prompt maintenance and repair of equipment, and maintenance of systems when conditions exist that may result in the development of spills or leaks.

Spill and Leak Prevention and Response

- Establish procedures and/or controls to minimize spills and leaks.
- Develop and implement spill and leak response procedures to prevent industrial materials from discharging through the storm water conveyance system. Spilled or leaked industrial materials shall be cleaned promptly and disposed of properly;
- Identify and describe all necessary and appropriate spill and leak response equipment, location(s) of spill and leak response equipment, and spill or leak response equipment maintenance procedures; and,
- Identify and train appropriate spill and leak response personnel.

Material Handling and Waste Management

- Prevent or minimize handling of industrial materials or wastes that can be readily mobilized by contact with storm water during a storm event;
- Contain all stored non-solid industrial materials or wastes (e.g., particulates, powders, shredded paper, etc.) that may be transported or dispersed by the wind or contact with storm water;
- Cover industrial waste disposal containers and industrial material storage containers that contain industrial materials when not in use;
- Divert run-on and storm water generated from within the facility away from all stockpiled materials;

- Clean all spills of industrial materials or wastes that occur during handling in accordance with the spill response procedures (Section X.H.1.c); and,
- Observe and clean as appropriate, any outdoor material or waste handling equipment or containers that can be contaminated by contact with industrial materials or wastes.

Erosion and Sediment Controls

For each erodible surface facility location identified in the SWPPP (Section X.G.1.f), the Discharge shall;

- Implement effective wind erosion controls;
- Provide effective stabilization for inactive areas, finished slopes, and other erodible areas prior to a forecasted storm event;
- Maintain effective perimeter controls and stabilize all site entrances and exits to sufficiently control discharges of erodible materials from discharging or being tracked off the site;
- Divert run-on and storm water generated from within the facility away from all erodible materials; and,
- If sediment basins are implemented, ensure compliance with the design of storm standards in Section X.H.6.

Employee Training Program

- Ensure that all team members implementing the various compliance activities of this General Permit are properly trained to implement the requirements of this General Permit, including but not limited to; BMP implementation, BMP effectiveness evaluations, visual observations, and monitoring activities. If a Discharger enters Level 1 status, appropriate team members shall be trained by a QISP;
- Prepare or acquire appropriate training manuals or training materials;
- Identify which personnel need to be trained, their responsibilities, and the type of training they shall receive;
- Provide a training schedule; and,
- Maintain documentation of all completed training classes and the personnel that received training in the SWPPP.

Quality Assurance and Record Keeping

- **Develop and implement management procedures to ensure that appropriate staff implements all elements of the SWPPP, including the Monitoring Implementation Plan;**
- **Develop a method of tracking and recording the implementation of BMPs identified in the SWPPP; and**
- **Maintain the BMP implementation records, training records, and records related to any spills and cleanup related response activities for a minimum of five (5) years (Section XXI.J.4).**

3.2 Advanced BMPs

In addition to the minimum BMPs described in Section X.H.1, the Discharger shall, to the extent feasible, implement and maintain any advanced BMPs identified in Section X.G.2.b, necessary to reduce or prevent discharges of pollutants in its storm water discharge in a manner that reflects best industry practice considering technological availability and economic practicability and achievability.

Advanced BMPs may include one or more of the following BMPs:

- **Exposure Minimization BMPs – Bagging, Fertilizer Storage, Maintenance Shop, and Mechanics Shop are all located inside of the Buildings and are not exposed to storm water. Peat Moss and mixed amendments stored outdoors are bagged and sealed to prevent contact with storm water.**
- **Storm Water Containment and Discharge Reduction BMPs – Three sedimentation basins receive all discharge from the facility. Drainage channels are located around all of the bulk redwood storage areas, which convey all discharge to the basins. These basins contain all storm water, except during very heavy storm events. The basins allow solids to settle and storm water to infiltrate into the soil and recharge groundwater. Water contained in the basins is also pumped out and used for dust spray down operations at the facility. See Section 5.7 and Appendix D for additional information.**
- **Treatment Control BMPs – No treatment processes are part of Sun-Land's storm water system. Treatment processes will be implemented at the request of the Regional Board if deemed necessary and economically feasible.**
- **Other Advanced BMPs – Silt fences are installed around bulk redwood storage piles for sediment/debris control. Silt fences and fiber rolls are also installed in strategic locations in the storm water conveyance system to reduce the amount of sediment and debris discharging to the basins.**

4. ASSESSMENT OF POTENTIAL POLLUTANT SOURCES

Section X.G of the Industrial Activities Storm Water General Permit requires a description and assessment of the facility's industrial activities, potential pollutant sources and potential pollutants that could be exposed to storm water or authorized non-storm water discharges. These include as applicable: (1) industrial processes, (2) material handling and storage areas, (3) dust and particulate generating activities, (4) significant spills and leaks, (5) non-storm water discharges and (6) erodible surfaces.

This assessment shall consider which pollutants are likely to be present in storm water discharges and authorized non-storm water discharges and include factors such as: (1) current storm water BMPs, (2) quantities of significant materials handled, produced, stored, or disposed of, (3) likelihood of exposure to storm water or authorized non-storm water discharges, (4) history of spills or leaks and (5) run-on from outside sources.

Section X.G.1 of the Industrial Activities Storm Water General Permit requires a description of each industrial process including the manufacturing, cleaning, maintenance, recycling, disposal or other activities related to the process. This includes the type, characteristics, and approximate quantity of significant materials used in or resulting from the process. A description of each handling and storage area is also required, including the type, characteristics, and quantity of industrial materials handled or stored, a description of the shipping, receiving, and loading procedures, and the spill or leak prevention and response procedures.

4.1 Drainage Area A – South Side of Facility

4.1.1 Mix Lines 1 and 2



Potential Pollutants	Sources
Total Suspended Solids (TSS)	Redwood Bark, Coir, Peat Moss, etc.
Oil and Grease (O&G)	Leaks from trucks, forklifts, or mechanical equipment

These areas of the facility, located on the paved area south of Building 1, contain mechanical equipment used for the dynamic mixing of soil amendment blends. The primary materials mixed in these areas include conifer-species lumber mill products such as Coastal Redwood and Douglass Fir, Canadian Sphagnum Peat Moss, and Coir (coconut husk fiber). In addition, bagged amendments are added to some

blends. Bagged amendments may include perlite, vermiculite, dolomite, ferrous sulfate, gypsum, potassium sulfate, calcium carbonate, magnesium sulfate, and potassium nitrate. All mixing equipment is located outdoors and potentially exposed to storm water. Storm water received in these areas flows south to storm water channels, which convey discharges to Sedimentation Basin 2.

Debris from mixing operations may accumulate in the drainage area and be mobilized by storm water. Leaks of oil and fluids from mechanical equipment or trucks could potentially be exposed to storm water. Spill and leak management limits the exposure of these materials to storm water. A spill kit containing absorbent is located near these areas for the management of leaks or spills. Employees have been trained in spill and leak prevention and control.

Mix Line BMPs

This area is managed to prevent the contamination of storm water by oil, fluids, and debris. Minimum Best Management Practices have been implemented in this area, including but not limited to:

- Conducting daily observations of the area for sediment, debris, and oil/fluid leaks. Any identified sediment, debris, waste, spills, rust, or leaked materials shall be cleaned and disposed of properly.
- Conducting regular sweeping of the area, when necessary, for sediment and debris that has accumulated in the area.
- Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements.
- Performing weekly inspections of spill control equipment and materials near the area.
- Following established procedures and/or controls to minimize leaks and spills in the area and prevent materials from discharging through the storm water conveyance system.

Minimum BMPs shall be implemented by members of the pollution prevention team and designated facility personnel. All discharge from these areas is conveyed to sedimentation basin 2, where mobilized solids are allowed to settle. No additional advanced BMPs are necessary to reduce or prevent pollutants in storm water discharges from this area.

4.1.2 Grinder



Potential Pollutants	Sources
Total Suspended Solids (TSS)	Redwood Bark, Coir, Peat Moss, etc.
Oil and Grease (O&G)	Leaks from trucks, forklifts, or mechanical equipment

This area of the facility, located on the paved area south of Building 1, contains mechanical equipment used for the grinding of redwood bark and coir. All grinding equipment is located outdoors and potentially exposed to storm water. Ground materials are stored in bins in this area, prior to transfer to mix lines. Storm water received in this area flows south to storm water channels, which convey discharges to Sedimentation Basin 2.

Debris from grinding operations may accumulate in the drainage area and be mobilized by storm water. Leaks of oil and fluids from mechanical equipment or trucks could potentially be exposed to storm water. Spill and leak management limits the exposure of these materials to storm water. A spill kit containing absorbent is located near this area for the management of leaks or spills. Employees have been trained in spill and leak prevention and control.

Grinder BMPs

This area is managed to prevent the contamination of storm water by oil, fluids, and debris. Minimum Best Management Practices have been implemented in this area, including but not limited to:

- Conducting daily observations of the area for sediment, debris, and oil/fluid leaks. Any identified sediment, debris, waste, spills, or leaked materials shall be cleaned and disposed of properly.
- Conducting regular sweeping of the area, when necessary, for sediment and organic debris that has accumulated in the area.
- Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements.
- Performing weekly inspections of spill control equipment and materials near the area.

- Following established procedures and/or controls to minimize leaks and spills in the area and prevent materials from discharging through the storm water conveyance system.

Minimum BMPs shall be implemented by members of the pollution prevention team and designated facility personnel. All discharge from this area is conveyed to sedimentation basin 2, where mobilized solids are allowed to settle. No additional advanced BMPs are necessary to reduce or prevent pollutants in storm water discharges from this area.

4.1.3 Metal Bin Storage



Potential Pollutants	Sources
Iron (Fe)	Rust from metal bin leakage
Nitrate and Nitrite (N+N), Phosphorous (P)	Residues from fertilizer bags in metal bin leakage

This area of the facility, located east of Building 2, is used for the storage of metal bins. The larger bins contain organic debris from facility maintenance and landscaping operations. The smaller green bin is used for the disposal of fertilizer bags. The materials are transferred from inside the facility through the garage door located in this area. All transfer and storage operations are conducted outdoors and exposed to storm water. Storm water received in this area flows south via sheet flow to storm water channels, which convey discharges to Sedimentation Basin 2.

Oil and fluid leaks from trucks and trailers could be exposed to storm water. Spill and leak management limits the exposure of these materials to storm water. Storm water leakage from the metal bin containing fertilizer bags could potentially contaminate storm water discharges. Overhead coverage is being considered for this area to prevent contact of storm water with fertilizer bags, and will be implemented during the 2016/2017 permit year. A spill kit containing absorbent is located in this area for the management of leaks or spills.

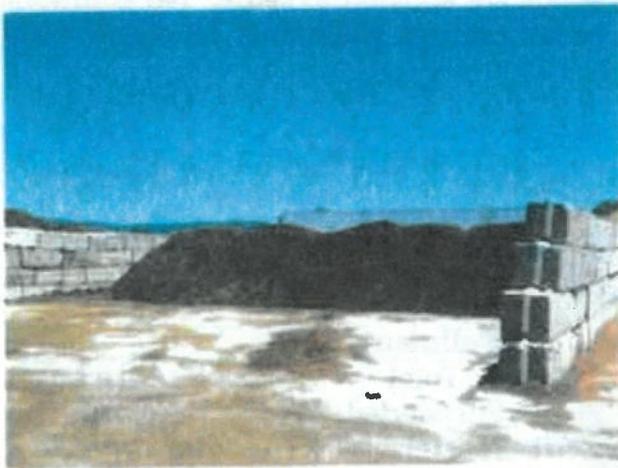
Metal Bin Storage BMPs

This area is managed to prevent the contamination of storm water by fertilizer residues, debris, and oil/fluid leaks. Minimum Best Management Practices have been implemented in this area, including but not limited to:

- Inspecting metal bin for leakage of refuse residues following storm events.
- Providing overhead coverage over metal bin used for fertilizer bag disposal.
- Conducting daily observations of the area for refuse residues, debris, and oil/fluid leaks. Any identified debris, waste, spills, or leaked materials shall be cleaned and disposed of properly.
- Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements.
- Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system.

Minimum BMPs shall be implemented by members of the pollution prevention team and designated facility personnel. Advanced BMPs for exposure minimization will be implemented in the area during the 2016/2017 permit year. Overhead coverage will be provided for the metal bin containing fertilizer bags.

4.1.4 Lava Rock and Coir Storage



Potential Pollutants	Sources
Total Suspended Solids (TSS)	Lava rock and coir debris tracked out of bins
Oil and Grease (O&G)	Leaks from trucks, and forklifts

This area of the facility, located east of Building 1, contains bins used for the bulk storage of a lava rock and coir used in soil amendment mixes. All transfer and storage operations are conducted outdoors and exposed to storm water. Storm water received in this area flows south via sheet flow to storm water channels, which convey discharges to Sedimentation Basin 2.

Debris from materials stored in the bins may be tracked out by trucks and mobilized by storm water. Oil and fluid leaks from trucks and trailers could be exposed to storm water. Spill and leak management limits the exposure of these materials to storm water. A spill kit containing absorbent is located near this area for the management of leaks or spills.

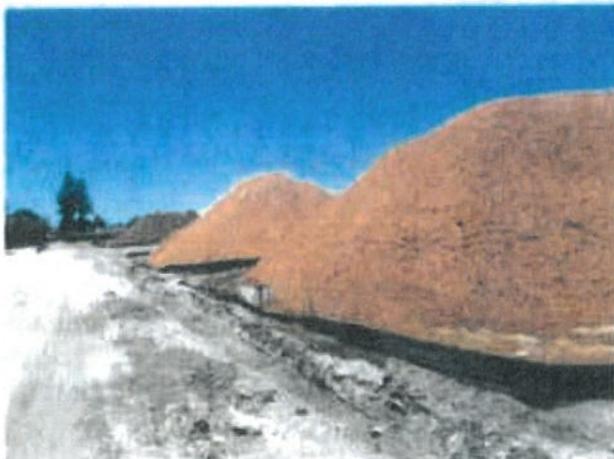
Lava Rock and Coir Storage BMPs

This area is managed to prevent the contamination of storm water by fertilizer residues, debris, and oil/fluid leaks. Minimum Best Management Practices have been implemented in this area, including but not limited to:

- Conducting daily observations of the area for tracked out debris and oil/fluid leaks. Any identified debris, waste, spills, tracked, or leaked materials shall be cleaned and disposed of properly.
- Conducting regular sweeping of the area, when necessary, for sediment and debris that has accumulated in the area.
- Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements.
- Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system.

Minimum BMPs shall be implemented by members of the pollution prevention team and designated facility personnel. All discharge from these areas is conveyed to Sedimentation Basin 2, where mobilized solids are allowed to settle. No additional advanced BMPs are necessary to reduce or prevent pollutants in storm water discharges from this area.

4.1.5 Redwood Bark Storage



Potential Pollutants	Sources
Total Suspended Solids (TSS)	Debris from bulk piles and sediments from unpaved areas
Nitrate and Nitrite (N+N), Phosphorous (P)	Leachate from decomposing redwood bark

This area of the facility, located in the southern side of the facility, is used for the bulk storage of conifer-species lumber mill products, including Redwood and Douglas Fir bark. There are six bulk storage piles in this area. From west to east, there are two fine ground piles, one plain ground pile, and three unground piles. Storm water channels are located between each of the piles, which conveys storm water to a channel running along the southern edge of this storage area, which discharges to Sedimentation Basin 2. The east, west, and southern edges of each pile are protected with silt fences and fiber rolls. Additional silt fences and fiber rolls have been placed in strategic locations along the storm water channels to reduce mobilized solids in storm water discharges. All transfer and storage operations are conducted outdoors and exposed to storm water. Storm water received in this area flows to south in storm water channels, which convey discharges to Sedimentation Basin 2. During heavy storm events, sedimentation basins may fill to capacity and discharge at Sampling Location D-1.

Leachate residues and debris from redwood materials stored in this area may be mobilized by storm water. Debris management limits the exposure of these materials to storm water. A spill kit containing absorbent is located near this area for the management of leaks or spills.

Redwood Bark Storage BMPs

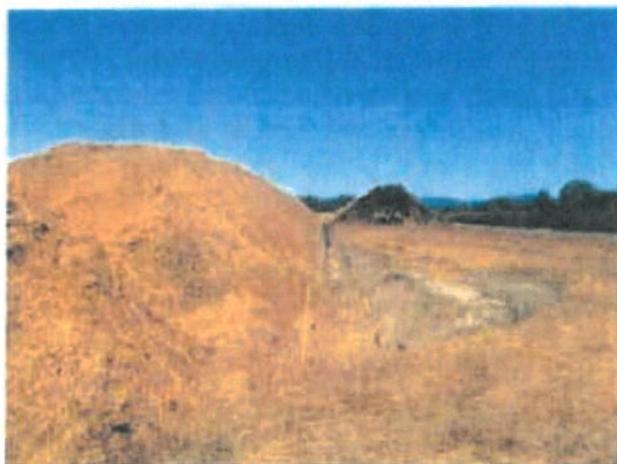
This area is managed to prevent the contamination of storm water by leachate, sediment, and debris. Minimum Best Management Practices have been implemented in this area, including but not limited to:

- Conducting daily observations of the surrounding area for leachate, tracked out debris and oil/fluid leaks. Any identified debris, waste, spills, tracked, or leaked materials shall be cleaned and disposed of properly.
- Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements.
- Conducting monthly inspections of drainage channels, silt fences, and fiber rolls to ensure conveyance system and treatment devices are well maintained.
- Inspect drainage channels, silt fences, and fiber rolls following storm events for sediment build-up and debris, cleaning/repairing when necessary.
- Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system.

Minimum BMPs shall be implemented by members of the pollution prevention team and designated facility personnel. All discharge from these areas is conveyed to Sedimentation Basin 2, where mobilized solids are allowed to settle. Discharge will only occur from the facility during heavy storm events when sedimentation basins fill to capacity. This allows for the containment of all potential pollutants on site during most storm events. Additional advanced BMPs implemented in this area include silt fences and fiber rolls around bulk storage piles to contain sediment and debris.

4.2 Drainage Area B – East Side of Facility

4.2.1 Redwood Piles



Potential Pollutants	Sources
Total Suspended Solids (TSS)	Debris from bulk piles and sediments from unpaved areas
Nitrate and Nitrite (N+N), Phosphorous (P)	Leachate from decomposing redwood bark

This area of the facility, located in the east side of the site, is used for the bulk storage of unprocessed conifer-species lumber mill products, including Redwood and Douglas Fir bark. There are two piles located in this area. Storm water channels are located between each of the piles, which convey storm water to a channel running along the southern edge of this storage area. Silt fences and fiber rolls have been placed in strategic locations along the storm water channels and basins to reduce mobilized solids in storm water discharges. All transfer and storage operations are conducted outdoors and exposed to storm water. Storm water received in this area flows to the south in storm water channels, which convey discharges to Sedimentation Basins 1A and 1B. During heavy storm events, sedimentation basins may fill to capacity and discharge at Sampling Location D-1.

Leachate residues and debris from redwood materials stored in this area may be mobilized by storm water. Debris management limits the exposure of these materials to storm water. A spill kit containing absorbent is located near this area for the management of leaks or spills.

Redwood Pile BMPs

This area is managed to prevent the contamination of storm water by leachate, sediment, and debris. Minimum Best Management Practices have been implemented in this area, including but not limited to:

- Conducting daily observations of the surrounding area for leachate, tracked out debris and oil/fluid leaks. Any identified debris, waste, spills, tracked, or leaked materials shall be cleaned and disposed of properly.
- Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements.
- Conducting monthly inspections of drainage channels, silt fences, and fiber rolls to ensure conveyance system and treatment devices are well maintained.

- Inspect drainage channels, silt fences, and fiber rolls following storm events for sediment build and debris, cleaning/repairing when necessary.
- Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system.

Minimum BMPs shall be implemented by members of the pollution prevention team and designated facility personnel. All discharge from these areas is conveyed to Sedimentation Basins 1A and 1B, where mobilized solids are allowed to settle. Discharge will only occur from the facility during heavy storm events when sedimentation basins fill to capacity. This allows for the containment of all potential pollutants on site during most storm events. Additional advanced BMPs implemented in this area include silt fences and fiber rolls in storm water channels to contain sediment and debris.

4.2.2 Materials Storage



Potential Pollutants	Sources
Total Suspended Solids (TSS)	Sediment from unpaved driveways and storage areas
Oil and Grease (O&G)	Leaks from trucks, and forklifts

This area of the facility, located north of the Redwood Piles #1 and #2, is used for the storage of materials. All materials stored in this area are bagged and sealed which prevents contact with storm water. Materials include bagged peat moss and finished soil amendment blends. Trucks and trailers may also be temporarily stored in this area. All transfer and storage operations are conducted outdoors and exposed to storm water. Storm water received in this area flows south via sheet flow down the unpaved driveway, or to the storm water channels surrounding the redwood piles, which convey discharges to Sedimentation Basins 1A and 1B.

Sediment from unpaved areas/driveways has the potential to be mobilized by storm water. Oil and fluid leaks from trucks and trailers could be exposed to storm water. Spill and leak management limits the exposure of these materials to storm water. A spill kit containing absorbent is located near this area for the management of leaks or spills.

Materials Storage BMPs

This area is managed to prevent the contamination of storm water by sediment and oil/fluid leaks. Minimum Best Management Practices have been implemented in this area, including but not limited to:

- Conducting daily observations of the area for oil/fluid leaks. Any identified debris, waste, spills, tracked, or leaked materials shall be cleaned and disposed of properly.
- Storing bagged materials on wood pallets to prevent contact with storm water flow.
- Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements.
- Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system.

Minimum BMPs shall be implemented by members of the pollution prevention team and designated facility personnel. All discharge from these areas are conveyed to sedimentation basins, where mobilized solids are allowed to settle. No additional advanced BMPs are necessary to reduce or prevent pollutants in storm water discharges from this area.

4.3 Drainage Area C – Northwest Side of Facility

4.3.1 Buildings 1 and 2 - Bagging



Potential Pollutants	Sources
Total Suspended Solids (TSS)	Tracked out debris from bagging operations
Oil and Grease (O&G)	Tracked out leaks from equipment and forklifts

This area of the facility, located inside of Buildings 1 and 2, contains mechanical equipment used in bagging operations. Materials are transferred from the mix lines to this area for bagging prior to shipment from the facility. All operations are performed inside the building and under cover. Bagged, finished product may be temporarily staged in this area prior to transfer operations. All materials are bagged

and stored inside the building and are not exposed to storm water. This limits the potential for storm water contamination from the area. No fluids are used or stored in these areas. Storm water received on the roof of buildings and unpaved areas between the buildings is conveyed to storm drain inlets. These drain inlets, located between the buildings, convey storm water via underground conveyance to Sedimentation Basin 2.

Tracked out materials have the potential to be mobilized by storm water. Tracked out oil and fluid leaks from equipment and forklifts could potentially be exposed to storm water. Debris, spill and leak management limits the exposure of these materials to storm water. A spill kit containing absorbent is located near this area for the management of leaks or spills.

Buildings 1 and 2 - Bagging BMPs

This area is managed to prevent the contamination of storm water by tracked out debris and oil/fluid leaks. Minimum Best Management Practices have been implemented in this area, including but not limited to:

- Conducting daily observations of the bagging areas for debris and oil/fluid leaks. Any identified debris, waste, spills, tracked, or leaked materials shall be cleaned and disposed of properly.
- Conducting daily sweeping of indoor bagging area to prevent the accumulation and tracking of materials/debris.
- Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements.
- Performing weekly inspections of spill control equipment and materials near the area.
- Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system.

Minimum BMPs shall be implemented by members of the pollution prevention team and designated facility personnel. The bagging areas are located indoors and there is no potential for exposure of bagging operations to storm water. All discharge from roof run-off and between buildings is conveyed to sedimentation basins, where mobilized solids are allowed to settle. No additional advanced BMPs are necessary to reduce or prevent pollutants in storm water discharges from these areas.

4.3.2 Buildings 3 and 4 – Fertilizer and Coir Storage



Potential Pollutants	Sources
Total Suspended Solids (TSS), Nitrate and Nitrite (N+N), Phosphorous (P)	Tracked out debris from leaks and spills of fertilizer
Oil and Grease (O&G)	Tracked out leaks from trucks and forklifts

These areas of the facility, located inside of Buildings 3 and 4, are used for the storage of materials. Building 3 is used for the storage of dry, bagged fertilizers. No liquid fertilizers are stored or used at this facility. Building 4 is used for the storage of unprocessed coir blocks. All materials are stored inside of the building and are not exposed to storm water. The materials stored in these buildings are bagged and sealed which limits the potential for spills and tracking out of building. Storm water received on the roof of buildings and unpaved areas between the buildings, is conveyed to storm drain inlets. These drain inlets, located between the buildings, convey storm water via underground conveyance to Sedimentation Basin 2.

Tracked out materials have the potential to be mobilized by storm water. Tracked out oil and fluid leaks from equipment and forklifts could potentially be exposed to storm water. Debris, spill and leak management limits the exposure of these materials to storm water. A spill kit containing absorbent is located near this area for the management of leaks or spills.

Buildings 3 and 4 – Fertilizer and Coir Storage BMPs

This area is managed to prevent the contamination of storm water by tracked out debris and oil/fluid leaks. Minimum Best Management Practices have been implemented in this area, including but not limited to:

- Conducting daily observations of the storage areas for debris and oil/fluid leaks. Any identified debris, waste, spills, tracked, or leaked materials shall be cleaned and disposed of properly.
- Conducting daily sweeping of storage areas to prevent the accumulation and tracking of materials/debris.
- Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements.

- Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system.

Minimum BMPs shall be implemented by members of the pollution prevention team and designated facility personnel. The bagging areas are located indoors and there is no potential for exposure of bagging operations to storm water. All discharge from roof run-off and between buildings is conveyed to sedimentation basins, where mobilized solids are allowed to settle. No additional advanced BMPs are necessary to reduce or prevent pollutants in storm water discharges from these areas.

4.3.3 Building 5 – Mechanics Shop



Potential Pollutants	Sources
Oil and Grease (O&G), Zinc (Zn), Iron (Fe)	Tracked out leaks and spills of new and used oil/fluids, residues, and particulates

This area of the facility, located inside of Building 5, contains the mechanics shop. This building is used for the maintenance and repair of equipment used in facility operations. Equipment, materials, and tools used in mechanical repair operations are stored in this building. Hazardous materials and waste storage is conducted in this area. The fluids used and stored in the area include motor oil, transmission fluid, hydraulic oil, coolant and solvent. Motor and hydraulic oil dispensers are stored inside the building within a storage tank protected by secondary containment. Transmission fluid and coolant are stored inside the building in drums. The used oil is held for recycling in a 55-gallon drum located inside the building. Mechanical equipment is used to crush used oil filters and stored in 55-gallon drum for recycling. The used coolant is held in a 55-gallon drum for recycling. All unsealed drums of hazardous materials are stored over secondary containment. All operations are performed inside the building and under cover. All materials are stored inside the building and are not exposed to storm water. This limits the potential for storm water contamination from the area. Storm water received on the roof of buildings and unpaved areas between the buildings, is conveyed to storm drain inlets. These drain inlets, located between the buildings, convey storm water via underground conveyance to Sedimentation Basin 2.

Tracked out materials have the potential to be mobilized by storm water. Tracked out particulates, residues, oil and fluid leaks from mechanical repair operations and

used oil storage could potentially be exposed to storm water. Debris, spill and leak management limits the exposure of these materials to storm water. A spill kit containing absorbent is located in this building for the management of leaks or spills.

Building 5 – Mechanics Shop BMPs

This area is managed to prevent the contamination of storm water by tracked out residues, debris, particulates, and oil/fluid leaks. Minimum Best Management Practices have been implemented in this area, including but not limited to:

- Conducting daily observations of the shop for debris and oil/fluid leaks. Any identified debris, waste, spills, tracked, or leaked materials shall be cleaned and disposed of properly.
- Conducting daily sweeping of the shop to prevent the accumulation and tracking of materials/debris.
- Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements.
- Ensure all hazardous materials and wastes are properly stored and maintained over secondary containment.
- Implementing adequate preventative maintenance program to prevent line leaks in oil dispensing equipment.
- Performing weekly inspections of spill control equipment and materials in the area.
- Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system.

Minimum BMPs shall be implemented by members of the pollution prevention team and designated facility personnel. The shop is located indoors and there is no potential for exposure of repair or storage operations to storm water. All discharge from roof run-off and between buildings is conveyed to sedimentation basins, where mobilized solids are allowed to settle. No additional advanced BMPs are necessary to reduce or prevent pollutants in storm water discharges from this area.

4.3.4 Building 6 – Maintenance Shop



Potential Pollutants	Sources
Oil and Grease (O&G)	Tracked out leaks and spills from equipment

This area of the facility, located inside of Building 6, contains the facility's maintenance shop. This building is used for the storage of equipment and materials used in facility maintenance operations. Equipment, materials, and tools used in facility maintenance operations are stored in this building. All equipment and materials are stored inside the building and are not exposed to storm water. This limits the potential for storm water contamination from the area. Storm water received on the roof of buildings and unpaved areas between the buildings, is conveyed to storm drain inlets. These drain inlets, located between the buildings, convey storm water via underground conveyance to Sedimentation Basin 2.

Tracked out materials have the potential to be mobilized by storm water. Tracked out oil and fluid leaks from equipment could potentially be exposed to storm water. Debris, spill and leak management limits the exposure of these materials to storm water. A spill kit containing absorbent is located in this building for the management of leaks or spills.

Building 6 – Maintenance Shop BMPs

This area is managed to prevent the contamination of storm water by tracked out debris and oil/fluid leaks. Minimum Best Management Practices have been implemented in this area, including but not limited to:

- Conducting daily observations of the shop for debris and oil/fluid leaks. Any identified debris, waste, spills, tracked, or leaked materials shall be cleaned and disposed of properly.
- Conducting daily sweeping of the shop to prevent the accumulation and tracking of materials/debris.
- Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements.
- Performing weekly inspections of spill control equipment and materials near the area.

- Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system.

Minimum BMPs shall be implemented by members of the pollution prevention team and designated facility personnel. The shop is located indoors and there is no potential for exposure of maintenance or storage operations to storm water. All discharge from roof run-off and between buildings is conveyed to sedimentation basins, where mobilized solids are allowed to settle. No additional advanced BMPs are necessary to reduce or prevent pollutants in storm water discharges from this area.

4.3.5 Truck Fueling – Above Ground Storage Tanks



Potential Pollutants	Sources
Total Suspended Solids (TSS)	Sediment from unpaved driveways
Oil and Grease (O&G)	Fuel spills, oil/fluid leaks from truck and loaders

Two above ground storage tanks (ASTs) are located north of Building 6. This area is used for AST storage and dispensing of fuel to trucks and loaders. The gasoline AST is 250 gallons, and the diesel AST is 500 gallons. Both ASTs are located over secondary containment. An additional 250 gallon AST containing diesel is located south of the staging area. This AST used for equipment fueling is located in a storm resistant shelter with secondary containment. All fueling operations are performed outdoors and are potentially exposed to storm water. Storm water received in these drainage areas is conveyed south via sheet flow to storm water channels or drain inlets which discharge to Sedimentation Basin 2.

Spills from fueling operations could be available for storm water contamination. Oil and fluids leaks from trucks and loaders during fueling could be available for exposure to storm water. Spills and leaks occurring during fuel delivery could be exposed to storm water. Spill and leak management limits the exposure of these materials to storm water. A spill kit containing absorbent is located near these areas for the management of leaks or spills. Employees have been trained in spill and leak prevention and control.

Truck Fueling – Above Ground Storage Tank BMPs

Practices will be implemented to minimize the discharge of pollutants to storm water from these areas. The fueling areas are managed to prevent the contamination of storm water by fuel spills, oil, fluids, and debris. Minimum Best Management Practices have been implemented in this area, including but not limited to:

- Monitoring the area during fueling operations to prevent fuel spills.
- Using spill and overflow protection during fueling.
- Conducting daily observations of the area for fuel spills, debris, and oil / fluid leaks from trucks and loaders fueled in the area. Any identified debris, waste, fuel spills, or leaked materials shall be cleaned and disposed of properly.
- Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements.
- Implementing adequate preventative maintenance program to prevent line leaks.
- Performing weekly inspections of spill control equipment and materials near the area.
- Inspecting secondary containment following storm events for overfilling. Drain storm water from secondary containment when necessary.
- Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system.

Minimum BMPs shall be implemented by members of the pollution prevention team and designated facility personnel. All ASTs are protected with secondary containment, which contains any potential pollutants from being mobilized from the area. No additional advanced BMPs are necessary to reduce or prevent pollutants in storm water discharges from this area

4.3.6 Materials Staging and Peat Moss Storage



Potential Pollutants	Sources
Total Suspended Solids (TSS)	Sediment from unpaved driveways/ aisles
Oil and Grease (O&G)	Oil / fluid leaks from truck and forklifts

These areas of the facility, located north and west of Buildings 1 through 6, are used for the staging and storage of materials. All materials stored in these areas are bagged and sealed which prevents contact with storm water. Materials include bagged peat moss and finished soil amendment blends. The area directly west of the buildings is used for the staging of bagged, finished products prior to shipment from the facility. All transfer and storage operations are conducted outdoors and exposed to storm water. All bagged materials are stored on wood pallets and contents are not exposed to rainfall or storm water flow. Storm water received in these drainage areas is conveyed south via sheet flow to storm water channels or drain inlets which discharge to Sedimentation Basin 2.

Sediment from unpaved areas/driveways has the potential to be mobilized by storm water. Oil and fluid leaks from trucks and trailers could be exposed to storm water. Spill and leak management limits the exposure of these materials to storm water. A spill kit containing absorbent is located near this area for the management of leaks or spills.

Materials Staging and Peat Moss Storage BMPs

These areas are managed to prevent the contamination of storm water by sediment and oil/fluid leaks. Minimum Best Management Practices have been implemented in this area, including but not limited to:

- Conducting daily observations of the area for spills of materials and oil/fluid leaks. Any identified debris, waste, spills, tracked, or leaked materials shall be cleaned and disposed of properly.
- Storing bagged materials on wood pallets to prevent contact with storm water flow.
- Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements.
- Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system.

Minimum BMPs shall be implemented by members of the pollution prevention team and designated facility personnel. All discharge from these areas is conveyed to sedimentation basins, where mobilized solids are allowed to settle. There is little potential for the exposure of potential pollutants from these areas and no advanced BMPs are necessary to reduce or prevent pollutants in storm water discharges from this area.

4.4 List of Industrial Materials

Section X.F of the Industrial Activities Storm Water General Permit requires a list of significant materials handled and stored at the site. For each material a description is provided of the locations where the material is being stored, received, shipped, and handled, as well as the typical quantities and frequency. Materials shall include raw materials, intermediate products, final or finished products, recycled materials, and waste or disposed materials.

Table 4 - List of Industrial Materials

Material	Location Material Stored/Handled and Shipped/Received	Quantity	Frequency
Diesel Fuel	Drainage Area C – Truck Fueling AST	Up to 500 gallons	Continuous
Diesel Fuel	Drainage Area C – Equipment Fueling AST	Up to 250 gallons	Continuous
Gasoline	Drainage Area C – Truck Fueling AST	Up to 250 gallons	Continuous
Milled lumber products (redwood bark/ chips)	Drainage Areas A and B	Varies	Continuous
Bagged Fertilizer	Building 3	Up to 55 gallons	Continuous
Used oil	Building 5	Up to 55 gallons	Continuous
Used coolant	Building 5	Up to 55 gallons	Continuous
Used oil filters	Building 5	Up to 55 gallons	Continuous

Table 4 - List of Industrial Materials (Continued)

Material	Location Material Stored/Handled and Shipped/Received	Quantity	Frequency
Motor Oil	Building 5	1 to 55 Gallons	Continuous
Transmission Oil	Building 5	1 to 55 Gallons	Continuous
Hydraulic Oil	Building 5	1 to 55 Gallons	Continuous
Bagged Amendments (perlite, vermiculite, dolomite, gypsum, etc.)	Building 3	Varies	Continuous
Coir	Drainage Area A and Building 4	Varies	Continuous

4.5 Dust and Particulate Generating Activities

Potential airborne dust sources include grinding and screening operations as well as vehicle traffic along exposed soil surfaces. During dry months, dust is controlled using a portable water truck, which periodically sprays down aisle areas and driveways. No particulate pollutants have been identified with dust at this facility. The facility operates two sweepers to regularly clean mixing and transfer areas in an effort to limit dust.

4.6 Significant Spills and Leaks

The facility has been evaluated for areas where spills and leaks can likely occur.

- No industrial materials have spilled or leaked in significant quantities and have discharged from the facility's storm water conveyance system within the previous five-year period;
- No toxic chemicals identified in 40 Code of Federal Regulations section 302 have been discharged from the facilities' storm water conveyance system within the previous five-year period;
- No oil or hazardous substances in excess of reportable quantities (40 C.F.R. §§ 110, 117, and 302) have discharged from the facility's storm water conveyance system within the previous five-year period;
- No industrial materials have spilled or leaked in significant quantities which had the potential to be discharged from the facility's storm water conveyance system within the previous five year period;

4.7 Non-Storm Water Discharges (NSWDs)

Section XI.A.1 of the Industrial Activities Storm Water General Permit requires monthly inspections of the facility to identify all non-storm water discharges, sources, and drainage areas. All non-storm water discharges shall be described, and shall include the source, quantity, frequency, and characteristics of the non-storm water discharges and associated drainage areas. Each non-storm water discharge described must be identified as an authorized or unauthorized non-storm water discharge.

Wash down of outgoing material delivery trucks, out-turning of the coir using sprinkler system contained within an out turning area (a bin constructed of concrete blocks), and dust spray down operations are the only activities that use significant amounts of water that could potentially flow through the storm water conveyance system during the dry season. These activities occur upstream from the sedimentation basins and there is never sufficient volume of water from these activities to produce enough discharge to reach the sedimentation basins. The small amount of water generated by these activities infiltrates into the soil. Discharge only occurs when sedimentation basins fill to capacity so there is no potential for NSWDs from the facility. See section 5.7 for description of conveyance system and discharge location.

4.8 Erodible Surfaces

The potential for soil erosion is low given the relatively flat nature of the site. There is a slight slope to the south, and to limit soil erosion on-site, vehicles will be limited to the parking areas and designated driveways/aisles. The working surface consists of compacted native soil and gravel. Additional gravel will be added as needed to fill any ruts or depressions resulting from trucks and equipment. Storm water channels and sedimentation basins will be inspected monthly and following storm events for signs of erosion and blockage. Eroded side slopes will be repaired/stabilized and accumulated sediment will be removed and stored on site. Additional erosion control measures will be implemented if necessary.

4.9 303(d) Listed Impairments

Section X.G.2 of the General Permit requires the identification of industrial pollutants related to the receiving waters with 303(d) listed impairments. Dischargers in the 303(d) impaired watershed are required to analyze for additional parameters, if applicable. Impaired water bodies within the watershed include Furlong Creek, Millers Canal, Pajaro River, Pinto Lake, Corralitos Creek, Rider Creek, Gallighan Slough, Harking Slough, Struve Slough, Watsonville Creek, and Watsonville Slough.

Table 5 – Summary of Pollutants Within Impaired Watershed

Parameter	Pollutant	Present at Facility
Boron	Boron	No
Chloride	Chloride	No
Chlorpyrifos	Chlorpyrifos	No
Dieldrin	Dieldrin	No
Dissolved Oxygen	Low Dissolved Oxygen	Yes
E. Coli and Enterococcus	Escherichia coli (E. coli)	No
E. Coli and Enterococcus	Fecal Coliform	No
E. Coli and Enterococcus	Pathogens	No
Nitrate, Nitrite, and Total Nitrogen	Nitrate	Yes
Nitrate, Nitrite, Total Nitrogen, Dissolved Oxygen, Temperature, and Total Phosphorous	Nutrients	Yes
PCBs (Polychlorinated biphenyls)	PCBs (Polychlorinated biphenyls)	No
Pesticide Screen	Pesticides	No
Sodium	Sodium	No

Table 5 – Summary of Pollutants Within Impaired Watershed (continued)

Specific Conductivity	Electrical Conductivity	No
Temperature	Temperature, water	No
Total DDT	DDD	No
Total Dissolved Solids	Total Dissolved Solids	No
Total Chlordane	Chlordane	No
Turbidity	Turbidity	Yes
pH	pH	Yes

The industrial pollutants related to the receiving waters with 303(d) listed impairments identified during the pollutant source assessment include Nitrate, Nutrients, Low Dissolved Oxygen, Turbidity, and pH. Bagged fertilizers could potentially be sources of nitrate, nutrients, and low dissolved oxygen. The dry fertilizer is stored indoors in bags and there is no potential for exposure to storm water. Overhead coverage will be installed over the metal bin used to dispose of empty fertilizer bags to eliminate potential exposure of residues. The facility will analyze storm water samples for Nitrate, Nitrite, Total Nitrogen, and Phosphorous, which are required based on the facility's SIC code. Sources of increased turbidity and variations in pH could be attributed to soil erosion in unpaved driveways and mobilized organic materials from bulk materials storage (redwood bark, coir, etc.). All storm water is conveyed to sedimentation basins to reduce turbidity by allowing suspended solids to settle. Silt fences and fiber rolls have also been installed around bulk materials storage and in storm water channels to help reduce suspended solids in storm water discharges. Discharge only occurs from the facility during heavy storm events that fill sedimentation basins. Total Suspended Solids and pH are basic parameters that will be analyzed in all storm water samples taken from sedimentation basin outfalls.

4.10 BMP Summary Table

Section X.H.5 of the Industrial Activities Storm Water General Permit requires a table summarizing each identified area of industrial activity and associated pollutant sources, the industrial pollutants, and Best Management Practices (BMPs):

Table 6 – Summary of Potential Pollutant Sources and Corresponding Best Management Practices

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Mix Lines and Grinder	Grinding and screening of materials, mixing of soil amendment blends	Redwood bark, coir, peat moss, etc. (debris from grinding and mixing operations) Oil/fluid leaks from trucks, loaders, forklifts, and mechanical equipment	Total Suspended Solids (TSS) Oil and Grease (O&G)	<ul style="list-style-type: none"> - Conducting daily observations of the area for sediment, debris, and oil/fluid leaks. Any identified sediment, debris, waste, spills, or leaked materials shall be cleaned and disposed of properly. - Conducting regular sweeping of the area, when necessary, for sediment and debris that has accumulated in the area. - Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements. - Performing weekly inspections of spill control equipment and materials near the area. - Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system.

Table 6 – Summary of Potential Pollutant Sources and Corresponding Best Management Practices (Continued)

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Metal Bin Storage	Materials storage and transfer	<p>Fertilizer residues in metal bin leakage (from empty fertilizer bags)</p> <p>Rust in metal bin leakage</p>	<p>Nitrate and Nitrite Nitrogen (N+N)</p> <p>Phosphorous (P)</p> <p>Iron (Fe)</p>	<ul style="list-style-type: none"> - Inspecting metal bin for leakage of refuse residues following storm events. - Providing overhead coverage over metal bin used for fertilizer bag disposal. - Conducting daily observations of the area for refuse residues, debris, and oil/fluid leaks. Any identified debris, waste, spills, or leaked materials shall be cleaned and disposed of properly - Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements - Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system

Table 6 – Summary of Potential Pollutant Sources and Corresponding Best Management Practices (Continued)

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Lava Rock and Coir Storage	Materials storage and transfer	<p>Tracked out material and debris</p> <p>Oil / fluid leaks from trucks and loaders</p>	<p>Total Suspended Solids (TSS)</p> <p>Oil and Grease (O&G)</p>	<ul style="list-style-type: none"> - Conducting daily observations of the area for refuse residues, debris, and oil / fluid leaks. Any identified debris, waste, spills, or leaked materials shall be cleaned and disposed of properly. - Conducting regular sweeping of the area, when necessary, for sediment and tracked out debris that has accumulated in the area. - Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements - Following established procedures and / or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system

Table 6 – Summary of Potential Pollutant Sources and Corresponding Best Management Practices (Continued)

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
<p>Redwood Bark Storage and Redwood Piles</p>	<p>Materials storage and transfer</p>	<p>Debris from bulk piles and sediments from unpaved areas</p> <p>Leachate from decomposing redwood bark</p>	<p>Total Suspended Solids (TSS)</p> <p>Nitrate and Nitrite Nitrogen (N+N), Phosphorous (P)</p>	<ul style="list-style-type: none"> - Conducting daily observations of the area for leachate, tracked out debris, and oil/fluid leaks. Any identified debris, waste, spills, or leaked materials shall be cleaned and disposed of properly. - Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements. - Conducting monthly inspections of drainage channels, silt fences, and fiber rolls to ensure conveyance system and treatment devices are well maintained. - Inspect drainage channels, silt fences, and fiber rolls following storm events for sediment build-up and debris, cleaning/repairing when necessary. - Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system

Table 6 – Summary of Potential Pollutant Sources and Corresponding Best Management Practices (Continued)

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Materials Storage, Materials Staging, and Peat Moss Storage	Bagged materials storage and transfer	Sediment from unpaved driveways/ aisles Oil/fluid leaks from trucks and forklifts	Total Suspended Solids (TSS) Oil and Grease (O&G)	<ul style="list-style-type: none"> - Conducting daily observations of the area for spills of materials and oil/fluid leaks. Any identified debris, waste, spills, or leaked materials shall be cleaned and disposed of properly. - Storing all bagged materials on wood pallets to prevent contact with storm water flow. - Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements. - Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system

Table 6 – Summary of Potential Pollutant Sources and Corresponding Best Management Practices (Continued)

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
<p>Buildings 1 and 2</p> <p>Bagging</p>	<p>Bagging of soil amendment blends by mechanical equipment, materials transfer</p>	<p>Tracked out debris from bagging operations</p> <p>Tracked out oil/ fluid leaks from equipment and forklifts</p>	<p>Total Suspended Solids (TSS)</p> <p>Oil and Grease (O&G)</p>	<ul style="list-style-type: none"> - Conducting daily observations of the bagging areas for debris and oil/ fluid leaks. Any identified debris, waste, spills, or leaked materials shall be cleaned and disposed of properly. - Conducting daily sweeping of indoor bagging areas to prevent the accumulation and tracking out of materials/ debris. - Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements. - Performing weekly inspections of spill control equipment and materials near the area. - Following established procedures and/ or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system

Table 6 – Summary of Potential Pollutant Sources and Corresponding Best Management Practices (Continued)

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
<p>Building 5 Mechanics Shop</p>	<p>Maintenance and repair of equipment</p>	<p>Tracked out leaks and spills of new and used oil/fluids, residues, and particulates</p>	<p>Oil and Grease (O&G), Zinc (Zn), Iron (Fe)</p>	<ul style="list-style-type: none"> - Conducting daily observations of the shop for debris and oil/fluid leaks. Any identified debris, waste, spills, or leaked materials shall be cleaned and disposed of properly. - Conducting daily sweeping of the shop to prevent the accumulation and tracking out of materials/debris. - Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements. - Ensure all hazardous materials and wastes are properly stored and maintained over secondary containment. - Implementing adequate preventative maintenance program to prevent line leaks in oil dispensing equipment. - Performing weekly inspections of spill control equipment and materials in the area. - Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system

Table 6 – Summary of Potential Pollutant Sources and Corresponding Best Management Practices (Continued)

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
<p>Building 6 Maintenance Shop</p>	<p>Storage of equipment and materials used for facility maintenance operations</p>	<p>Tracked out leaks and spills from equipment</p>	<p>Oil and Grease (O&G)</p>	<ul style="list-style-type: none"> - Conducting daily observations of the shop for debris and oil/fluid leaks. Any identified debris, waste, spills, or leaked materials shall be cleaned and disposed of properly. - Conducting daily sweeping of the shop to prevent the accumulation and tracking out of materials/debris. - Using absorbent on oil and fluid leaks and spills immediately and disposing of properly, in accordance with California Code of Regulations (CCR), Title 22, Hazardous Waste, requirements. - Performing weekly inspections of spill control equipment and materials in the area. - Following established procedures and/or controls to minimize leaks and spills in the area and prevent industrial materials from discharging through the storm water conveyance system

5. MONITORING IMPLEMENTATION PLAN

5.1 Overview of Monitoring Implementation Plan

A facility specific Storm Water Monitoring Implementation Plan has been developed for Sun-Land Garden Products, Inc., in accordance with all requirements of the General Permit. The Monitoring Implementation Plan requirements are designed to assist the Discharger in developing a comprehensive plan for the monitoring requirements in the General Permit and to assess their monitoring program. The Monitoring Implementation Plan includes a description of visual observation procedures and locations, as well as sampling procedures, locations, and methods.

The monitoring data will be used to determine:

- (1) Whether Best Management Practices (BMPs) addressing pollutants in industrial storm water discharges and Authorized Non-Storm Water Discharges (NSWDs) are effective for compliance with the effluent and receiving water limitations of the General Permit.
- (2) The presence of pollutants in industrial storm water discharges and Authorized NSWDs (and their sources) that may trigger the implementation of additional BMPs and/or Storm Water Pollution Prevention Plan (SWPPP) revisions.
- (3) The effectiveness of BMPs in reducing or preventing pollutants in industrial storm water discharges and Authorized NSWDs.

The Monitoring Implementation Plan requires:

- (1) An identification of team members assigned to conduct the monitoring requirements.
- (2) A description of discharge locations, visual observation procedures, and visual observation response procedures related to monthly visual observations and sampling event visual observations in accordance with Attachment H of the General Permit.
- (3) Justifications for alternative discharge locations in accordance with Section XI.C.3 of the General Permit, representative sampling reduction in accordance with Section XI.C.4 of the General Permit or qualified combined samples in accordance with Section XI.C.5 of the General Permit, which are applicable to the facility.
- (4) Procedures for field instrument calibration instructions, including calibration intervals specified by the manufacturer.
- (5) An example Chain of Custody form used when handling and shipping water quality samples to the lab.

The Monitoring Implementation Plan prepared for Sun-Land Garden Products, Inc. includes performing Monthly Visual Observations of Authorized and Unauthorized Non-Storm Water Discharges (NSWDs), Sampling Event Visual Observations, Storm Water Sampling and Analysis, an Annual Comprehensive Facility Compliance Evaluation, and maintaining records of visual observations and storm water sampling analysis results.

5.2 FACILITY MONITORING PERSONNEL

The following team members have been assigned to conduct the monitoring requirements of the General Permit at Sun-Land Garden Products, Inc. The group is led by Mr. Martin Reyes- Operations Manager, and assisted by selected facility personnel and qualified storm water contractor.

Table 7 – Identification of Team Members Assigned to Conduct Monitoring Requirements

Monitoring Task	Team Member Assigned to Task	Alternate Team Member Assigned to Task
Monthly Visual Observations	Martin Reyes	Trained Facility Personnel
Storm Water Sampling and Sampling Event Visual Observations	Martin Reyes	Trained Facility Personnel or Qualified Contractor
Annual Comprehensive Facility Compliance Evaluation	Qualified Contractor	Martin Reyes

This Monitoring Implementation Plan has been developed and implemented at this facility. The Plan shall be revised whenever appropriate, due to changes in discharge locations, drainage areas and pollutant sources. The Monitoring Implementation Plan will be readily available in the SWPPP for review by employees, Regional Water Quality Control Board staff and local regulatory agency inspectors.

5.3 MONTHLY VISUAL OBSERVATIONS

At least once per calendar month, on a days without precipitation, monitoring personnel shall visually observe all outdoor industrial equipment and storage areas, outdoor industrial activities drainage areas, and their discharge locations. The Monthly Visual Observations will be conducted during daylight hours of the scheduled facility operating hours. Visual observations provide immediate information indicating the presence of many pollutants and their sources. The facility will implement corrective actions and revise BMPs, as necessary, when the visual observations indicate pollutant sources have not been adequately addressed in the SWPPP.

Monthly Visual Observations and evaluations of the following will be conducted and documented monthly by monitoring personnel:

- (1) The presence or indications of prior, current, or potential Unauthorized Non-Storm Water Discharges (NSWDs) and their sources.
- (2) Any Authorized Non-Storm Water Discharges (NSWDs), sources, and associated Best Management Practices (BMPs) to ensure compliance with Section IV.B.3 of the General Permit.
- (3) Outdoor industrial equipment and storage areas, outdoor industrial activity areas, Best Management Practice (BMP) implementation, and all other potential sources of industrial pollutants.

Monitoring Personnel shall:

- (1) Visually observe and record the presence of any non-storm water discharge pollutant characteristics, such as floating and suspended materials, oil and grease, discolorations, turbidity, odors, trash/debris and the source(s) of any discharged pollutants.
- (2) Visually observe and document the effectiveness of BMP implementation in areas of outdoor industrial activity.

Sun-Land Garden Products, Inc. shall maintain records of all Monthly Visual Observations. Records shall include the date, approximate time, locations observed, presence and possible source of any observed pollutants, name of person(s) that conducted the observations, and any response actions and/or additional Storm Water Pollution Prevention Plan (SWPPP) revisions necessary in response to the visual observations.

5.4 SAMPLING EVENT VISUAL OBSERVATIONS

Sampling Event Visual Observations will be conducted by monitoring personnel at the same time sampling is performed at the discharge locations of the facility. At each discharge location where a sample is obtained, monitoring personnel shall observe the discharge of storm water associated with industrial activity.

Monitoring Personnel shall:

- (1) Visually observe and record the presence or absence of floating and suspended materials, oil and grease, discolorations, turbidity, odors, trash/debris, and source(s) of any discharged pollutants.
- (2) Ensure that visual observations of storm water discharged from containment sources (e.g. secondary containment or storage ponds) are conducted at the time that the discharge is sampled.
- (3) In the event that a discharge location is not visually observed during the sampling event, storm water monitoring personnel shall record which discharge locations were not observed during sampling or that there was no discharge from the discharge location.
- (4) Provide an explanation for uncompleted sampling event visual observations will be included in the Annual Report.

Dischargers are only required to perform Sampling Event Visual Observations during scheduled facility operating hours. If a storm event occurs during unscheduled facility operating hours (e.g. during the weekend or night) and during 12 hours preceding the scheduled facility operating hours, storm water monitoring personnel are still responsible for performing visual observations at discharge locations that are still producing a discharge at the start of facility operations.

Sun-Land Garden Products, Inc. shall maintain records of all Sampling Event Visual Observations. Records shall include the date, approximate time, locations observed, presence and possible source of any observed pollutants, name of person(s) that conducted the observations, and any response actions and/or additional Storm Water Pollution Prevention Plan (SWPPP) revisions necessary in response to the visual observations. BMPs shall be revised as necessary when the visual observations indicate pollutant sources have not been adequately addressed in the SWPPP.

5.5 STORM WATER SAMPLING AND ANALYSIS

The General Permit requires that Sun-Land Garden Products, Inc. shall collect and analyze storm water samples from two (2) Qualifying Storm Events (QSEs) within the first half of each reporting year (July 1 to December 31), and two (2) QSEs within the second half of each reporting year (January 1 to June 30). These monitoring program requirements are designed to provide useful, cost-effective, timely, and easily obtained information to assist Dischargers as they identify their facility's pollutant sources and implement corrective actions and revise BMPs as necessary.

A Qualifying Storm Event (QSE) is a precipitation event that:

- (1) Produces a discharge from at least one drainage area.
- (2) Is preceded by 48 hours with no discharge from any drainage area.

Except as provided in Section XI.C.3-4 of the General Permit (Alternate Discharge Locations and Representative Sampling Reduction), samples shall be collected from each drainage area and at all discharge locations.

The samples must be:

- (1) Representative of storm water associated with industrial activities and any commingled Authorized Non-Storm Water Discharges (NSWDs).
- (2) Associated with the discharge location of contained storm water.

Samples from each discharge location shall be collected within four (4) hours of:

- (1) The start of the discharge.
- (2) The start of facility operations if the Qualifying Storm Event (QSE) occurs within the previous 12-hour period (e.g., for storms with discharges that begin during the night for facilities with day-time operating hours). Sample collection is required during scheduled facility operating hours and when sampling conditions area safe in accordance with Section XI. C.6.a.ii. of the General Permit.

Sun-Land Garden Products, Inc. shall have all collected samples analyzed for the following parameters:

- (1) Total Suspended Solids (TSS) and Oil and Grease (O&G).
- (2) pH
- (3) Additional parameters identified by the Discharger on a facility-specific basis that serve as indicators of the presence of all industrial pollutants identified in the pollutant source assessment (Section X.G.2 of the General Permit). These additional parameters may be modified (added for removed) in accordance with

any updated Storm Water Pollution Prevention Plan (SWPPP) pollutant source assessment.

- (4) Additional applicable Table 1 parameters dependent on the facility Standard Industrial Classification (SIC) Code(s) as listed on Table 1 of the General Permit.
- (5) Additional applicable industrial parameters related to receiving waters with 303(d) listed impairments or approved TMDLs based on the assessment in Section X.G.2.a.ix. of the General Permit.
- (6) Additional parameters required by the Regional Water Board.

The Additional Table 1 Parameters required for this facility based upon Standard Industrial Classification (SIC) Code are:

Table 8 – Additional Table 1 Analytical Parameters

SIC Code(s)	Classification	Additional Table D Parameters Required
2875	Fertilizers – Mixing Only	Iron (Fe)
		Nitrate + Nitrite Nitrogen (N+N)
		Lead (Pb)
		Zinc (Zn)
		Phosphorous (P)

5.6 STORM WATER MONITORING METHODS

The General Permit requires that Sun-Land Garden Products, Inc. shall:

- (1) Ensure that the collection, preservation and handling of all storm water samples are in accordance with Attachment H of the General Permit.
- (2) Ensure that samples from different discharge locations shall not be combined or composited except as allowed in Section XI.C.5 of the General Permit.
- (3) Ensure that all laboratory analyses are conducted according to test procedures under 40 Code of Federal Regulations part 136, including the observations of holding times, unless other test procedures have been specified in this General Permit or by the Regional Water Board. With the exception of analysis conducted by the discharger or contractor, all laboratory analysis will be

conducted at a laboratory certified for such analysis by the State Department of Health Services.

- (4) Ensure all monitoring instruments and equipment, including the contractors own field instruments, shall be calibrated and maintained in accordance with manufacturers specification to ensure accurate measurements. Field test measurements of pH shall be performed as soon as practicable, but no later than 15 minutes after the sample is collected.

The current analytical methods and corresponding method detection limits used to detect pollutants in storm water discharges at the facility follow:

Table 9 – Analytical Methods and Reporting Units

Parameter	Analytical Method	Reporting Units
pH	Portable Analysis or Wide Range Litmus Paper	pH units
Total Suspended Solids (TSS)	SM 2540-D	mg/L
Oil and Grease (O&G)	EPA 1664A	mg/L
Iron	EPA 200.8	mg/L
Nitrate + Nitrite Nitrogen (N+N)	SM 4500-NO3-E	mg/L
Lead (Pb)	EPA 200.8	mg/L
Zinc (Zn)	EPA 200.8	mg/L
Phosphorous (P)	SM 4500-P B+E	mg/L

The quality control methods for each storm water sampling and analysis are described in the laboratory analysis results report.

pH will be analyzed using wide range litmus paper when sampling is conducted by facility personnel and with a calibrated portable instrument for pH when conducted by a qualified contractor. Contractors shall ensure that all field measurements are conducted in accordance with the accompanying manufacturer's instructions. Calibration of the portable instrument for pH analysis is performed using the one-point calibration method with pH 7.0 standard buffer solution. The calibration interval is weekly, as recommended by the manufacturer.

5.7 STORM WATER DISCHARGE LOCATIONS

All storm water discharge at this facility is conveyed to sedimentation basins. Discharge only occurs from the facility during heavy storm events with sufficient rainfall to fill the basins. The basins are located downslope from industrial activity and storage areas on the south side of the site. Discharge in Drainage Areas A and C, which occupy the west and central portions of the site, is conveyed to Sedimentation Basin 2. Discharge from the paved area containing mix lines and grinding areas is conveyed south via sheet flow to the storm water channels located around the bulk redwood materials stored in Area A. Discharge from Area C is either conveyed to the drain inlets located between Building 1 through 6 or via sheet flow to the storm water channels around the bulk redwood storage near Sedimentation Basin 2. If filled to capacity, discharge from Basin 2 is conveyed south under the driveway to Discharge Location D-1.

Table 10 - Storm Water Conveyance System – Drainage Area A

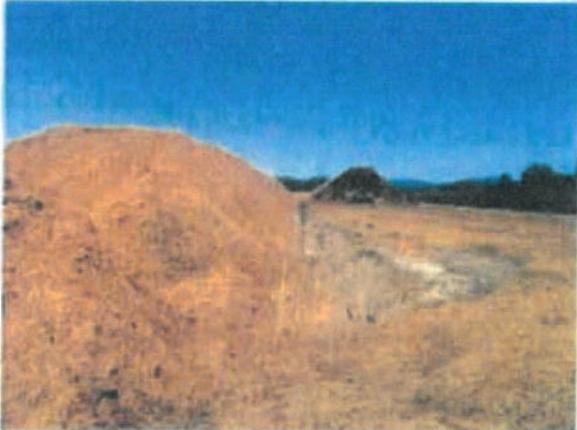
Storm Water Conveyance	Drainage Areas to Sedimentation Basin 2
<p>Drain Inlets Between Buildings</p> 	<p>Buildings 1 through 6 – Area C</p> 
<p>Outfall to Storm Water Channel</p> 	<p>Redwood Storage – Area A</p> 

Table 10 - Storm Water Conveyance System – Drainage Area A (continued)

Storm Water Conveyance	Drainage Areas to Sedimentation Basin 2
<p>Storm Water Channels</p> 	<p>Paved Areas – Mix Lines, Grinder, Etc.</p> 
<p>Main Channel to Basin 2</p> 	<p>Sedimentation Basin 2</p> 

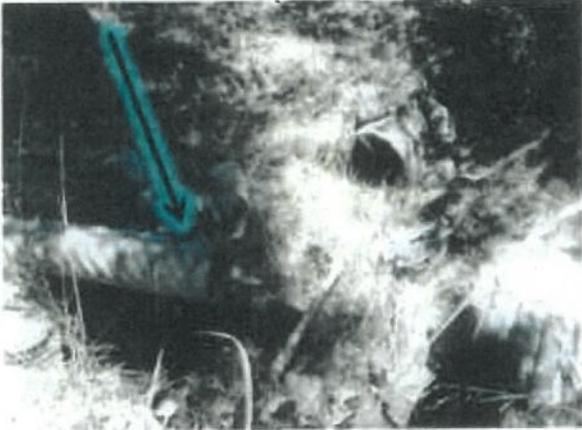
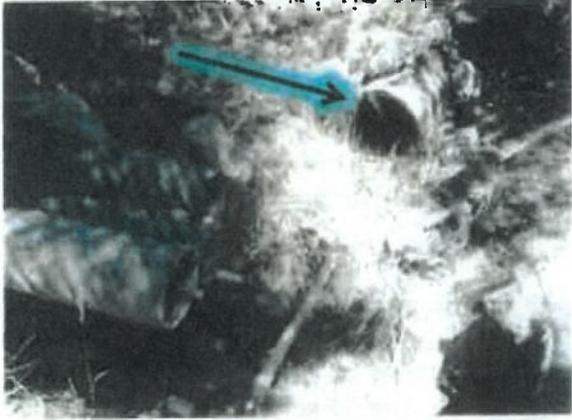
All discharge from Drainage Area B containing Redwood Piles #1 and #2, located along the east side of the site, is conveyed by storm water channels to Detention Basin 1A and 1B. Discharge is conveyed under the driveway by the storm water channels running north to south, to a channel running east to west, which discharges into Detention Basin 1A. If detention basin 1A is filled to capacity, discharge is conveyed to Detention Basin 1B. Detention Basins 1A and 1B will only be filled to capacity during heavy storm events. If filled to capacity, discharge from Basin 1B is conveyed west under the driveway to Discharge Location D-1. Please refer to Appendix D – Sedimentation Basin Feasibility Study, for capacity of sedimentation basins and additional design considerations.

Table 11 - Storm Water Conveyance System – Drainage Area B

<p>Storm Water Conveyance</p>	<p>Drainage Areas to Sedimentation Basin 2</p>
<p>Storm Water Channels</p> 	<p>Redwood Piles #1 and #2</p> 
<p>Main Channel to Basin 1A</p> 	<p>Sedimentation Basin 1A</p> 
<p>Channel Connecting Basins 1A and 1B</p> 	<p>Sedimentation Basin 1B</p> 

Storm water sampling is conducted at Discharge Location D-1, located adjacent to Pioneer Rd. near the southeast driveway. Discharge only occurs at this sampling location if Sedimentation Basins 1B or 2 are filled to capacity. Separate outfall pipes for these detention basins are located at the sampling location. If both detention basins are filled to capacity and discharging at the sampling location, two separate samples shall be collected from the two outfall pipes at Discharge Location D-1. The storm water drainage areas, storm drain inlets, sampling locations, and storm water conveyance system at the facility are shown on the Facility Site Map. Storm water sampling is conducted at Discharge Location D-1, as described in Storm Water Sample Collection and Handling Methods.

Table 12 - Storm Water Sampling Location D-1

Storm Water Sampling Location	Drainage Areas
<p>Outfall From Basin 2</p> 	<p>Sedimentation Basin 2</p> 
<p>Outfall from Basin 1B</p> 	<p>Sedimentation Basin 1B</p> 

If additional storage capacity is required, additional sedimentation basins shall be designed to comply with the current design storm standards of the new General Permit.

5.8 MONITORING EXCEPTIONS

Except as provided in section XI.C.3-5 (Alternative Discharge Locations, Representative Sampling Reduction, and Qualified Combined Samples), the General Permit requires that storm water samples be collected and analyzed from each drainage area at all discharge locations. Sun-Land Garden Products, Inc. will comply with the monitoring methods described in the General Permit and Attachment H. Exceptions in the Monitoring Implementation Plan for the facility may include:

1. **Sample Collection and Visual Observations Exceptions:** Sample collection and visual observations are not required under the following conditions:
 - i. During dangerous weather conditions such as flooding or electrical storms; or,
 - ii. Outside of schedule facility operating hours. The Discharger is not precluded from collecting samples or conducting visual observations outside of scheduled facility operating hours.
 - iii. In the event that samples are not collected or visual observations are not conducted in accordance with Section XI.B.5 due to these exceptions, an explanation shall be included in the Annual Report.
 - iv. Sample collection is not required for drainage areas with no exposure to industrial activities and materials in accordance with the definitions in Section XVII.

2. **Sampling Frequency Reduction Certification:** Dischargers are eligible to reduce the number of QSEs sampled each reporting year in accordance with the following requirements:
 - i. Results from four (4) consecutive QSEs that were sampled (QSEs may be different reporting years) did not exceed any NALs as defined in Section XII.A, and
 - ii. The Discharger is in full compliance with the requirements of the General Permit and has updated, certified and submitted via SMARTS all documents, data, and reports required by the General Permit during the time period in which samples were collected.

The Regional Water Board may notify a Discharger that it may not reduce the number of QSEs sampled each reporting year if the Discharger is subject to an enforcement action. An eligible Discharger shall certify via SMARTS that it meets the conditions above. Upon Sampling Frequency Reduction certification, the Discharger shall collect and analyze samples from one (1) QSE within the first half of each reporting year (July 1 to December 31), and one (1) QSE within the second half of each reporting year (January 1 to June 30). All other monitoring, sampling, and reporting requirements remain the same.

5.9 STORM WATER SAMPLE COLLECTION AND HANDLING METHODS

Storm water sample collection and handling methods at Sun-Land Garden Products, Inc., include:

- (1) Identifying the sampling parameters required to be tested and the number of storm water discharge points that will be sampled. Request the analytical testing laboratory to provide the appropriate number and type of sample containers, sample container labels, blank chain of custody forms, and sample preservation instructions.
- (2) Determine how samples will be transported to the laboratory. The testing laboratory should receive samples within 48 hours of the physical sampling (unless otherwise required by the laboratory). The Discharger may either deliver the samples to the laboratory, arrange for the laboratory to pick up the samples, or overnight ship the samples to the laboratory. All sample analysis shall be done in accordance with 40 Code of Federal Regulations, Part 136. Samples for pH have a holding time of 15 minutes.
- (3) For grab samples, use only the sample containers provided by the laboratory to collect and store samples. Use of any other type of containers may contaminate the samples. To prevent contamination, do not touch inside of sample container or cap or put anything into the sample containers before collecting storm water samples.
- (4) Do not overfill sample containers. Overfilling can change the analytical results. Tightly screw on the cap of each sample container without stripping the threads of the cap.
- (5) Complete and attach a label for each sample container. The label shall identify the date and time of sample collection, the person taking the sample, and the sample collection location or discharge point. The label should also identify any sample containers that have been preserved.
- (6) Carefully pack sample containers into an ice chest or refrigerator to prevent breakage and maintain temperature during shipment. Remember to place frozen ice packs into shipping containers. Samples should be kept as close to 4 C (39 F) as possible until arriving at the laboratory. Do not freeze samples.
- (7) Complete a Chain of Custody form for each set of samples. The Chain of Custody form shall include the Discharger's name, address, and phone number, identification of each sample container and sample collection point, person collecting the samples, the date and time each sample container was filled, and the analysis that is required for each sample container.
- (8) Upon shipping/delivering the sample containers, obtain both the signatures of the person relinquishing and receiving the sample containers.

- (9) Personnel shall be designated and trained to collect, maintain, and ship samples in accordance with the sample protocols and laboratory practices.
- (10) Refer to Table 1 in the General Permit for test methods, detection limits, and reporting units.
- (11) Dischargers are required to report to the Water Board any sampling data collected more frequently than required in this General Permit (Section XXI.J.2).
- (12) All sampling and sample preservation shall be in accordance with 40 Code of Federal Regulations, Part 136 and the current edition of the "Standard Method for the Examination of Water and Wastewater" (American Public Health Association). All monitoring instruments and equipment (including Discharger field instruments for measuring pH or specific conductance if identified as an additional sampling parameter) shall be calibrated and maintained in accordance with manufacturers' specifications to ensure accurate measurements. All laboratory analyses shall be conducted according to approved test procedures under 40 Code of Federal Regulations, Part 136, unless the Regional Water Quality Control Board has specified other test procedures. All metals shall be reported as total metals. Dischargers may conduct their own field analysis of pH (or specific conductance if identified as an additional sampling parameter) if the Discharger has sufficiently capability (qualified and trained employees, properly calibrated and maintained field instruments, etc.) to adequately perform the field analysis. With the exception of field analysis conducted by Dischargers for pH (or specific conductance if identified as a additional sampling parameter), all analysis shall be sent to and combined at laboratory certified for such analysis by the California Department of Public Health.

5.10 Sampling Analysis Reporting

All sampling and analytical results from storm water samples are required to be submitted via SMARTS within 30 days of obtaining all results for each sampling event. The method detection limit will be provided when an analytical result from samples taken is reported by the laboratory as a "non-detect" or less than the method detection limit. A value of zero shall not be reported. Storm water personnel will provide analytical results reported by the laboratory as below the minimum level (often referred to as the reporting limit) but above the method detection limit. Reported analytical results will be averaged automatically by SMARTS. For any calculation required by the General Permit, SMARTS will assign a value of zero (0) for all results less than the minimum level as reported by the laboratory.

5.11 Numeric Action Levels (NALs) and Exceedance Response Actions (ERAs)

Analytical monitoring provides an additional indication of the presence and concentrations of pollutants in storm water discharges. Sampling, analysis, and reporting in accordance with the requirements of the General Permit will be conducted at this facility and compared to the two types of Numeric Action Levels (NALs) in Table 11 of this Monitoring Implementation Plan (see Table 2 of the General Permit).

Table 13 – Parameter NAL Values, Test Methods, and Reporting Units

Parameter	Test Method	Reporting Units	Annual NAL	Instantaneous Maximum NAL
pH	Portable Analysis	pH units	N/A	Less than 6.0 Greater than 9.0
Total Suspended Solids (TSS)	SM 2540-D	mg/L	100	400
Oil and Grease (O&G), Total	EPA 1664A	mg/L	15	25
Iron, Total (Fe)	EPA 200.7	mg/L	1.0	N/A
Nitrate + Nitrite Nitrogen (N+N)	SM 4500-NO3-E	mg/L	0.68	N/A
Lead (Pb)	EPA 200.8	mg/L	0.262	N/A
Zinc (Zn)	EPA 200.8	mg/L	0.26	N/A
Phosphorous (P)	SM 4500-P B+E	mg/L	2.0	N/A

NAL exceedances are not, in and of themselves, violations of the General Permit. A Discharger that does not fully comply with the Level 1 status and/or Level 2 status ERA requirements, when required by the terms of the General Permit, is in violation of the General Permit.

5.13 ANNUAL COMPREHENSIVE FACILITY COMPLIANCE EVALUATION

Sun-Land Garden Products, Inc. shall conduct an Annual Comprehensive Facility Compliance Evaluation (Annual Evaluation) to identify areas of the facility contributing pollutants to industrial storm water discharges, as described in Section XV of the General Permit. The purpose of this requirement is to evaluate whether measures to reduce or prevent industrial pollutant loads identified in this SWPPP are adequate and properly implemented in accordance with the terms of the General Permit, and to determine whether additional control measures are needed.

One Annual Evaluation shall be conducted for each reporting year (July 1 to June 30). If an Annual Evaluation is conducted fewer than eight (8) months, or more than sixteen (16) months, after the previous Annual Evaluation was conducted, the justification for doing so shall be documented. The SWPPP shall be revised, as appropriate, and the revisions implemented within 90 days of the Annual Evaluation.

At a minimum, Annual Evaluations shall consist of:

- (1) A review of all sampling, visual observations, and inspection records conducted the previous reporting year;
- (2) An inspection of all areas of industrial activity and associated potential pollutant sources for evidence of, or the potential for, pollutants entering the storm water conveyance system;
- (3) An inspection of all drainage areas previously identified as having no exposure to industrial activities and materials in accordance with the definitions in Section XVII of the General Permit;
- (4) An inspection of equipment needed to implement the Best Management Practices (BMPs);
- (5) An inspection of any Best Management Practices (BMPs);
- (6) A review and effectiveness assessment of all Best Management Practices (BMPs) for each area of industrial activity and associated potential pollutant sources to determine if the BMPs are properly designed, implemented, and are effective in reducing and preventing pollutants in industrial storm water discharges and authorized NSWDS.
- (7) An assessment of any other factors needed to comply with the requirements in Section XVI.B of the General Permit.

5.14 MONITORING AND RECORDS

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. If Dischargers monitor any pollutant more frequently than required, the results of such monitoring shall be included in the calculation and reporting of the data submitted.

The General Permit requires Dischargers to maintain records of all Monitoring Implementation Plan tasks performed during each reporting year. Records of the monitoring information shall include the date, exact location, and time of sampling or measurement; the date(s) analyses were performed; the individual(s) that performed the analysis; the analytical techniques or methods used; and the results of such analysis. Dischargers shall retain for a period of at least five (5) years, either a paper or electronic copy of all storm water monitoring information, records, data, and reports required by the General Permit. Copies shall be available for review by the Water Board's staff at the facility during scheduled facility operating hours.

Upon written request by Water Boards, U.S. EPA, or local municipal agencies, Dischargers shall provide paper or electronic copies of Annual Reports or other requested records within ten (10) days from receipt of request.

5.15 ANNUAL REPORT

An Annual Report shall be certified and submitted electronically via SMARTS no later than July 15 following each reporting year using the standardized format and checklists in SMARTS. A copy of each Annual Report shall be retained at the facility for a minimum of five years. The Annual Report shall include:

- (1) A Compliance Checklist that indicates whether a Discharger complies with, and has addressed all applicable requirements of the General Permit,
- (2) An explanation for any non-compliance of requirements within the reporting year, as indicated in the Compliance Checklist,
- (3) An identification, including page numbers and/or sections, of all revisions made to the SWPPP within the reporting year,
- (4) The date(s) of the Annual Evaluation.

6. EMPLOYEE STORM WATER TRAINING PROGRAM

Section X.H.1.f of the General Permit requires an Employee Storm Water Training Program as a Minimum Best Management Practice, which must be implemented by all facilities covered by the Permit. The facility's Storm Water Training Program shall ensure that all team members implementing the various compliance activities of the General Permit are properly trained to implement the requirements of the General Permit, including but not limited to: BMP implementation, BMP effectiveness evaluations, visual observations, and monitoring activities. If Sun-Land Garden Products, Inc. enters a Level 1 status, appropriate team members shall be trained by a QISP. The employee-training program shall, at a minimum, address topics such as spill response, good housekeeping, and materials handling procedures, and actions necessary to implement all BMPs identified in the SWPPP and requirements of the SWMIP.

Employee awareness of the relationship between their daily activities and storm water pollution is essential in improving the quality of storm water discharged from this facility. The employee-training program shall cover the following items:

- **NPDES Storm Water Regulations:** NPDES permit requirements and penalties for violations.
- **Storm Water Drainage and Sanitary Sewers:** Differences between storm water conveyances and sanitary sewers/septic systems, including the types of water or waste-water that may be discharged to the two systems.
- **Sources and Effects of Pollutants:** Sources of pollutants present on the facility that could be discharged with storm water and the effects of different types of pollutants on receiving surface waters.
- **Best Management Practices (BMPs):** BMPs that are being implemented at the facility and individual responsibilities for maintaining the effectiveness of the BMPs.
- **Proper Chemical and Petroleum Storage, Handling, and Disposal Practices:** Employees who work with chemicals and petroleum products are trained in the proper storage, use, handling, and disposal of these materials.
- **Spill Response Procedures:** Employees who regularly work with potential pollutants are trained to cleanup of minor spills and leaks (generally, less than one gallon) of these materials, to notify supervisors/managers of all spills, and to recognize conditions that require the assistance of emergency contractors.
- **Good Housekeeping:** Good housekeeping practices that should be incorporated into daily activities to reduce the amounts of pollutants discharged in storm water.
- **Monitoring Tasks:** Designated employees are trained to perform the various monitoring tasks required by the Permit.

Refer to Appendix C: Employee Storm Water Training Record for documentation of all completed training classes and the personnel that received training in the SWPPP.

7. Certification

SUN-LAND GARDEN PRODUCTS, INC.

WATSONVILLE, CA

CERTIFICATION AND SIGNATURE

"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 ensure 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 fine and imprisonment for knowing violations."

Signature: WRS

Name: Martin Reyes

Title: Operations Manager

Date: 8/18/16

**NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES)
GENERAL PERMIT FOR STORM WATER DISCHARGES
ASSOCIATED WITH INDUSTRIAL ACTIVITIES
(GENERAL PERMIT)**

FACILITY NAME: Sun-Land Garden Products, Inc.

Waste Discharge Identification (WDID) # 3 441017406

	FACILITY CONTACT	Consultant/Qualified Industrial Storm Water Practitioner (QISP)
Name	Martin Reyes	Sidera Environmental, Inc.
Title	Operations Manager	Consultant
Company	Sun-Land Garden Products, Inc.	Sidera Environmental, Inc.
Street Address	90 Pioneer Rd.	2901 W. Coast Highway, Suite 200
City, State	Watsonville, CA	Newport Beach, CA
Zip	95076	92863

SWPPP (General Permit Section)	Not Applicable	SWPPP Page # or Reference Location	Date Implemented or Last Revised
Signed Certification		Section 7	7/20/16
Pollution Prevention Team		Section 1.4	7/20/16
Existing Facility Plans	X		7/20/16
Site Map(s) (Section X.E)			
Facility Boundaries		Appendix A	7/20/16
Drainage Areas		Appendix A	7/20/16
Direction of flow		Appendix A	7/20/16
On-facility water bodies	X		7/20/16
Areas of soil erosion		Appendix A	7/20/16
Nearby water bodies	X	Section 2.1	7/20/16
Municipal storm drain inlets		Appendix A	7/20/16
Points of discharge		Appendix A	7/20/16
Sampling locations		Appendix A	7/20/16
Structural control measures		Appendix A	7/20/16
Impervious areas		Appendix A	7/20/16
Location of Directly Exposed Materials		Appendix A	7/20/16
Locations of significant spills and leaks	X		7/20/16

Site Map(s) (Section X.E) Continued			
SWPPP (General Permit Section)	Not Applicable	SWPPP Page # or Reference Location	Date Implemented or Last Revised
Areas of Industrial Activity		Appendix A	7/20/16
Storage areas/storage tanks		Appendix A	7/20/16
Shipping and receiving areas		Appendix A	7/20/16
Fueling areas		Appendix A	7/20/16
Vehicle and equipment storage/maintenance		Appendix A	7/20/16
Material handling/processing		Appendix A	7/20/16
Waste treatment/disposal		Appendix A	7/20/16
List of Industrial Materials (Section X.F)			
Storage Location		Section 4.4	7/20/16
Quantity		Section 4.4	7/20/16
Frequency		Section 4.4	7/20/16
Receiving and shipping location		Section 4.4	7/20/16
Quantity		Section 4.4	7/20/16
Frequency		Section 4.4	7/20/16
Handling location		Section 4.4	7/20/16
Quantity		Section 4.4	7/20/16
Frequency		Section 4.4	7/20/16
Potential Pollution Sources (Section X.G)			
Description of Potential Pollution Sources (Section X.G.1)			
Industrial processes		Sections 4.1 – 4.3	7/20/16
Material handling and storage activities		Section 4.1 - 4.3	7/20/16
Dust & particulate generating activities		Section 4.5	7/20/16
Significant spills and leaks		Section 4.6	7/20/16
Non-storm water discharges		Section 4.7	7/20/16
Erodible surfaces		Section 4.8	7/20/16

Assessment of Potential Pollutant Sources (Section X.G.2)			
SWPPP (General Permit Section)	Not Applicable	SWPPP Page # or Reference Location	Date Implemented or Last Revised
Narrative assessment of likely sources of pollutants		Section 4	7/20/16
Narrative assessment of likely pollutants present in storm water discharges		Section 4	7/20/16
Identification of additional BMPs		Section 4	7/20/16
Identification of drainage areas with no exposure		Section 4	7/20/16
Identification of additional parameters		Section 5.6	7/20/16
Storm Water Best Management Practices (Section X.H)			
Minimum BMPs (Section X.H.1)			
Good housekeeping		Section 3.1	7/20/16
Preventative maintenance		Section 3.1	7/20/16
Spill response		Section 3.1	7/20/16
Material handling and waste management		Section 3.1	7/20/16
Erosion and sediment controls		Section 3.1	7/20/16
Employee training program		Section 3.1	7/20/16
Quality assurance and record keeping		Section 3.1	7/20/16
Advanced BMPs (Section X.H.2)			
Implement advanced BMPs at the facility		Section 3.2	7/20/16
Exposure Minimization BMPs		Section 3.2 and 4	7/20/16
Storm Water containment and discharge reduction BMPs		Section 3.2, 4, and 5.7	7/20/16
Treatment control BMPs		Section 3.2	7/20/16
Temporary Suspension of Activities (Section X.H.3)			
BMPs necessary for stabilization of the facility	X		7/20/16
BMP Descriptions (Section X.H.4)			
Pollutant that a BMP reduces or prevents		Section 4	7/20/16
Frequency of BMP implementation		Section 4	7/20/16
Location of BMP		Section 4	7/20/16
Person implementing BMP		Section 4	7/20/16
Procedures/maintenance/instructions for BMPs		Section 4	7/20/16
Equipment and tools for BMP implementation		Section 4	7/20/16
BMPs needing more frequent inspections		Section 4	7/20/16
Minimum BMP/applicable advanced BMPs not implemented at the facility	X		7/20/16
BMPs Implemented in lieu of minimum or applicable advanced BMPs	X		7/20/16
BMP Summary Table		Section 4.10	7/20/16

Monitoring Implementation Plan (Section X.I)			
SWPPP (General Permit Section)	Not Applicable	SWPPP Page # or Reference Location	Date Implemented or Last Revised
Team members assisting in developing the MIP		Section 5.2	7/20/16
Summary of visual observation procedures, locations, and details		Sections 5.3, 5.4	7/20/16
Justifications if applicable for: Alternative discharge locations, Representative Sampling Reduction or, Qualified Combined Samples	X		7/20/16
Procedures for field instrument calibration		Section 5.6	7/20/16
Example of Chain of Custody		Section 5.12	7/20/16
Annual Comprehensive Facility Compliance Evaluation (Section XV)			
Review of all visual inspection and monitoring records and sampling and analysis results conducted during the previous year		Section 5.13	7/20/16
Visual inspection of all areas of industrial activity and associated potential pollutant sources		Section 5.13	7/20/16
Visual inspection of all drainage areas previously identified as having no-exposure to industrial activities and materials in accordance with the definitions in Section XVII		Section 5.13	7/20/16
Visual inspection of equipment needed to implement the BMPs		Section 5.13	7/20/16
Visual inspection of any structural and/or treatment control BMPs		Section 5.13	7/20/16
Review and assessment of all BMPs of all BMPs for each area of industrial activity and associated potential pollutant sources		Section 5.13	7/20/16
Assessment of other factors needed to complete the information described in Section		Section 5.13	7/20/16

EMPLOYEE STORM WATER TRAINING RECORD

Appendix C

Instructor Name:

Jared Diaz

Title: Consultant - QISP

Employee Training Element	Training Description		Date Training Completed
NPDES Storm Water Regulations	Employees are informed of NPDES permit requirements and potential penalties for violations		
Storm Water Drainage and Sanitary Sewers	Employees have been instructed on the differences between storm water conveyances and sanitary sewers/septic systems, including the types of water or waste-water that may be discharged to the two systems.		
Sources and Effects of Pollutants	Employees have been informed of the sources of pollutants present on the facility that could be discharged with storm water. They have also been instructed on the effects of different types of pollutants on receiving surface waters.		
Best Management Practices	Employees have been familiarized with the best management practices that are being implemented at the facility and their individual responsibilities for maintaining the effectiveness of the best management practices.		
Proper Chemical and Petroleum Storage, Handling, and Disposal Practices	Employees who work with chemicals and petroleum products and waste, including fuel, lubricating oil, solvents, batteries, paints, and asphalt emulsions, have been trained in the proper storage, use, handling, and disposal of these materials.		
Spill Response Procedures	Employees who regularly work with chemicals and petroleum products and waste have been trained to clean up minor spills (generally, less than one gallon) of these materials, to notify supervisors/managers of all spills, and to recognize conditions that require the assistance of emergency contractors.		
Good Housekeeping	Employees have been instructed in good housekeeping practices that should be incorporated into their daily activities to reduce the amounts of pollutants discharged in storm water.		
Preventative Maintenance	Designated employees have been instructed on the preventative maintenance activities, and frequencies, that are to be performed on storm water conveyances and other equipment that could contribute to storm water.		
Storm Water Conveyance/Discharge Inspection	Designated employees have been trained to perform inspections of storm water conveyance areas, discharge points, and sources of pollutants at specified frequencies to identify potential discharges of contaminated run-off.		
Employee Name	Title	Signature	Date Training Completed
Mafra Reyes	Director of Operations		1/6/17

Sedimentation basins

Sun Land Garden (a division of Berger Peatmoss), Watsonville, CA

Goal:

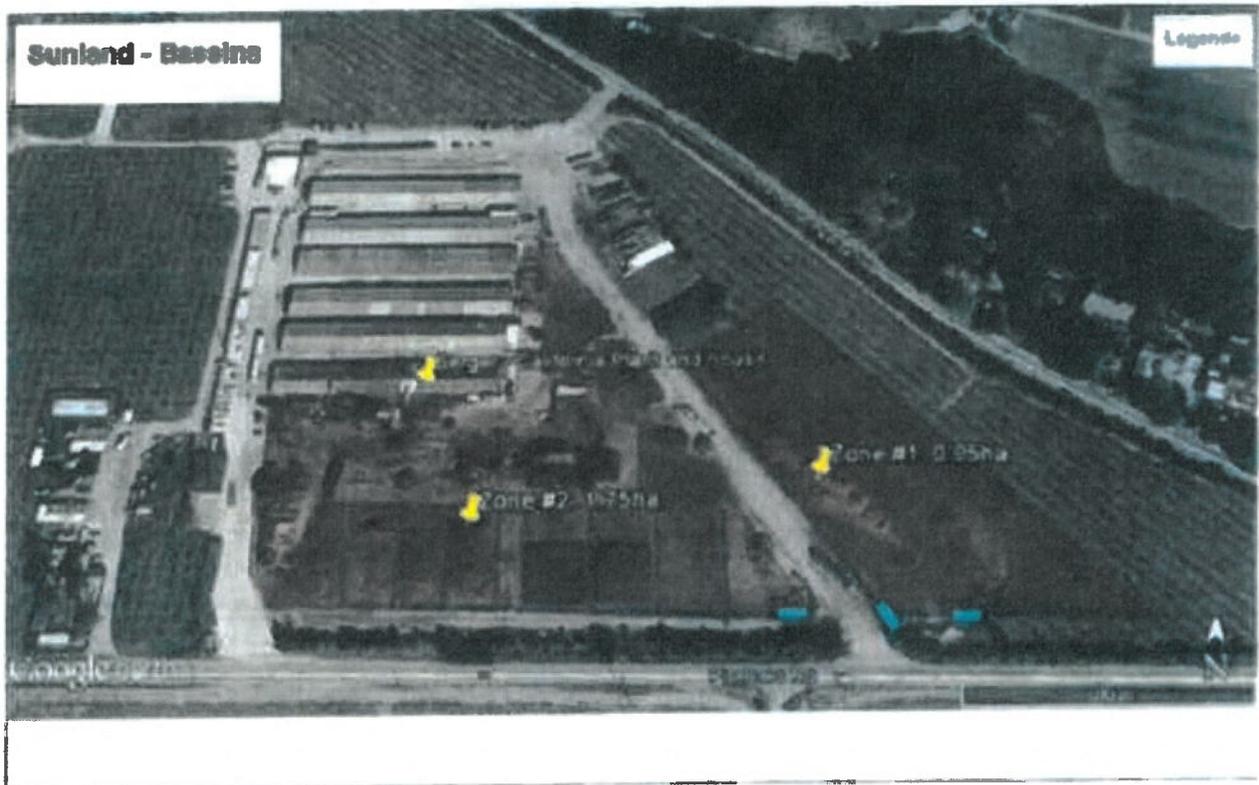
collect rain water and remove as much as possible suspended particles from it.

Theory:

Based on experience from our CDL composting site in Québec, which has an annual rainfall / snowfall average of 800 mm and a daily treatment capacity of 26.5 m³. Watsonville has approximately 600 mm of precipitation annually (see charts at the end of this document).

The purpose of the basins is to induce a sudden flow speed drop at the entrance, thus creating a retention time long enough to allow particles in suspension in the water to sink and get caught in the basins.

The following picture shows an aerial view of the Watsonville site, the 2 main zones of drainage, and the approximate positions of the 3 sedimentation basins:



The following table shows the optimal design requirements:

Optimal requirements examples					
deepness (m)	Width (m)	Lenght (m)	deepness (pi)	Width (pi)	Lenght (pi)
1.5	3	8.4	5	10	28
1.5	4	12	5	13	38

Note: Max width of 5 m (excavator reach) and ideal ratio length / width of 2.5:1 to 3:1



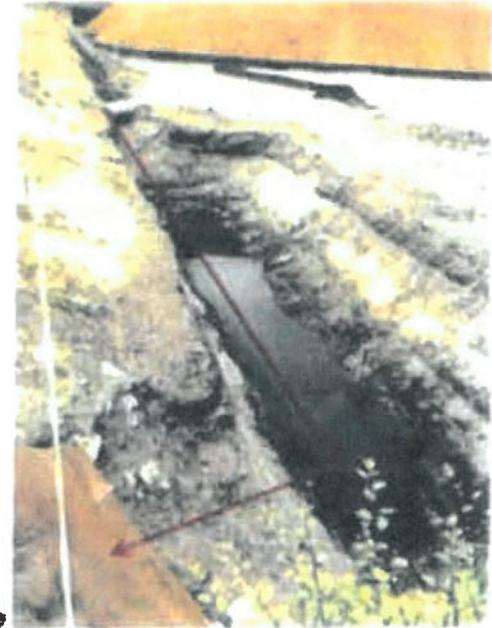
Based on real-life experience on one of our composting site, the following table shows the used sizing ratio (in m³/ha, 1 ha = 100 m x 100 m) the volume to be treated:

Sedimentary basin sizing	Hectares	Sizing ratio (m ³ /ha)	requested treated volume (m ³)
Zone #1 to be drained	0.95	40	38
Zone #2 to be drained	1.75	40	70

Due to yard limitation (underground pipes, access road), 2 basins were dug in zone 1 to compensate for the fact that there was not enough room to dig only 1 with the appropriate dimensions. The following table shows the actual sizes of each of the 3 basins:

Basins	Actual dimensions						ratio L/w
	deepness (m)	Width (m)	Lenght (m)	deepness (pi)	Width (pi)	Lenght (pi)	
1A	1.8	3.64	6.7	6	12	22	1.8
1B	1.8	3.64	7.9	6	12	26	2.2
2	1.8	3.64	8.5	6	12	28	2.3

Pictures and drawings:



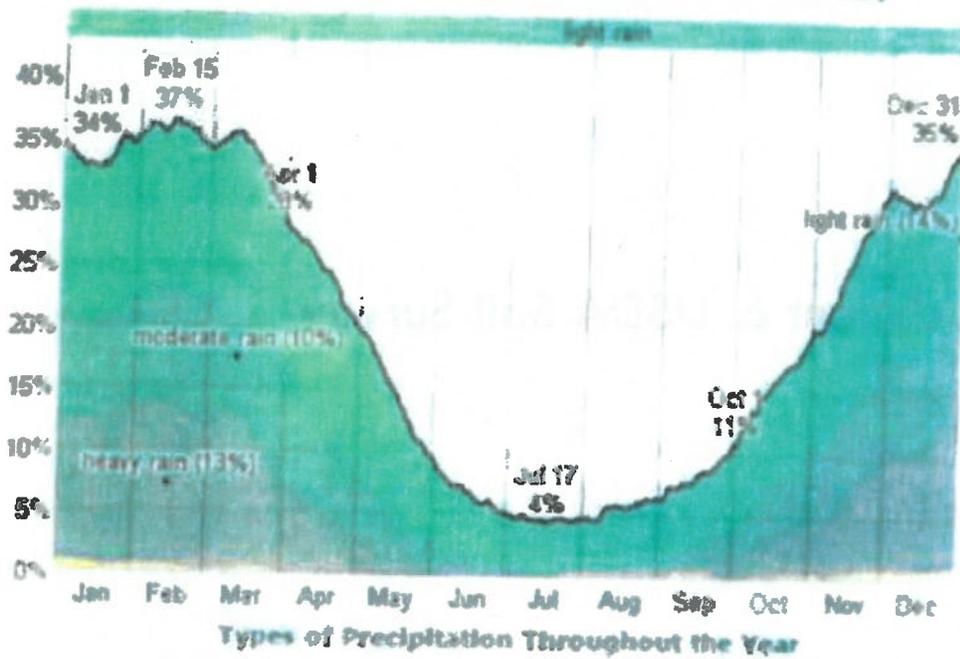
SEDIMENTATION BASIN FEASIBILITY STUDY

Appendix L

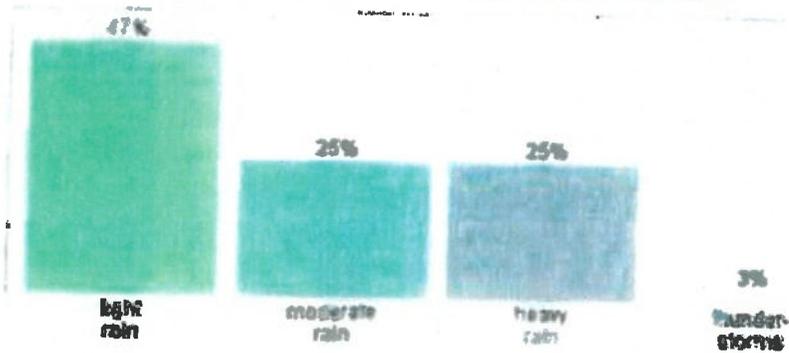
Watsonville weather averages

Annual high temperature	47.0°F
Annual low temperature	48.9°F
Average temperature	67.3°F
Average annual precipitation - rainfall	28.52 inch

Probability of Precipitation at Some Point in the Day



Types of Precipitation Throughout the Year



Attachment 6. USDA Soil Survey



United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for **Santa Cruz County, California**

Sunland Garden Products Soil Survey



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

Custom Soil Resource Report

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

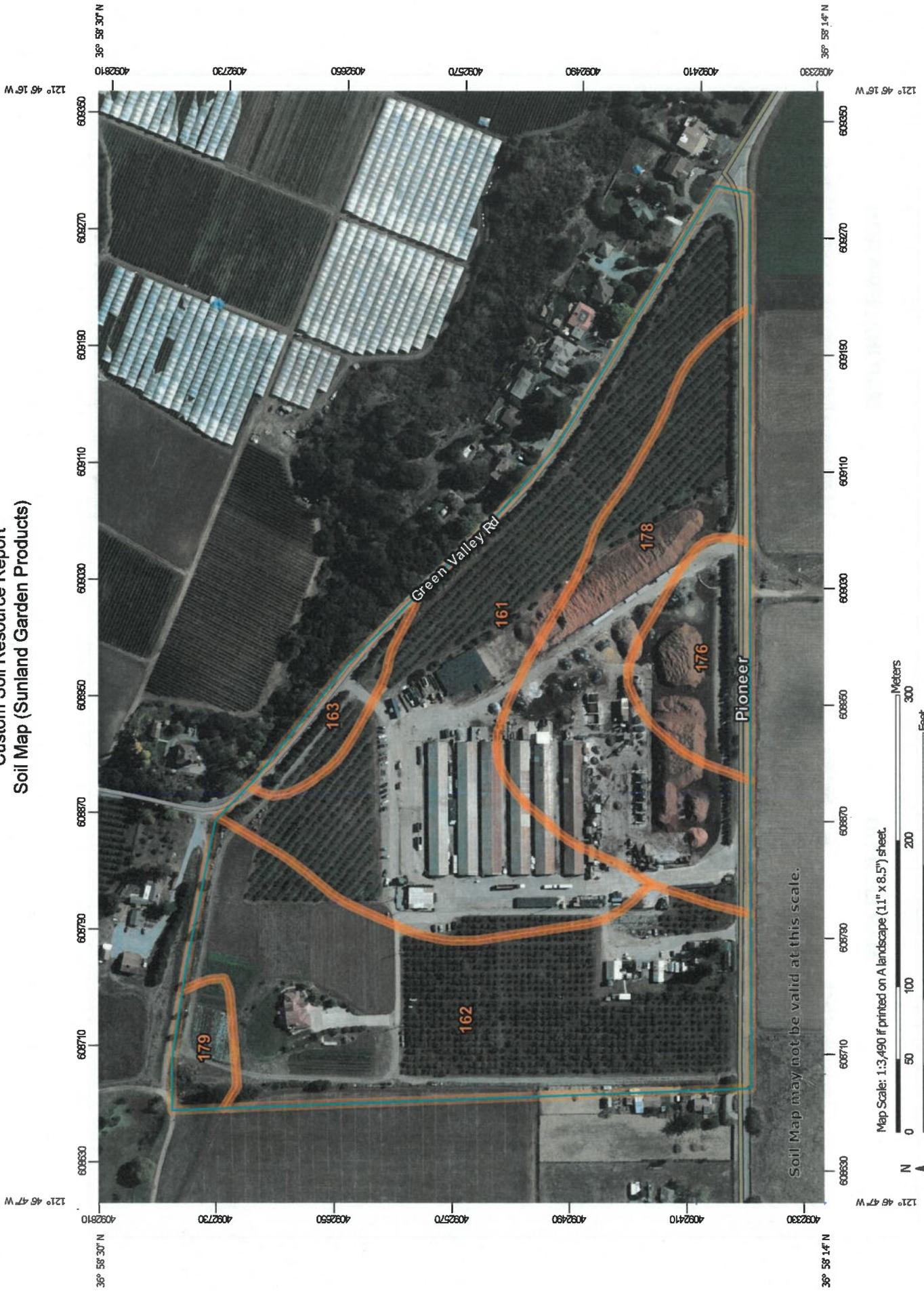
Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map (Sunland Garden Products)



Soil Map may not be valid at this scale.

Map Scale: 1:3,490 if printed on A landscape (11" x 8.5") sheet.

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

 Area of Interest (AOI)	 Spoil Area
 Soils	 Stony Spot
 Soil Map Unit Polygons	 Very Stony Spot
 Soil Map Unit Lines	 Wet Spot
 Soil Map Unit Points	 Other
 Special Point Features	 Special Line Features
 Blowout	 Water Features
 Borrow Pit	 Streams and Canals
 Clay Spot	 Transportation
 Closed Depression	 Rails
 Gravel Pit	 Interstate Highways
 Gravelly Spot	 US Routes
 Landfill	 Major Roads
 Lava Flow	 Local Roads
 Marsh or swamp	 Background
 Mine or Quarry	 Aerial Photography
 Miscellaneous Water	
 Perennial Water	
 Rock Outcrop	
 Saline Spot	
 Sandy Spot	
 Severely Eroded Spot	
 Sinkhole	
 Slide or Slip	
 Sodic Spot	

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Santa Cruz County, California
 Survey Area Data: Version 10, Sep 9, 2016

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 26, 2010—Sep 17, 2011

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.

Map Unit Legend (Sunland Garden Products)

Santa Cruz County, California (CA087)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
161	Pinto loam, 0 to 2 percent slopes	12.6	33.7%
162	Pinto loam, 2 to 9 percent slopes	12.1	32.4%
163	Pinto loam, 9 to 15 percent slopes	1.0	2.7%
176	Watsonville loam, 0 to 2 percent slopes	2.5	6.6%
178	Watsonville loam, thick surface, 0 to 2 percent slopes	8.4	22.4%
179	Watsonville loam, thick surface, 2 to 15 percent slopes	0.8	2.3%
Totals for Area of Interest		37.4	100.0%

Map Unit Descriptions (Sunland Garden Products)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas

Custom Soil Resource Report

are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Santa Cruz County, California

161—Pinto loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: h9fn
Elevation: 20 to 1,000 feet
Mean annual precipitation: 20 to 35 inches
Mean annual air temperature: 59 degrees F
Frost-free period: 245 to 275 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Pinto and similar soils: 85 percent
Minor components: 7 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pinto

Setting

Landform: Terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium and/or marine deposits

Typical profile

H1 - 0 to 21 inches: loam
H2 - 21 to 51 inches: sandy clay loam, clay loam, loam
H2 - 21 to 51 inches: sandy clay loam, clay loam
H2 - 21 to 51 inches:
H3 - 51 to 65 inches:
H3 - 51 to 65 inches:

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Very high (about 14.2 inches)

Interpretive groups

Land capability classification (irrigated): 2s
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Elkhorn, sandy loam

Percent of map unit: 5 percent

Custom Soil Resource Report

Hydric soil rating: No

Watsonville

Percent of map unit: 1 percent

Landform: Marine terraces

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Tread

Hydric soil rating: Yes

Pinto

Percent of map unit: 1 percent

Hydric soil rating: No

162—Pinto loam, 2 to 9 percent slopes

Map Unit Setting

National map unit symbol: h9fp

Elevation: 20 to 1,000 feet

Mean annual precipitation: 20 to 35 inches

Mean annual air temperature: 59 degrees F

Frost-free period: 245 to 275 days

Farmland classification: Prime farmland if irrigated

Map Unit Composition

Pinto and similar soils: 85 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pinto

Setting

Landform: Alluvial fans, terraces

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Alluvium

Typical profile

H1 - 0 to 21 inches: loam

H2 - 21 to 51 inches: sandy clay loam, clay loam, loam

H2 - 21 to 51 inches: sandy clay loam, clay loam

H2 - 21 to 51 inches:

H3 - 51 to 65 inches:

H3 - 51 to 65 inches:

Properties and qualities

Slope: 2 to 9 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Moderately well drained

Custom Soil Resource Report

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Very high (about 14.2 inches)

Interpretive groups

Land capability classification (irrigated): 2e

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: C

Hydric soil rating: No

Minor Components

Watsonville

Percent of map unit: 5 percent

Landform: Marine terraces

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Tread

Hydric soil rating: Yes

Elkhorn, sandy loam

Percent of map unit: 5 percent

Hydric soil rating: No

163—Pinto loam, 9 to 15 percent slopes

Map Unit Setting

National map unit symbol: h9fq

Elevation: 20 to 1,000 feet

Mean annual precipitation: 20 to 35 inches

Mean annual air temperature: 59 degrees F

Frost-free period: 245 to 275 days

Farmland classification: Not prime farmland

Map Unit Composition

Pinto and similar soils: 85 percent

Minor components: 7 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pinto

Setting

Landform: Alluvial fans, terraces

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Alluvium and/or marine deposits

Custom Soil Resource Report

Typical profile

H1 - 0 to 21 inches: loam
H2 - 21 to 51 inches: sandy clay loam, clay loam, loam
H2 - 21 to 51 inches: sandy clay loam, clay loam
H2 - 21 to 51 inches:
H3 - 51 to 65 inches:
H3 - 51 to 65 inches:

Properties and qualities

Slope: 9 to 15 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Very high (about 14.2 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Ecological site: CLAYPAN (R014XD089CA)
Hydric soil rating: No

Minor Components

Elkhorn, sandy loam

Percent of map unit: 5 percent
Hydric soil rating: No

Watsonville

Percent of map unit: 1 percent
Landform: Marine terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Hydric soil rating: Yes

Pinto

Percent of map unit: 1 percent
Hydric soil rating: No

176—Watsonville loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: h9g4
Elevation: 20 to 1,200 feet
Mean annual precipitation: 28 inches
Mean annual air temperature: 57 degrees F
Frost-free period: 245 to 275 days

Custom Soil Resource Report

Farmland classification: Farmland of statewide importance

Map Unit Composition

Watsonville and similar soils: 85 percent

Minor components: 12 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Watsonville

Setting

Landform: Marine terraces

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Alluvium

Typical profile

H1 - 0 to 18 inches: loam

H2 - 18 to 39 inches: clay, clay loam

H2 - 18 to 39 inches: sandy clay loam, clay loam

H3 - 39 to 63 inches:

H3 - 39 to 63 inches:

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: About 18 inches to abrupt textural change

Natural drainage class: Somewhat poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water storage in profile: Very low (about 2.9 inches)

Interpretive groups

Land capability classification (irrigated): 3w

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: D

Ecological site: CLAYPAN (R014XD089CA)

Hydric soil rating: Yes

Minor Components

Elkhorn, sandy loam

Percent of map unit: 5 percent

Hydric soil rating: No

Pinto, loam

Percent of map unit: 4 percent

Hydric soil rating: No

Watsonville, thick surface

Percent of map unit: 3 percent

Landform: Marine terraces

Landform position (two-dimensional): Toeslope

Custom Soil Resource Report

Landform position (three-dimensional): Tread
Hydric soil rating: Yes

178—Watsonville loam, thick surface, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: h9g6
Elevation: 20 to 1,200 feet
Mean annual precipitation: 28 inches
Mean annual air temperature: 57 degrees F
Frost-free period: 245 to 275 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Watsonville and similar soils: 85 percent
Minor components: 14 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Watsonville

Setting

Landform: Marine terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium

Typical profile

H1 - 0 to 18 inches: loam
H2 - 18 to 39 inches: clay, clay loam
H2 - 18 to 39 inches: sandy clay loam, clay loam
H3 - 39 to 63 inches:
H3 - 39 to 63 inches:

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: About 18 inches to abrupt textural change
Natural drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Very low (about 2.9 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability classification (nonirrigated): 3w

Custom Soil Resource Report

Hydrologic Soil Group: D

Hydric soil rating: Yes

Minor Components

Elkhorn, sandy clay

Percent of map unit: 5 percent

Hydric soil rating: No

Pinto, loam

Percent of map unit: 4 percent

Hydric soil rating: No

Watsonville,, thick surface

Percent of map unit: 3 percent

Landform: Marine terraces

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Tread

Hydric soil rating: Yes

Danville, loam

Percent of map unit: 2 percent

Hydric soil rating: No

179—Watsonville loam, thick surface, 2 to 15 percent slopes

Map Unit Setting

National map unit symbol: h9g7

Elevation: 20 to 1,200 feet

Mean annual precipitation: 28 inches

Mean annual air temperature: 57 degrees F

Frost-free period: 245 to 275 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Watsonville and similar soils: 85 percent

Minor components: 13 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Watsonville

Setting

Landform: Marine terraces

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Alluvium

Typical profile

H1 - 0 to 18 inches: loam

H2 - 18 to 39 inches: clay, clay loam

Custom Soil Resource Report

H2 - 18 to 39 inches: sandy clay loam, clay loam

H3 - 39 to 63 inches:

H3 - 39 to 63 inches:

Properties and qualities

Slope: 2 to 15 percent

Depth to restrictive feature: About 18 inches to abrupt textural change

Natural drainage class: Somewhat poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water storage in profile: Very low (about 2.9 inches)

Interpretive groups

Land capability classification (irrigated): 3e

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: D

Hydric soil rating: Yes

Minor Components

Danville, loam

Percent of map unit: 5 percent

Hydric soil rating: No

Elder, sandy loam

Percent of map unit: 4 percent

Hydric soil rating: No

Elkhorn, sandy loam

Percent of map unit: 2 percent

Hydric soil rating: No

Pinto, loam

Percent of map unit: 2 percent

Hydric soil rating: No

Soil Information for All Uses

Soil Properties and Qualities

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

Soil Physical Properties

Soil Physical Properties are measured or inferred from direct observations in the field or laboratory. Examples of soil physical properties include percent clay, organic matter, saturated hydraulic conductivity, available water capacity, and bulk density.

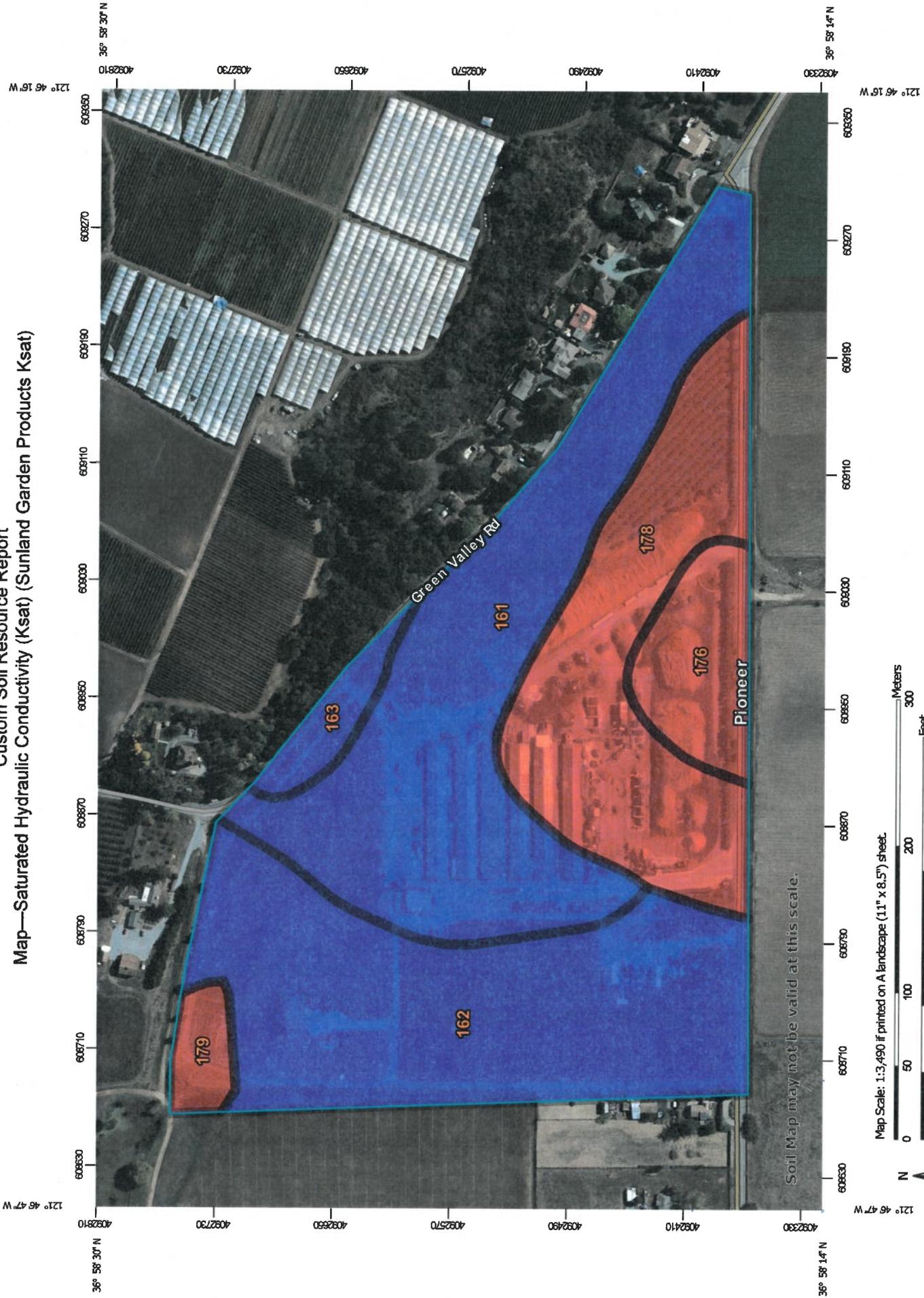
Saturated Hydraulic Conductivity (Ksat) (Sunland Garden Products Ksat)

Saturated hydraulic conductivity (Ksat) refers to the ease with which pores in a saturated soil transmit water. The estimates are expressed in terms of micrometers per second. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Saturated hydraulic conductivity is considered in the design of soil drainage systems and septic tank absorption fields.

For each soil layer, this attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

The numeric Ksat values have been grouped according to standard Ksat class limits.

Custom Soil Resource Report
 Map—Saturated Hydraulic Conductivity (Ksat) (Sunland Garden Products Ksat)



Soil Map may not be valid at this scale.

Map Scale: 1:3,490 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Santa Cruz County, California
 Survey Area Data: Version 10, Sep 9, 2016

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 26, 2010—Sep 17, 2011

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.

MAP LEGEND

Area of Interest (AOI)
 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  <= 3.0057
-  > 3.0057 and <= 3.5086
-  Not rated or not available

Soil Rating Lines

-  <= 3.0057
-  > 3.0057 and <= 3.5086
-  Not rated or not available

Soil Rating Points

-  <= 3.0057
-  > 3.0057 and <= 3.5086
-  Not rated or not available

Water Features

Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

Table—Saturated Hydraulic Conductivity (Ksat) (Sunland Garden Products Ksat)

Saturated Hydraulic Conductivity (Ksat)— Summary by Map Unit — Santa Cruz County, California (CA087)				
Map unit symbol	Map unit name	Rating (micrometers per second)	Acres in AOI	Percent of AOI
161	Pinto loam, 0 to 2 percent slopes	3.5086	12.6	33.7%
162	Pinto loam, 2 to 9 percent slopes	3.5086	12.1	32.4%
163	Pinto loam, 9 to 15 percent slopes	3.5086	1.0	2.7%
176	Watsonville loam, 0 to 2 percent slopes	3.0057	2.5	6.6%
178	Watsonville loam, thick surface, 0 to 2 percent slopes	3.0057	8.4	22.4%
179	Watsonville loam, thick surface, 2 to 15 percent slopes	3.0057	0.8	2.3%
Totals for Area of Interest			37.4	100.0%

Rating Options—Saturated Hydraulic Conductivity (Ksat) (Sunland Garden Products Ksat)

Units of Measure: micrometers per second

Aggregation Method: Weighted Average

Aggregation is the process by which a set of component attribute values is reduced to a single value that represents the map unit as a whole.

A map unit is typically composed of one or more "components". A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. For the attribute being aggregated, the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the aggregation process derives a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for soil map units can be rendered. Aggregation must be done because, on any soil map, map units are delineated but components are not.

For each of a map unit's components, a corresponding percent composition is recorded. A percent composition of 60 indicates that the corresponding component typically makes up approximately 60% of the map unit. Percent composition is a critical factor in some, but not all, aggregation methods.

The aggregation method "Weighted Average" computes a weighted average value for all components in the map unit. Percent composition is the weighting factor. The result returned by this aggregation method represents a weighted average value of the corresponding attribute throughout the map unit.

Component Percent Cutoff: None Specified

Components whose percent composition is below the cutoff value will not be considered. If no cutoff value is specified, all components in the database will be considered. The data for some contrasting soils of minor extent may not be in the database, and therefore are not considered.

Tie-break Rule: Fastest

The tie-break rule indicates which value should be selected from a set of multiple candidate values, or which value should be selected in the event of a percent composition tie.

Interpret Nulls as Zero: No

This option indicates if a null value for a component should be converted to zero before aggregation occurs. This will be done only if a map unit has at least one component where this value is not null.

Layer Options (Horizon Aggregation Method): All Layers (Weighted Average)

For an attribute of a soil horizon, a depth qualification must be specified. In most cases it is probably most appropriate to specify a fixed depth range, either in centimeters or inches. The Bottom Depth must be greater than the Top Depth, and the Top Depth can be greater than zero. The choice of "inches" or "centimeters" only applies to the depth of soil to be evaluated. It has no influence on the units of measure the data are presented in.

When "Surface Layer" is specified as the depth qualifier, only the surface layer or horizon is considered when deriving a value for a component, but keep in mind that the thickness of the surface layer varies from component to component.

When "All Layers" is specified as the depth qualifier, all layers recorded for a component are considered when deriving the value for that component.

Whenever more than one layer or horizon is considered when deriving a value for a component, and the attribute being aggregated is a numeric attribute, a weighted average value is returned, where the weighting factor is the layer or horizon thickness.

Saturated Hydraulic Conductivity (Ksat), Standard Classes (Sunland Garden Products Ksat Std 6"-60")

Saturated hydraulic conductivity (Ksat) refers to the ease with which pores in a saturated soil transmit water. The estimates are expressed in terms of micrometers per second. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Saturated hydraulic conductivity is considered in the design of soil drainage systems and septic tank absorption fields.

For each soil layer, this attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Custom Soil Resource Report

The numeric Ksat values have been grouped according to standard Ksat class limits. The classes are:

Very low: 0.00 to 0.01

Low: 0.01 to 0.1

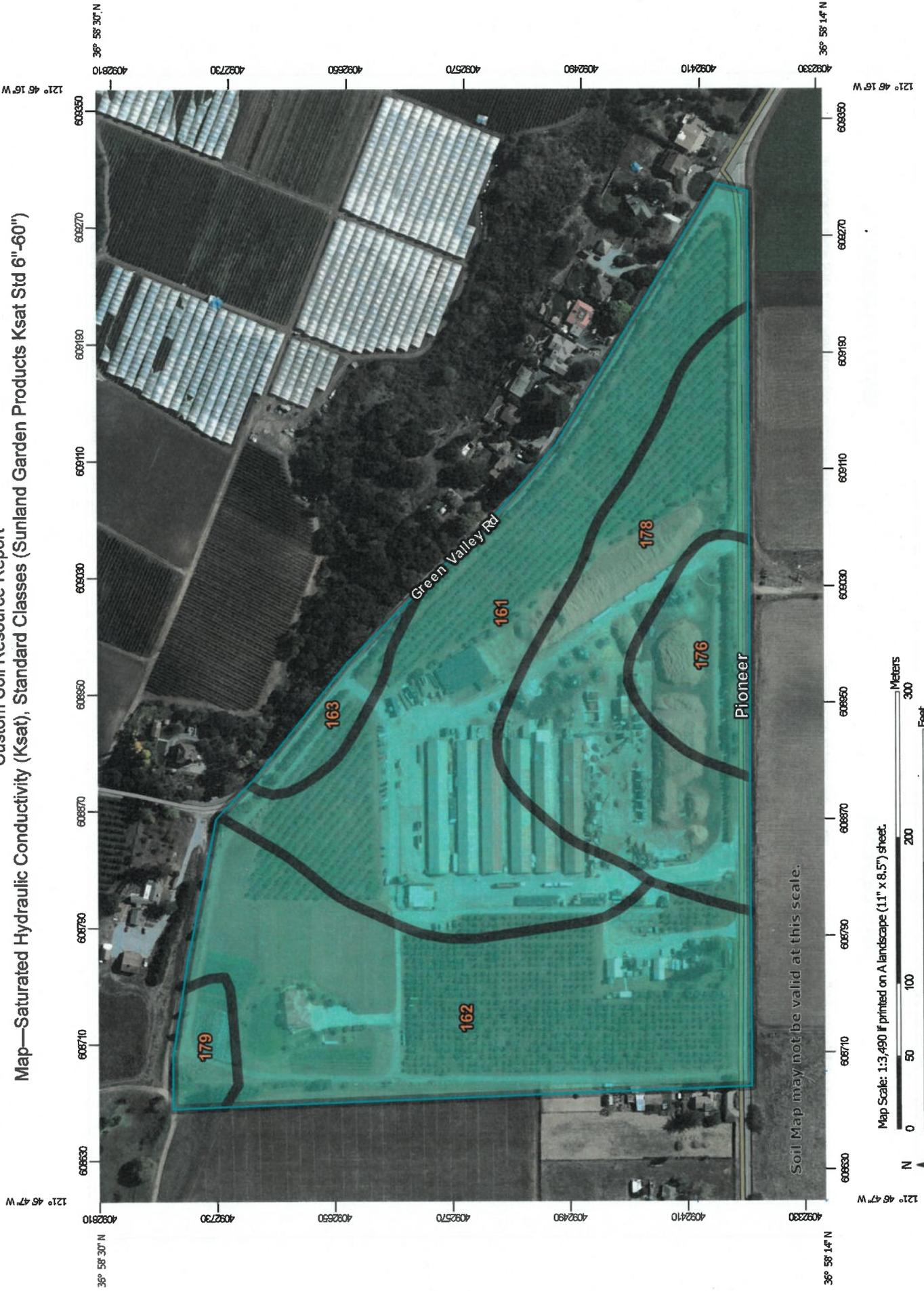
Moderately low: 0.1 to 1.0

Moderately high: 1 to 10

High: 10 to 100

Very high: 100 to 705

Custom Soil Resource Report
 Map—Saturated Hydraulic Conductivity (Ksat), Standard Classes (Sunland Garden Products Ksat Std 6"-60")



MAP LEGEND

Area of Interest (AOI)
 Area of Interest (AOI) Not rated or not available

Water Features
 Streams and Canals

Transportation
 Rails
 Interstate Highways
 US Routes
 Major Roads
 Local Roads

Background
 Aerial Photography

Soils
Soil Rating Polygons
 Very Low (0.0 - 0.01)
 Low (0.01 - 0.1)
 Moderately Low (0.1 - 1)
 Moderately High (1 - 10)
 High (10 - 100)
 Very High (100 - 705)
 Not rated or not available

Soil Rating Lines
 Very Low (0.0 - 0.01)
 Low (0.01 - 0.1)
 Moderately Low (0.1 - 1)
 Moderately High (1 - 10)
 High (10 - 100)
 Very High (100 - 705)
 Not rated or not available

Soil Rating Points
 Very Low (0.0 - 0.01)
 Low (0.01 - 0.1)
 Moderately Low (0.1 - 1)
 Moderately High (1 - 10)
 High (10 - 100)
 Very High (100 - 705)

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Santa Cruz County, California
 Survey Area Data: Version 10, Sep 9, 2016

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 26, 2010—Sep 17, 2011

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.

Table—Saturated Hydraulic Conductivity (Ksat), Standard Classes (Sunland Garden Products Ksat Std 6"-60")

Saturated Hydraulic Conductivity (Ksat), Standard Classes— Summary by Map Unit — Santa Cruz County, California (CA087)				
Map unit symbol	Map unit name	Rating (micrometers per second)	Acres in AOI	Percent of AOI
161	Pinto loam, 0 to 2 percent slopes	3.1539	12.6	33.7%
162	Pinto loam, 2 to 9 percent slopes	3.1539	12.1	32.4%
163	Pinto loam, 9 to 15 percent slopes	3.1539	1.0	2.7%
176	Watsonville loam, 0 to 2 percent slopes	2.4717	2.5	6.6%
178	Watsonville loam, thick surface, 0 to 2 percent slopes	2.4717	8.4	22.4%
179	Watsonville loam, thick surface, 2 to 15 percent slopes	2.4717	0.8	2.3%
Totals for Area of Interest			37.4	100.0%

Rating Options—Saturated Hydraulic Conductivity (Ksat), Standard Classes (Sunland Garden Products Ksat Std 6"-60")

Units of Measure: micrometers per second

Aggregation Method: Weighted Average

Component Percent Cutoff: None Specified

Tie-break Rule: Fastest

Interpret Nulls as Zero: No

Layer Options (Horizon Aggregation Method): Depth Range (Weighted Average)

Top Depth: 6

Bottom Depth: 60

Units of Measure: Inches

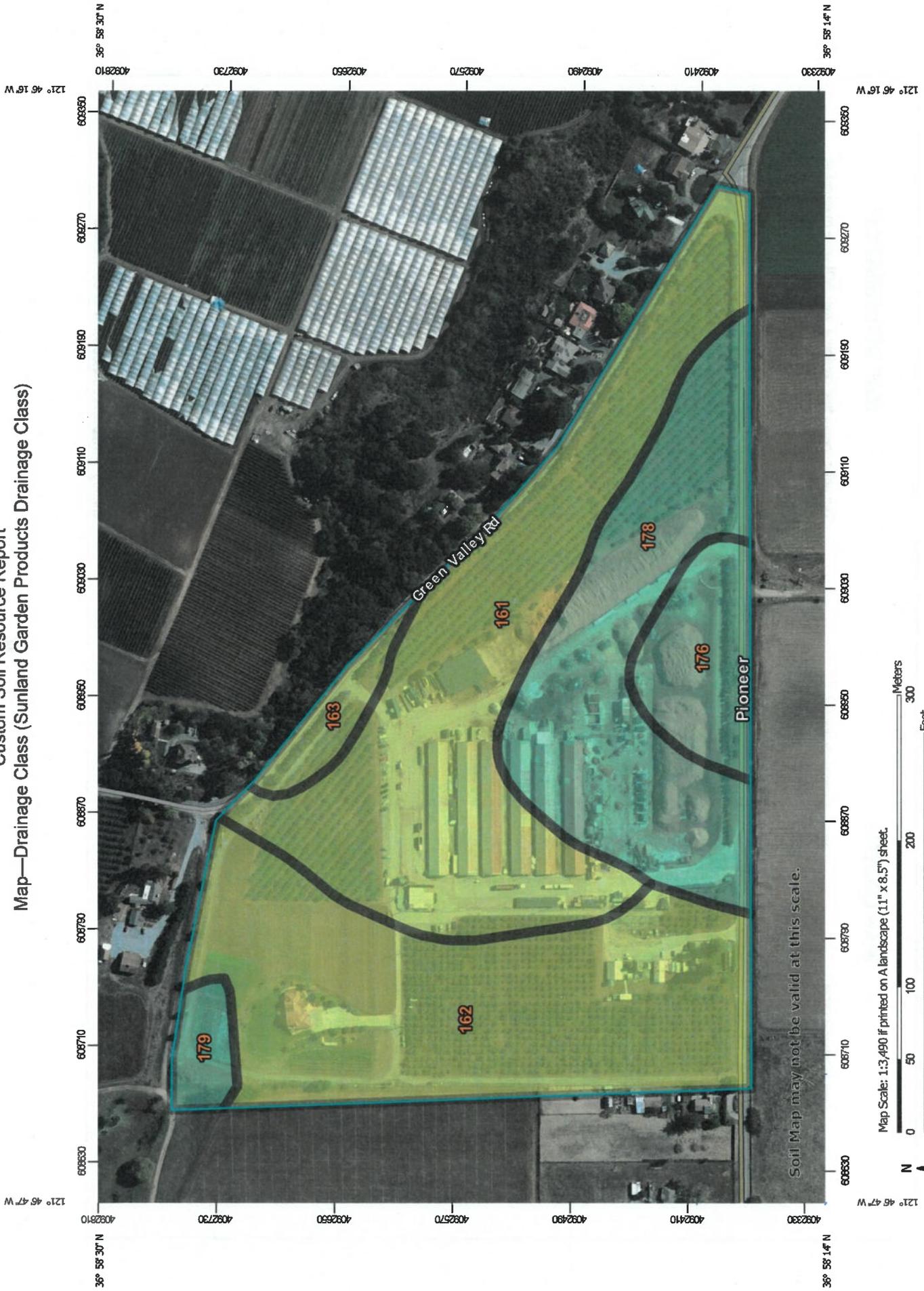
Soil Qualities and Features

Soil qualities are behavior and performance attributes that are not directly measured, but are inferred from observations of dynamic conditions and from soil properties. Example soil qualities include natural drainage, and frost action. Soil features are attributes that are not directly part of the soil. Example soil features include slope and depth to restrictive layer. These features can greatly impact the use and management of the soil.

Drainage Class (Sunland Garden Products Drainage Class)

"Drainage class (natural)" refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized—excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained, and very poorly drained. These classes are defined in the "Soil Survey Manual."

Custom Soil Resource Report
Map—Drainage Class (Sunland Garden Products Drainage Class)



MAP LEGEND

- Area of Interest (AOI)**
 - Area of Interest (AOI)
- Soils**
 - Soil Rating Polygons
 - Excessively drained
 - Somewhat excessively drained
 - Well drained
 - Moderately well drained
 - Somewhat poorly drained
 - Poorly drained
 - Very poorly drained
 - Subaqueous
 - Not rated or not available
 - Soil Rating Lines
 - Excessively drained
 - Somewhat excessively drained
 - Well drained
 - Moderately well drained
 - Somewhat poorly drained
 - Poorly drained
 - Very poorly drained
 - Subaqueous
 - Not rated or not available
- Water Features**
 - Streams and Canals
- Transportation**
 - Rails
 - Interstate Highways
 - US Routes
 - Major Roads
 - Local Roads
- Background**
 - Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Santa Cruz County, California
 Survey Area Data: Version 10, Sep 9, 2016

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 26, 2010—Sep 17, 2011

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.

Table—Drainage Class (Sunland Garden Products Drainage Class)

Drainage Class— Summary by Map Unit — Santa Cruz County, California (CA087)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
161	Pinto loam, 0 to 2 percent slopes	Moderately well drained	12.6	33.7%
162	Pinto loam, 2 to 9 percent slopes	Moderately well drained	12.1	32.4%
163	Pinto loam, 9 to 15 percent slopes	Moderately well drained	1.0	2.7%
176	Watsonville loam, 0 to 2 percent slopes	Somewhat poorly drained	2.5	6.6%
178	Watsonville loam, thick surface, 0 to 2 percent slopes	Somewhat poorly drained	8.4	22.4%
179	Watsonville loam, thick surface, 2 to 15 percent slopes	Somewhat poorly drained	0.8	2.3%
Totals for Area of Interest			37.4	100.0%

Rating Options—Drainage Class (Sunland Garden Products Drainage Class)

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Water Features

Water Features include ponding frequency, flooding frequency, and depth to water table.

Depth to Water Table (Sunland Garden Products Depth to Water Table)

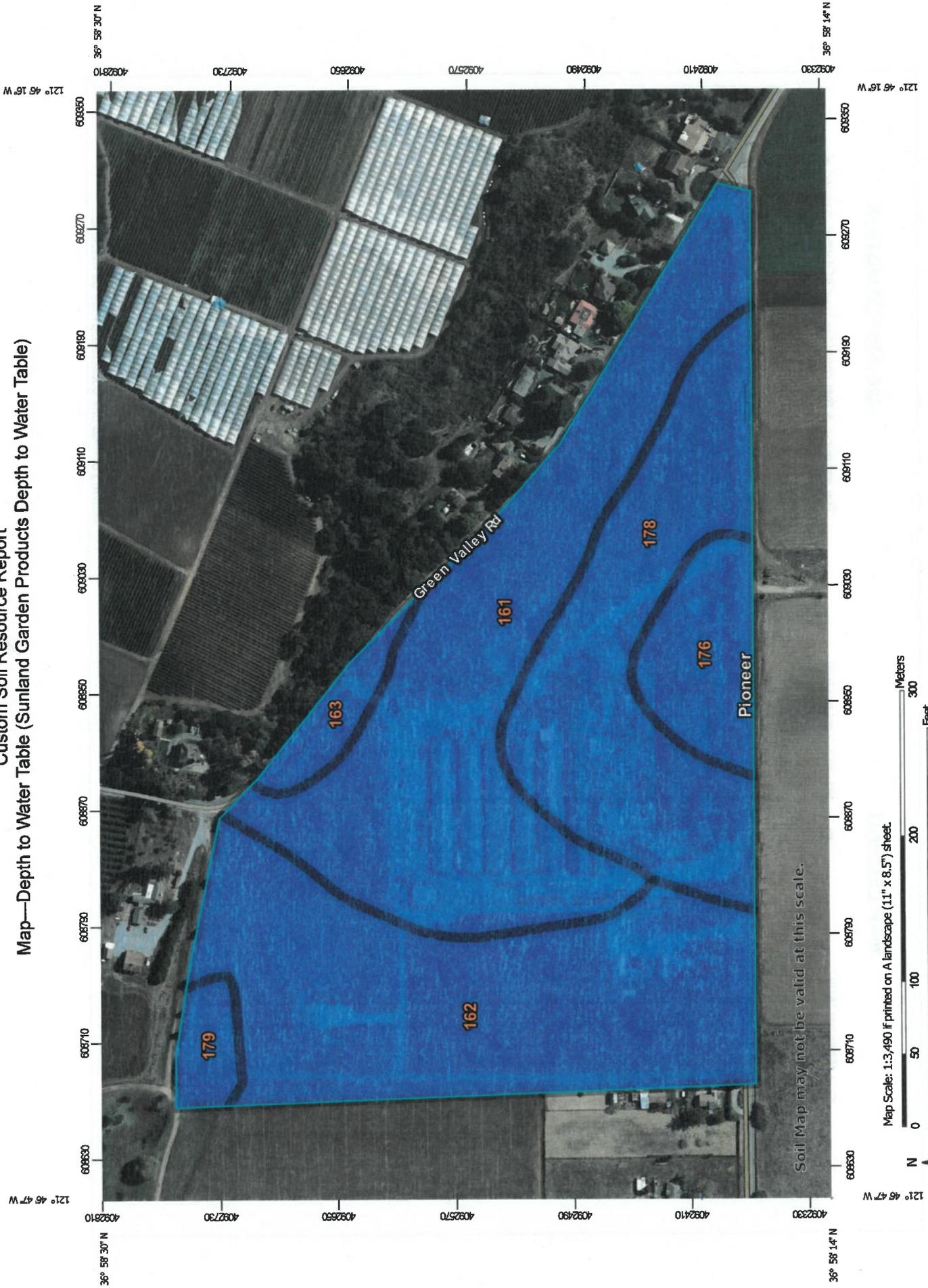
"Water table" refers to a saturated zone in the soil. It occurs during specified months. Estimates of the upper limit are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

This attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A

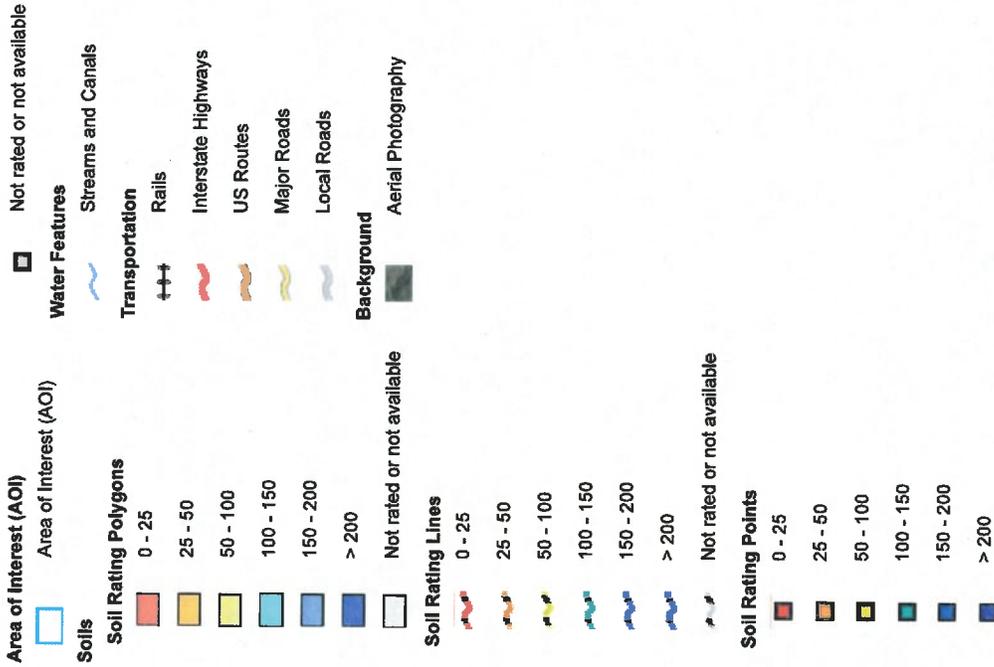
Custom Soil Resource Report

"representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Custom Soil Resource Report
 Map—Depth to Water Table (Sunland Garden Products Depth to Water Table)



MAP LEGEND



MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Santa Cruz County, California
 Survey Area Data: Version 10, Sep 9, 2016

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 26, 2010—Sep 17, 2011

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.

Table—Depth to Water Table (Sunland Garden Products Depth to Water Table)

Depth to Water Table— Summary by Map Unit — Santa Cruz County, California (CA087)				
Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
161	Pinto loam, 0 to 2 percent slopes	>200	12.6	33.7%
162	Pinto loam, 2 to 9 percent slopes	>200	12.1	32.4%
163	Pinto loam, 9 to 15 percent slopes	>200	1.0	2.7%
176	Watsonville loam, 0 to 2 percent slopes	>200	2.5	6.6%
178	Watsonville loam, thick surface, 0 to 2 percent slopes	>200	8.4	22.4%
179	Watsonville loam, thick surface, 2 to 15 percent slopes	>200	0.8	2.3%
Totals for Area of Interest			37.4	100.0%

Rating Options—Depth to Water Table (Sunland Garden Products Depth to Water Table)

Units of Measure: centimeters

Aggregation Method: Weighted Average

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Interpret Nulls as Zero: No

Beginning Month: January

Ending Month: December

Soil Reports

The Soil Reports section includes various formatted tabular and narrative reports (tables) containing data for each selected soil map unit and each component of each unit. No aggregation of data has occurred as is done in reports in the Soil Properties and Qualities and Suitabilities and Limitations sections.

The reports contain soil interpretive information as well as basic soil properties and qualities. A description of each report (table) is included.

Soil Chemical Properties

This folder contains a collection of tabular reports that present soil chemical properties. The reports (tables) include all selected map units and components for each map unit. Soil chemical properties are measured or inferred from direct observations in the field or laboratory. Examples of soil chemical properties include pH, cation exchange capacity, calcium carbonate, gypsum, and electrical conductivity.

Chemical Soil Properties (Sunland Garden Products Soil Chemical Properties)

This table shows estimates of some chemical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Cation-exchange capacity is the total amount of extractable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. Soils having a low cation-exchange capacity hold fewer cations and may require more frequent applications of fertilizer than soils having a high cation-exchange capacity. The ability to retain cations reduces the hazard of ground-water pollution.

Effective cation-exchange capacity refers to the sum of extractable cations plus aluminum expressed in terms of milliequivalents per 100 grams of soil. It is determined for soils that have pH of less than 5.5.

Soil reaction is a measure of acidity or alkalinity. It is important in selecting crops and other plants, in evaluating soil amendments for fertility and stabilization, and in determining the risk of corrosion.

Calcium carbonate equivalent is the percent of carbonates, by weight, in the fraction of the soil less than 2 millimeters in size. The availability of plant nutrients is influenced by the amount of carbonates in the soil.

Gypsum is expressed as a percent, by weight, of hydrated calcium sulfates in the fraction of the soil less than 20 millimeters in size. Gypsum is partially soluble in

Custom Soil Resource Report

water. Soils that have a high content of gypsum may collapse if the gypsum is removed by percolating water.

Salinity is a measure of soluble salts in the soil at saturation. It is expressed as the electrical conductivity of the saturation extract, in millimhos per centimeter at 25 degrees C. Estimates are based on field and laboratory measurements at representative sites of nonirrigated soils. The salinity of irrigated soils is affected by the quality of the irrigation water and by the frequency of water application. Hence, the salinity of soils in individual fields can differ greatly from the value given in the table. Salinity affects the suitability of a soil for crop production, the stability of soil if used as construction material, and the potential of the soil to corrode metal and concrete.

Sodium adsorption ratio (SAR) is a measure of the amount of sodium (Na) relative to calcium (Ca) and magnesium (Mg) in the water extract from saturated soil paste. It is the ratio of the Na concentration divided by the square root of one-half of the Ca + Mg concentration. Soils that have SAR values of 13 or more may be characterized by an increased dispersion of organic matter and clay particles, reduced saturated hydraulic conductivity and aeration, and a general degradation of soil structure.

Custom Soil Resource Report

Chemical Soil Properties—Santa Cruz County, California										
Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio		
	<i>In</i>	<i>meq/100g</i>	<i>meq/100g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>			
161—Pinto loam, 0 to 2 percent slopes										
Pinto	0-21	10-15	—	5.6-7.3	0	0	0	0		
	21-51	15-20	—	5.6-6.5	0	0	0	0		
	51-65	15-20	—	5.1-7.3	0	0	0	0		
162—Pinto loam, 2 to 9 percent slopes										
Pinto	0-21	10-15	—	5.6-7.3	0	0	0	0		
	21-51	15-20	—	5.6-6.5	0	0	0	0		
	51-65	15-20	—	5.1-7.3	0	0	0	0		
163—Pinto loam, 9 to 15 percent slopes										
Pinto	0-21	10-15	—	5.6-7.3	0	0	0	0		
	21-51	15-20	—	5.6-6.5	0	0	0	0		
	51-65	15-20	—	5.1-7.3	0	0	0	0		
176—Watsonville loam, 0 to 2 percent slopes										
Watsonville	0-18	10-15	—	5.6-7.3	0	0	0	0		
	18-39	20-30	—	5.6-8.4	0	0	0.0-2.0	0		
	39-63	15-20	—	5.6-8.4	0	0	0.0-2.0	0		
178—Watsonville loam, thick surface, 0 to 2 percent slopes										
Watsonville	0-18	20-30	—	5.6-7.3	0	0	0	0		
	18-39	20-30	—	5.6-8.4	0	0	0.0-2.0	0		
	39-63	15-20	—	5.6-8.4	0	0	0.0-2.0	0		

Custom Soil Resource Report

Chemical Soil Properties—Santa Cruz County, California									
Map symbol and soil name	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio	
	<i>In</i>	<i>meq/100g</i>	<i>meq/100g</i>	<i>pH</i>	<i>Pct</i>	<i>Pct</i>	<i>mmhos/cm</i>		
179—Watsonville loam, thick surface, 2 to 15 percent slopes									
Watsonville	0-18	20-30	—	5.6-7.3	0	0	0	0	
	18-39	20-30	—	5.6-8.4	0	0	0.0-2.0	0	
	39-63	15-20	—	5.6-8.4	0	0	0.0-2.0	0	

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Custom Soil Resource Report

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**Attachment 7. Geotechnical Engineering Study
prepared by Central Coast Agri-Buildings, dated
September 28, 2018**

**GEOTECHNICAL ENGINEERING STUDY
SUN-LAND GARDEN PRODUCTS MACHINERY CANOPY
90 PIONEER ROAD
WATSONVILLE, CALIFORNIA**

September 28, 2018

Prepared for

Mr. Jack Bowlus
Central Coast Agri-Buildings
3891 Cienega Road
Hollister, CA 95023

Prepared by

Earth Systems Pacific
500 Park Center Drive, Suite 1
Hollister, CA 95023

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September 28, 2018

File No.: 302452-001

Mr. Jack Bowlus
Central Coast Agri-Buildings
3891 Cienega Road
Hollister, CA 95023

PROJECT: SUN-LAND GARDEN PRODUCTS MACHINERY CANOPY
90 PIONEER ROAD
WATSONVILLE, SANTA CRUZ COUNTY, CALIFORNIA

SUBJECT: Geotechnical Engineering Study

REF.: Proposal for Geotechnical Engineering Study, Sun-Land Garden Products Machinery Canopy, 90 Pioneer Road, Watsonville, Santa Cruz County, California, by Earth Systems Pacific, September 28, 2018.

Dear Mr. Jack Bowlus:

In accordance with your authorization of the above referenced proposal, this geotechnical engineering study has been prepared by Earth Systems Pacific (Earth Systems) for use in the development of plans and specifications for the proposed machinery canopy in Watsonville, California. The conclusions and recommendations presented herein are based on our understanding of the currently proposed development, a review of the subsurface conditions revealed by the soil borings advanced as a part of this investigation, the results of laboratory tests and our engineering analysis.

We appreciate the opportunity to assist you on this project. Should you have any questions regarding the contents of this report, please contact the undersigned.

Sincerely,

Earth Systems Pacific

Kira Ortiz PE 88089
Project Engineer



Ajay Singh, GE 3057
Principal Engineer



Doc. No.: 1809-126.SER/ev



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FIGURES

Figure 1 – Vicinity Map

Figure 2 – Site Plan

APPENDIX A

Boring Logs

APPENDIX B

Laboratory Test Results



1.0 INTRODUCTION

This report presents the results of the geotechnical engineering study performed by Earth Systems Pacific (Earth System), for the planned new machinery canopy at the Sun-Land Garden Products facility in Watsonville, California. The attached Vicinity Map Figure 1, shows the general location of the site and the attached Site Plan, Figure 2, shows the location of the borings advanced at the site as part of this investigation.

Site Setting

The subject property is trapezoidal-shaped and located at 90 Pioneer Road in Watsonville, California. The middle portion of the site has a latitude of 36.9720°N and a longitude of 121.7765°W (See Figure 1).

Site Description

The site is located on the north side of Pioneer Road, approximately 850 feet west of the intersection of Green Valley Road and Pioneer Road in Watsonville, California. The project site is currently occupied by several existing buildings and stockpiles of landscaping material as shown on the attached Site Plan (Figure 2).

Project Description

Based on a preliminary Foundation Plan prepared by Pacific Engineering Group, the canopy will be a pre-engineered open metal structure about 200 feet by 55 feet, and we understand that it will be up to about 35 feet in height. The machinery is currently situated atop a concrete slab and is surrounded by a combination of concrete and asphalt pavement. No new grading, new concrete slabs or underground utilities are planned.

Scope of Services

The scope of work for the geotechnical engineering study included general site reconnaissance, subsurface exploration, laboratory testing, engineering evaluation and analysis of the data collected by Earth Systems, and preparation of this report. The analysis and engineering recommendations presented in the following sections of this report are based on our understanding of the proposed development at the subject site and our experience with projects of a similar nature.



The report and recommendations are intended to comply with the considerations of Section 1803 of the California Building Code (CBC), 2016 Edition, and common geotechnical engineering practice in this area at this time under similar conditions.

Preliminary geotechnical recommendations for site preparation and grading, foundations, and geotechnical observation and testing are presented to guide the development of project plans and specifications. It is our intent that this report be used by the client to form the geotechnical basis of the design of the project as described herein, and in the preparation of plans and specifications.

Detailed evaluation of the site geology and potential geologic hazards, and analyses of the soil for infiltration rates, mold or other microbial content, asbestos, radioisotopes, hydrocarbons, or other chemical properties are beyond the scope of this report. This report also does not address issues in the domain of contractors such as, but not limited to, site safety, loss of volume due to stripping of the site, shrinkage of soils during compaction, excavatability, shoring, temporary slope angles, and construction means and methods. Ancillary features such as temporary access roads, fences, light poles, and non-structural fills are not within our scope and are also not addressed.

To verify that pertinent issues have been addressed and to aid in conformance with the intent of this report, it is requested that final grading and foundation plans be submitted to this office for review. In the event that there are any changes in the nature, design, or locations of improvements, or if any assumptions used in the preparation of this update report prove to be incorrect, the conclusions and recommendations contained herein should not be considered valid unless the changes are reviewed and the conclusions of this update report are verified or modified in writing by the geotechnical engineer. The criteria presented in this update report are considered preliminary until such time as they are verified or modified in writing by the geotechnical engineer in the field during construction.

3.0 FIELD INVESTIGATION

Subsurface Exploration

Our subsurface exploration program consisted of drilling two exploratory borings at the site on August 29, 2018 at the approximate locations shown on the Site Plan, Figure 2. The borings were



drilled using a truck-mounted drilling rig equipped with 6-inch diameter solid stem augers and sampled to depths ranging from 15 to 25 feet below the ground surface (bgs).

The drilling process consisted of augering to the desired depth and upon reaching that depth, the augers were retrieved from the hole and a standard split-spoon sampler connected to steel rods was lowered into the hole. The samplers were driven with a 140-pound, safety hammer falling about 30 inches per drop using a rope and cathead. The samplers were driven up to 18 inches and the hammer blows required to drive the samplers were recorded every six inches and are presented on the boring logs. The sampler was then retrieved to the surface, taken apart, and the brass liners containing the soil samples were examined to assist with logging and selected samples were sealed, labeled and transported to the laboratory for testing. Efforts were made to minimize sample disturbance and moisture losses during sample transportation and storage in the laboratory.

Our staff geologist supervised the drilling program, logged the soil conditions encountered in the borehole and collected representative samples for laboratory testing. Subsurface conditions revealed by our borings were described by our staff engineer. The borings were backfilled with lean cement grout. The boring logs show soil description including: color, major and minor components, USCS classification, changes in soil conditions with depth, moisture content, consistency/density, plasticity, sampler type, and sampling depths and laboratory test results. Copies of the boring logs advanced for this investigation are presented in Appendix A.

Subsurface Profile

A review of the logs of borings drilled at the site by Earth Systems, indicates the near surface soils consist of stiff, moist, fat clay extending to approximately 8 to 9 feet below the ground surface (bgs). Below the upper fat clayey soil, the borings encountered alternating layers of medium dense clayey sand and stiff lean clay with varying sand contents to the maximum depths explored of 25 feet bgs.

Groundwater was encountered during our subsurface exploration at a depth of approximately 20 feet bgs. It should be noted, however, that fluctuations in the level of subsurface water can occur due to variations in rainfall, and temperature, and groundwater levels should not be considered constant.



4.0 DATA ANALYSIS

Subsurface Soil Classification

Based on the data acquired during our subsurface investigation (See Appendix A), the site is assigned to Site Class D (“stiff soil”) as defined by Table 20.3-1 of the ASCE 7-10.

Seismic Design Parameters

The following seismic design parameters represent the general procedure as outlined in Section 1613 of the CBC and in ASCE 7. The values determined below are based on the 2009 National Earthquake Hazard Reduction Program (NEHRP) maps and were obtained using the United States Geological Survey’s Design Maps Web Application.

Summary of Seismic Parameters - CBC 2016
(Site Coordinates 36.9720°N, 121.7765°W)

Parameter	Design Value
Site Class	D
Mapped Short Term Spectral Response Parameter, (S_s)	2.36g
Mapped 1-second Spectral Response Parameter, (S_1)	0.98g
Site Coefficient, (F_a)	1.0
Site Coefficient, (F_v)	1.5
Site Modified Short Term Response Parameter, (S_{MS})	2.36g
Site Modified 1-second Response Parameter, (S_{M1})	1.47g
Design Short Term Response Parameter, (S_{DS})	1.57g
Design 1-second Response Parameter, (S_{D1})	0.98g

Static Settlement

The possibility of settlement is minimized by the light structural loads expected for the proposed improvements. Anticipated static settlements of the onsite native soils are on the order of 1 inch with a differential settlement of ½ inches.

5.0 CONCLUSIONS

General

Based on the results of the field investigation and the laboratory testing program, in our opinion,



the site is geotechnically suitable for the planned new machinery canopy provided that the recommendations contained herein are implemented in the design and construction. The primary geotechnical concerns are the presence of highly expansive surface soils at the site. To reduce the shrinkage and swelling potential, special provisions as those outlined in the following sections of the report will be necessary.

Site Preparation and Grading

Grading plans were not available during the preparation of this report; however, it is anticipated that site grading will consist of removing the existing concrete slab, reworking the native soils, and preparation of the subgrade to receive new foundations.

Soil Expansion Potential

A plasticity index test performed on a sample of the upper soils from the site resulted in a liquid limit (LL) of 55 and a plasticity index of (PI) of 37. These values indicate that the sample tested has a very high expansion potential. Soils with high shrinkage-swelling potential undergo pronounced volume changes with moisture content fluctuations and when constrained they could exert significant uplift forces on the overlying structures.

In our experience, the commonly used engineering measures used to minimize post-construction distress to lightly loaded structures overlying expansive soils include one or a combination of the following:

- Increase the depth of footings to act as a moisture cutoff barrier and extend the footings to depths where moisture fluctuations are anticipated to be less pronounced;
- Pre-expand clays by compacting them at a high degree of saturation and relative compaction in the range of 88 to 92 percent;
- Add a layer of non-expansive soil on top of the expansive soils and place lightly loaded structures on top of the non-expansive soil layer;
- Keep the soils moist until they are covered with concrete; and
- Manage surface water runoff and irrigation water in such a way that it does not have a chance to penetrate the areas around the structures and the hardscape



areas where it could result in creating pronounced moisture content fluctuations in soil.

Foundations

The proposed loads of the canopy may be adequately supported on conventional spread footings. Details of the foundation recommendations are included in the following sections of the report.

Groundwater

Groundwater was encountered in boring B1 during the subsurface exploration at a depth of approximately 20 feet bgs. Variations in rainfall, temperature, and other factors may affect water levels, and therefore groundwater levels should not be considered constant; however, groundwater is not expected to have an adverse effect on the construction of the planned machinery canopy.

Seismicity

The Watsonville area is recognized by geologists and seismologists as one of the most seismically active regions in the United States. The significant earthquakes in this area are generally associated with crustal movement along well-defined, active fault zones which regionally trend in a northwesterly direction. Although research on earthquake prediction has greatly increased in recent years, seismologists cannot predict when and where an earthquake will occur. Nevertheless, based on current technology, it is reasonable to assume that the proposed development will be subjected to at least one moderate to severe earthquake during its lifetime. During such an earthquake, the danger from fault offset on the site is low, but strong shaking of the site is likely to occur and, therefore, the project should be designed in accordance with the seismic design provisions of the latest California Building Code. The California Building Code seismic design parameters are not intended to prevent structural damage during an earthquake, but to reduce damage and minimize loss of life.

6.0 RECOMMENDATIONS

Site Preparation and Grading

General Site Preparation

1. The site area is already covered with an at-grade concrete slab; therefore, no further site



preparation is needed. However, we have included these recommendations herein, in case additional area is prepared to receive a new slab.

2. Site clearing, placement of fill, and grading operations at the site should be conducted in accordance with the recommendations provided in this report. Compaction recommendations for site grading can be found later in this section.
3. The site should be prepared for grading by removing vegetation, debris, and other potentially deleterious materials from areas to receive improvements. Existing utility lines that will not be serving the proposed project should be either removed or abandoned. The appropriate method of utility abandonment will depend upon the type and depth of the utility. Recommendations for abandonment can be made as necessary.
4. Due to potential ground disturbance from demolition activities, a program of over-excavation and backfilling may be required. Loose, disturbed soil within the building areas should be cleaned out (excavated) to competent, undisturbed soil. The exposed ground should be inspected by the geotechnical engineer to determine the need for additional excavation work.
5. Ruts or depressions resulting from the removal of utilities, fill soils, tree root systems, and abandoned and/or buried structures, buried debris, and remnants of the former use of the site that are discovered during site grading should be removed and properly cleaned out down to undisturbed native soil. The bottoms of the resulting depressions should be scarified and cross-scarified at least 8 inches in depth, moisture conditioned and recompacted. The depressions should then be backfilled with approved, compacted, moisture conditioned structural fill, as recommended in other sections of this report.
6. Site clearing, and backfilling operations should be conducted under the field observation of the geotechnical engineer.
7. The geotechnical engineer should be notified at least 48 hours prior to commencement of grading operations.



Compaction Recommendations

1. In general, the underlying native soil should be scarified at least 8 inches, moisture conditioned to a minimum of 3 percent over optimum moisture content and recompacted to relative compaction value ranging between 88 to 92 percent. Relative compaction should be measured relative to the maximum dry density measured using ASTM D1557. This scarification operation should be performed at all locations designated for proposed structural fill, exterior flatwork, foundations, and pavement areas.

Fill Recommendations

1. The on-site native and fill soils that are free of debris, excessive amounts of organics and other deleterious material, may be used as structural fill; however, because these soils are deemed to have high shrinkage/swelling potential, they should not be placed within the upper 18 inches of the subgrade beneath the exterior flatwork.
2. If fill is to be imported for general use at the site as non-expansive imported material, the soil should meet the following criteria:
 - a. Be coarse grained and have a plasticity index of less than 15 and/or an expansion index less than 20;
 - b. Be free of organics, debris or other deleterious material;
 - c. Have a maximum rock size of 3 inches; and
 - d. Contain sufficient clay binder to allow for stable foundation and utility trench excavations.
3. A representative sample of the proposed imported soils should be submitted at least three days before being transported to the site for evaluation by the geotechnical engineer. During importation to the site the material should be further reviewed on an intermittent basis.

Foundations

1. The planned machinery canopy may be supported by conventional spread footings bearing on the stiff native soil or engineered fill material. The footings should have



minimum depths of 24 inches below the lowest adjacent grade or the bottom of the slab. The footing excavations should be clean, free of loose material, and should be observed by the geotechnical engineer prior to placement of formwork or reinforcement. Since the underlying soils are very expansive, footing excavations should be kept moist to avoid any cracking by frequently spraying it with water up until concrete is placed in the excavations.

2. The footings should be designed using a maximum allowable bearing capacity of 1,500 psf dead plus live load. This value may be increased by one-third when transient loads such as wind or seismicity are included.
3. Resistance to lateral loads should be calculated based on a passive equivalent fluid pressure of 250 pcf and a friction factor of 0.30. Passive and frictional resistance can be combined in the calculations without reductions. These values are based on the assumption that backfill adjacent to foundations is properly compacted. The upper 12 inches of embedment should be disregarded.

Surfacewater Drainage Management and Finish Improvements

1. Unpaved ground surfaces should be finish graded to direct surface runoff away from site improvements at a minimum 5 percent grade for a minimum distance of 10 feet. If this is not practical due to the terrain or other site features, swales with improved surfaces should be provided to divert drainage away from improvements. The landscaping should be planned and installed to maintain proper surface drainage conditions.
2. Runoff from driveways, roof gutters, downspouts, planter drains and other improvements should be collected in a closed pipe system which discharge in a non-erosive manner away from foundations, pavements, and other improvements.
3. Stabilization of surface soils, particularly those disturbed during construction, by vegetation or other means during and following construction is essential to protect the site from erosion damage. Care should be taken to establish and maintain vegetation.



4. Raised planter beds adjacent to foundations should be provided with sealed sides and bottoms so that irrigation water is not allowed to penetrate the subsurface beneath foundations. Outlets should be provided in the planters to direct accumulated irrigation water away from foundations.
5. Open areas adjacent to exterior flatwork should be irrigated or otherwise maintained so that constant moisture conditions are created throughout the year. Irrigation systems should be controlled to the minimum levels that will sustain the vegetation without saturating the soil.
6. Bio-retention swales constructed within 10 feet or less from the building foundation should be lined with a 20-mil pond liner.

Geotechnical Observation and Testing

1. It must be recognized that the recommendations contained in this report are based on a limited number of borings and rely on continuity of the subsurface conditions encountered.
2. It is assumed that the geotechnical engineer will be retained to provide consultation during the design phase, to interpret this report during construction, and to provide construction monitoring in the form of testing and observation.
3. Unless otherwise stated, the terms "compacted" and "recompacted" refer to soils placed in level lifts not exceeding 8 inches in loose thickness and compacted to a minimum of 90 percent of maximum dry density. The standard tests used to define maximum dry density and field density should be ASTM D 1557-12 and ASTM D 6938-17, respectively, or other methods acceptable to the geotechnical engineer and jurisdiction.
4. "Moisture conditioning" refers to adjusting the soil moisture to at least 3 percentage points above optimum moisture content prior to application of compactive effort. If the soils are overly moist so that they become unstable, or if the recommended compaction cannot be readily achieved, drying the soil to optimum moisture content or just above may be necessary. Placement of gravel layers or geotextiles may also be necessary to



help stabilize unstable soils. The geotechnical engineer should be contacted for recommendations for mitigating unstable soils.

5. At a minimum, the following should be provided by the geotechnical engineer:
 - Review of final grading and foundation plans,
 - Professional observation during site preparation, grading, and foundation excavation,
 - Oversight of soil compaction testing during grading,
 - Oversight of soil special inspection during grading.

6. Special inspection of grading should be provided as per Section 1705.6 and 1705.8 and Table 1705.6 and 1705.8 of the CBC; the soils special inspector should be under the direction of the geotechnical engineer. In our opinion, the following operations should be subject to *continuous* soils special inspection:
 - Scarification and recompaction,
 - Fill placement and compaction,
 - Foundation pier drilling,
 - Over-excavation to the recommended depth.

7. In our opinion, the following operations may be subject to *periodic* soils special inspection; subject to approval by the Building Official:
 - Site preparation,
 - Compaction of utility trench backfill,
 - Removal of existing development features,
 - Compaction of subgrade and aggregate base,
 - Observation of foundation excavations,
 - Building pad moisture conditioning.



8. It will be necessary to develop a program of quality control prior to beginning grading. It is the responsibility of the owner, contractor, or project manager to determine any additional inspection items required by the architect/engineer or the governing jurisdiction.
9. The locations and frequencies of compaction tests should be as per the recommendations of the geotechnical engineer at the time of construction. The recommended test locations and frequencies may be subject to modification by the geotechnical engineer based upon soil and moisture conditions encountered, the size and type of equipment used by the contractor, the general trend of the compaction test results, and other factors.
10. A preconstruction conference among a representative of the owner, the geotechnical engineer, soils special inspector, the architect/engineer, and contractors is recommended to discuss planned construction procedures and quality control requirements. Earth Systems should be notified at least 48 hours prior to beginning grading operations.

7.0 CLOSURE

This report is valid for conditions as they exist at this time for the type of project described herein. Our intent was to perform the investigation in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing in the locality of this project at this time under similar conditions. No representation, warranty, or guarantee is either expressed or implied. This report is intended for the exclusive use by the client as discussed in the Scope of Services section. Application beyond the stated intent is strictly at the user's risk.

If changes with respect to the project type or location become necessary, if items not addressed in this report are incorporated into plans, or if any of the assumptions stated in this report are not correct, Earth Systems should be notified for modifications to this report. Any items not specifically addressed in this report should comply with the California Building Code and the requirements of the governing jurisdiction.

The preliminary recommendations of this report are based upon the geotechnical conditions encountered during the investigation and may be augmented by additional requirements of the



architect/engineer, or by additional recommendations provided by this firm based on conditions exposed at the time of construction.

If Earth Systems is not retained to provide construction observation and testing services, it will not be responsible for the interpretation of the information by others or any consequences arising there from.

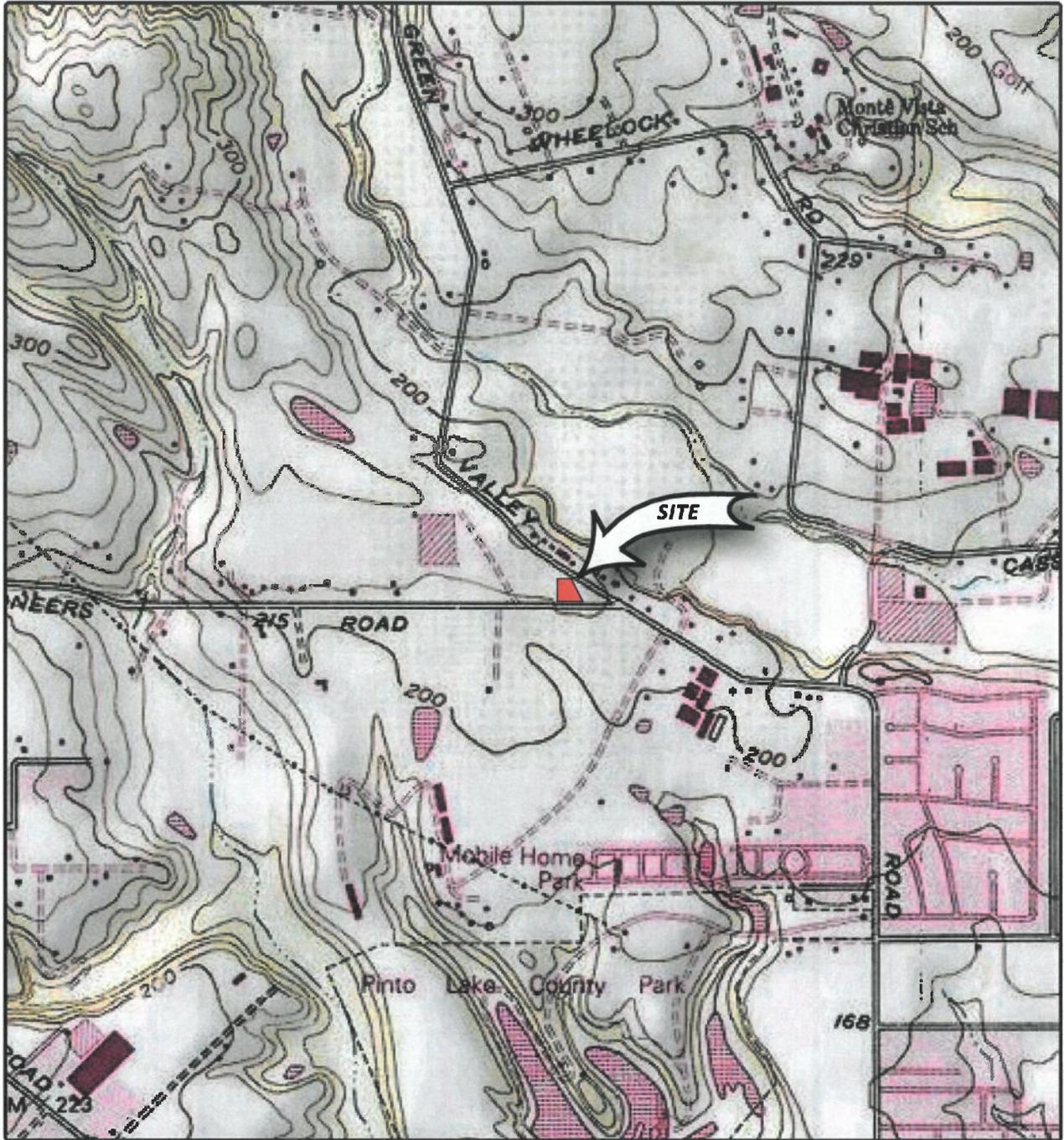
This document, the data, conclusions, and recommendations contained herein are the property of Earth Systems. This report should be used in its entirety, with no individual sections reproduced or used out of context. Copies may be made only by Earth Systems, the client, and his authorized agents for use exclusively on the subject project. Any other use is subject to federal copyright laws and the written approval of Earth Systems.

FIGURES

Figure 1 - Vicinity Map

Figure 2 - Site Plan

TN
MN
13.2



Approximate Scale 1: 24,000



Base: USGS 7.5 Minute Series, Cordelia Quadrangle (2015)

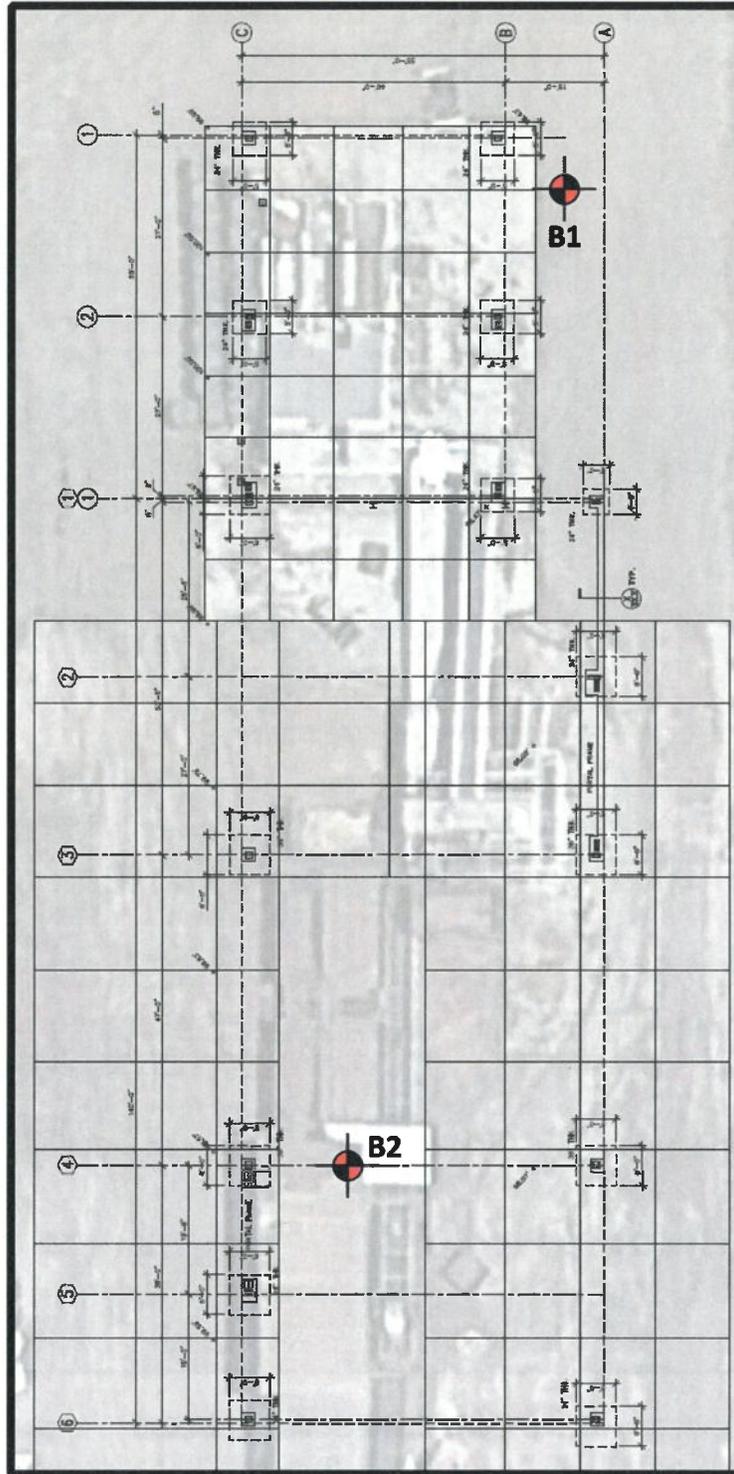


Earth Systems Pacific

Sun-Land Garden Machinery Canopy
90 Pioneer Road
Watsonville,

Vicinity Map

302452-001



 **B2** Approximate boring location

Base: Pacific Engineering Group, Inc. (date unknown)



Earth Systems Pacific

Sun-Land Garden Machinery Canopy
90 Pioneer Road
Watsonville, California

Site Plan
302452-001

APPENDIX A

Boring Logs



Earth Systems Pacific

LOGGED BY D. Teimoorian
 DRILL RIG SIMCO 2400 S-1
 AUGER TYPE Solid Stem Auger

Boring No. 1
 PAGE 1 OF 1
 JOB NO. 02452-001
 DATE 8/29/18

DEPTH (feet)	SCS CLASS	SYMBOL	Sun-Land Garden Products Machinery Canopy 90 Pioneer Road Watsonville, Santa Cruz County, California	SAMPLE DATA						
				INTERVAL (feet)	SAMPLE NUMBER	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER IN.	POCKET PEN (lb.s)
0			SOIL DESCRIPTION							
0 - 1			AC-2.5", AB-2.0"							
1 - 2	CH		FAT CLAY; stiff, olive brown, moist, few fine sand							
2 - 3			- grayish brown, very moist, oxidation [LL = 55; PI = 18]	1.5-3.0	1-1		102.7	21.7	5	6
3 - 4			- moist, less oxidation						9	
4 - 5				3.5-5.0	1-2		103.5	21.0	4	9
5 - 6									13	
6 - 7										
7 - 8										
8 - 9	SC		CLAYEY SAND; medium dense, gray brown, moist, mostly fine to medium sand, few fine gravel, free water on gravels, oxidized							
9 - 10				8.5-10.0	1-3				9	11
10 - 11									14	
11 - 12										
12 - 13										
13 - 14	SP-SC		POORLY graded SAND with CLAY; medium dense, orange brown, wet, fine sand							
14 - 15				13.5-15.0	1-4				6	5
15 - 16	CL		LEAN CLAY; stiff, orange brown, very moist						6	
16 - 17										
17 - 18										
18 - 19	CL		SANDY LEAN CLAY; stiff, light gray brown, very moist, fine to medium sand							
19 - 20				18.5-20.0	1-5				3	5
20 - 21									11	
21 - 22										
22 - 23										
23 - 24	SC		CLAYEY SAND; medium dense, dark orange brown, very moist, fine to medium sand							
24 - 25				23.5-25.0	1-6				4	5
25 - 26			Bottom of boring at 25.0' Groundwater encountered at 20.0'						10	

LEGEND 2.5" Mod CaSam 2.0" CaSam SPT Borehole Groundwater

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.



LOGGED BY D. Teimoorian
 DRILL RIG SIMCO 2400 S-1
 AUGER TYPE 1" Solid Stem Auger

PAGE 1 OF 1
 JOB NO. 02452-001
 DATE 8/29/8

DEPTH (feet)	SCS CLASS	SYMBOL	Sun-Land Garden Products Machinery Canopy 90 Pioneer Road Watsonville, Santa Cruz County, California	SAMPLE DATA						
				INTERVAL (feet)	SAMPLE NUMBER	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER IN.	POCKET PEN (lb.s)
0			Concrete - 3.5", AB - 4.00"							
0.5 - 5.0	CH		FAT CLAY; stiff, dark brown, moist, few fine sand, slightly oxidized	0.5-5.0	2-1	○	107.5	18.6	5 6 10	
3.5 - 5.0			- very stiff, less oxidation	3.5-5.0	2-2	■	109.7	19.7	6 11 19	
8.5 - 10.0	SC		CLAYEY SAND, medium dense, orange brown, moist, fine to medium sand	8.5-10.0	2-3	●			9 10 10	
13.5 - 15.0				13.5-15.0	2-4	●			4 5 6	
15.0 - 16.0			Bottom of boring at 15.0' Groundwater not encountered							

LEGEND: 2.5" Mod CaSam 2.0" CaSam SPT Borehole Sample Groundwater

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.

APPENDIX B

Laboratory Test Results



Sun-Land Garden Products Canopy

302452-001

BULK DENSITY TEST RESULTS

ASTM D 2937-17 (modified for ring liners)

September 19, 2018

BORING NO.	DEPTH feet	MOISTURE CONTENT, %	WET DENSITY, pcf	DRY DENSITY, pcf
1-1	2.5 - 3.0	21.7	125.0	102.7
1-2	4.5 - 5.0	21.0	125.2	103.5
2-1	2.5 - 3.0	18.6	127.4	107.5
2-2	4.5 - 5.0	19.7	131.2	109.7



PLASTICITY INDEX

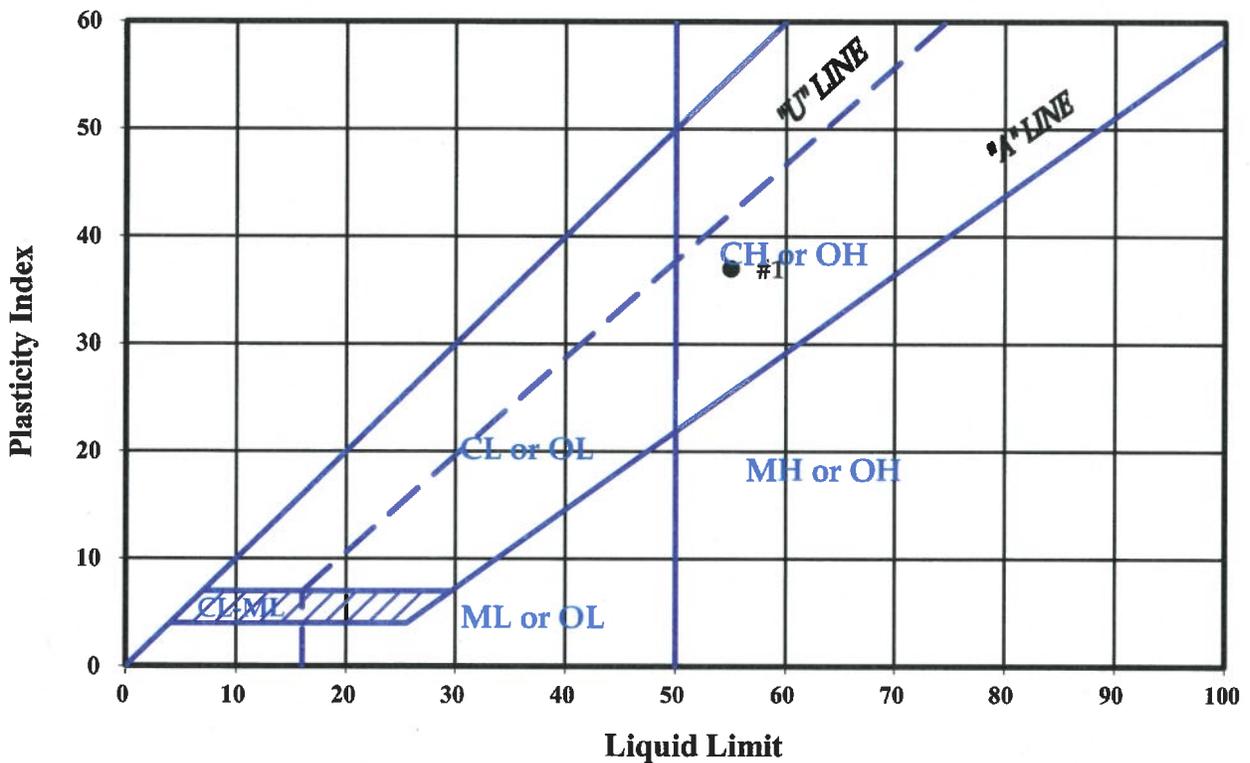
ASTM D 4318-17

Light Olive Brown Fat Clay (CH)

September 19, 2018

Test No.:	1	2	3	4	5
Boring No.:	B1-1				
Sample Depth:	2.5 - 3.0'				
Liquid Limit:	55				
Plastic Limit:	18				
Plasticity Index:	37				

Plasticity Chart



**Attachment 8. Figure SWM-17 Runoff Detention by
Modified Rational Method**

RUNOFF DETENTION BY THE MODIFIED RATIONAL METHOD

Data Entry: PRESS TAB & ENTER DESIGN VALUES SS Ver: 1.0

Site Location P60 Isoleth: 1.43 Fig. SWM-2 in County Design Criteria
 Rational Coefficients Cpre: 0.35 See note # 2
 Cpost: 0.70 See note # 2
 Impervious Area: 384987 ft² See note # 2 and # 4

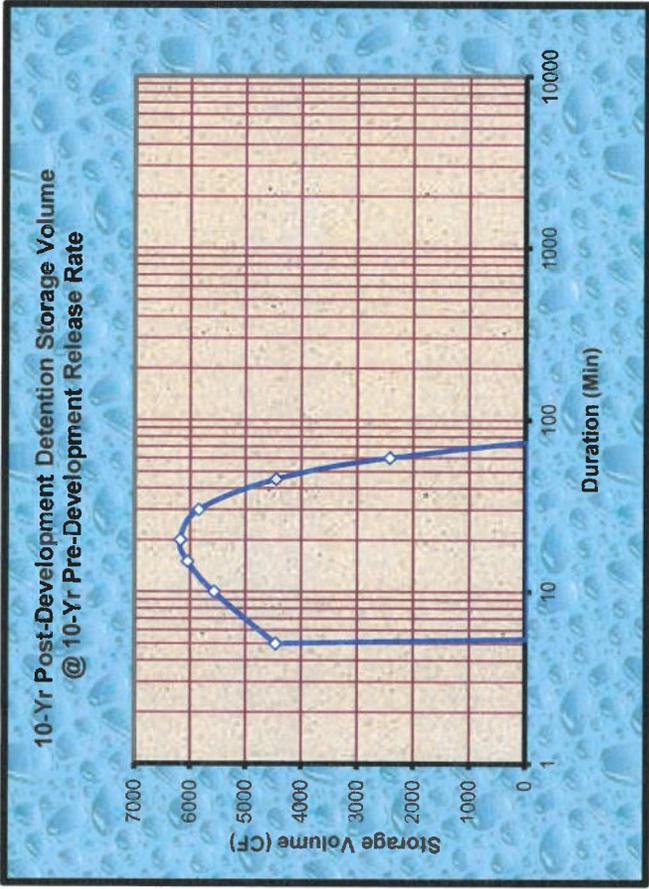
STRUCTURE DIMENSIONS FOR DETENTION

6180 ft³ storage volume calculated
 100 % void space assumed
 6180 ft³ excavated volume needed

Structure Ratios	Length	Width*	Depth*
	100.00	25.00	1.50
Dimen. (ft)	118.12	29.53	1.77

*For pipe, use the square root of the sectional area

10 - YEAR DESIGN STORM				DETENTION @ 15 MIN.	
Storm Duration (min)	10 - Year Intensity (in/hr)	10 - Yr. Release Qpre (cfs)	10 - Year Qpost (cfs)	Detention Rate To Storage (cfs)	Specified Storage Volume (cf)
1440	0.24	0.751	1.502	-3.872	-418149
1200	0.26	0.812	1.625	-3.749	-337403
960	0.29	0.894	1.789	-3.585	-258109
720	0.32	1.013	2.025	-3.349	-180825
480	0.39	1.206	2.412	-2.962	-106624
360	0.44	1.365	2.730	-2.643	-71368
240	0.52	1.626	3.252	-2.122	-38191
180	0.59	1.841	3.681	-1.692	-22846
120	0.70	2.192	4.385	-0.989	-8901
90	0.80	2.482	4.964	-0.410	-2768
60	0.95	2.956	5.912	0.538	2422
45	1.07	3.346	6.693	1.319	4451
30	1.28	3.986	7.971	2.597	5844
20	1.52	4.747	9.494	4.120	6180
15	1.72	5.374	10.747	5.374	6045
10	2.05	6.400	12.800	7.427	5570
5	2.77	8.629	17.259	11.885	4457



Notes & Limitations on Use:

- 1) The modified rational method, and therefore the standard calculations are applicable in watersheds up to 20 acres in size.
- 2) Required detention volume determinations shall be based on all net new impervious area both on and off-site, resulting from the proposed project. Pervious areas shall not be included in detention volume sizing; an exception may be made for incidental pervious areas less than 10% of the total area.
- 3) Gravel packed detention chambers shall specify on the plans, aggregate that is washed, angular, and uniformly graded (of single size), assuring void space not less than 35%.
- 4) A map showing boundaries of both regulated impervious areas and actual drainage areas routed to the hydraulic control structure of the detention facility is to be provided, clearly distinguishing between the two areas, and noting the square footage.
- 5) The EPA defines a class V injection well as any bored, drilled, or driven shaft, or dug hole that is deeper than its widest surface dimension, or an improved sinkhole, or a subsurface fluid distribution system. Such storm water drainage wells are "authorized by rule". For more information on these rules, contact the EPA. A web site link is provided from the County DPW Stormwater Management web page.
- 6) Refer to the County of Santa Cruz Design Criteria, for complete method criteria.

RUNOFF DETENTION BY THE MODIFIED RATIONAL METHOD

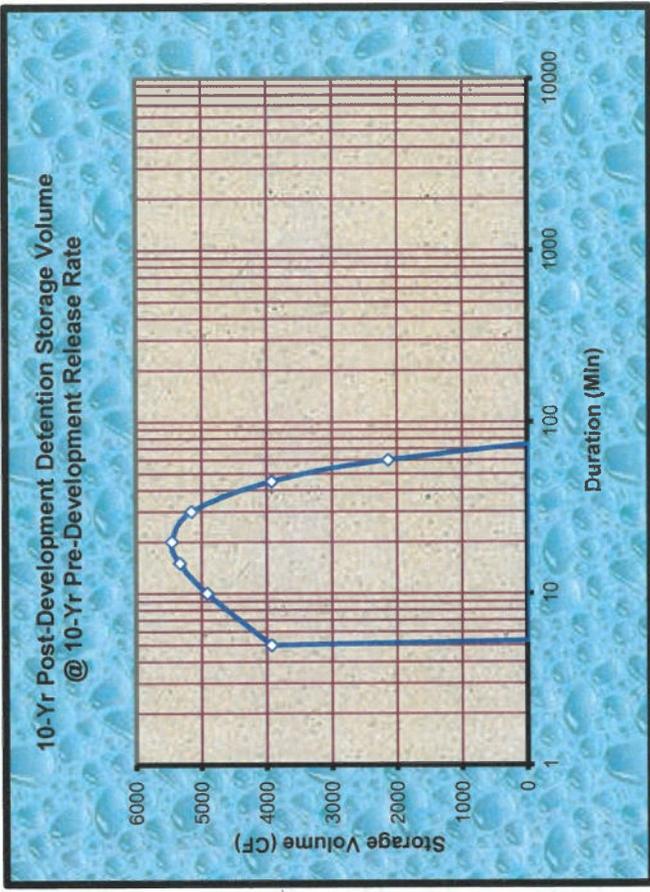
Data Entry: **PRESS TAB & ENTER DESIGN VALUES** SS Ver: 1.0

Site Location P60 Isoleth:	1.43	Fig. SWM-2 in County Design Criteria
Rational Coefficients Cpr:	0.35	See note # 2
Cpost:	0.70	See note # 2
Impervious Area:	339539 ft ²	See note # 2 and # 4

STRUCTURE DIMENSIONS FOR DETENTION

5450	ft ³ storage volume calculated		
100	% void space assumed		
5450	ft ³ excavated volume needed		
Structure Ratios	Length	Width*	Depth*
	100.00	25.00	1.50
Dimen. (ft)	113.27	28.32	1.70

*For pipe, use the square root of the sectional area



Notes & Limitations on Use:

- 1) The modified rational method, and therefore the standard calculations are applicable in watersheds up to 20 acres in size.
- 2) Required detention volume determinations shall be based on all net new impervious area both on and off-site, resulting from the proposed project. Pervious areas shall not be included in detention volume sizing; an exception may be made for incidental pervious areas less than 10% of the total area.
- 3) Gravel packed detention chambers shall specify on the plans, aggregate that is washed, angular, and uniformly graded (of single size), assuring void space not less than 35%.
- 4) A map showing boundaries of both regulated impervious areas and actual drainage areas routed to the hydraulic control structure of the detention facility is to be provided, clearly distinguishing between the two areas, and noting the square footage.
- 5) The EPA defines a class V injection well as any bored, drilled, or driven shaft, or dug hole that is deeper than its widest surface dimension, or an improved sinkhole, or a subsurface fluid distribution system. Such storm water drainage wells are "authorized by rule". For more information on these rules, contact the EPA. A web site link is provided from the County DPW Stormwater Management web page.
- 6) Refer to the County of Santa Cruz Design Criteria, for complete method criteria.

Storm Duration (min)	10 - Yr. DESIGN STORM			DETENTION @ 15 MIN.	
	10 - Year Intensity (in/hr)	Release Qpre (cfs)	10 - Year Qpost (cfs)	Detention Rate To Storage (cfs)	Specified Storage Volume (cf)
1440	0.24	0.662	1.325	-3.415	-368786
1200	0.26	0.716	1.433	-3.306	-297572
960	0.29	0.789	1.578	-3.162	-227639
720	0.32	0.893	1.786	-2.953	-159479
480	0.39	1.064	2.127	-2.612	-94037
360	0.44	1.204	2.408	-2.331	-62943
240	0.52	1.434	2.868	-1.871	-33682
180	0.59	1.623	3.247	-1.492	-20149
120	0.70	1.934	3.867	-0.872	-7850
90	0.80	2.189	4.378	-0.362	-2441
60	0.95	2.607	5.214	0.475	2136
45	1.07	2.951	5.902	1.163	3926
30	1.28	3.515	7.030	2.291	5154
20	1.52	4.186	8.373	3.634	5450
15	1.72	4.739	9.479	4.739	5332
10	2.05	5.645	11.289	6.550	4912
5	2.77	7.611	15.221	10.482	3931

**Attachment 9. Figure SWM-24 Runoff Retention by
Storage Percolation Method**

RUNOFF RETENTION BY THE STORAGE PERCOLATION METHOD

Data Entry: **PRESS TAB KEY & ENTER DESIGN VALUES** Notes & Limitations on Use:

SS Ver:1.0

Site Location P60 Isoleth: **1.43** Fig. SWM-2
 Rational Coefficients Cpre: **0.35**
 Cpost: **0.70**
 Impervious Area: **384987** ft²
 Saturated Soil Permeability: **0.03** in/hr

Saturated soil permeability values may be used conservatively from the USDA-NRCS soil survey, or use actual test values.
 Site selection and design shall give proper consideration to the path for excess flows downstream of the designated retention area.
 Retention site location on, or immediately above, slopes exceeding 15% will require consulting a geotechnical engineer.
 Gravel packed structures shall use washed, angular, uniformly graded aggregate providing not less than 35% void space.
 Refer to the County of Santa Cruz Design Criteria, Stormwater Management - Section H, for complete method criteria.

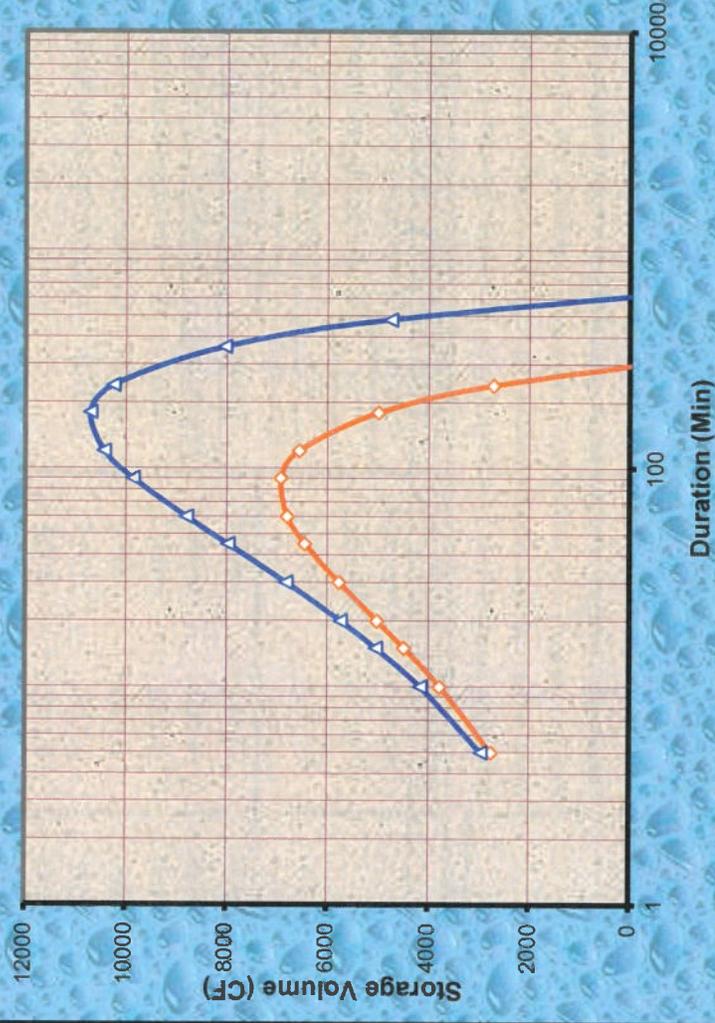
2 - YEAR DESIGN STORM				RETENTION @ 120 MIN.			STRUCTURE DIMENSIONS FOR RETENTION			DETENTION @ 60 MIN.			
Storm Duration (min)	2 - Year Intensity (in/hr)	Qpre (cfs)	Qpost (cfs)	Retention Rate To Storage (cfs)	Specified Retained Volume (cf)	10695 ft ³ storage volume calculated	% void space assumed	Detention Rate To Storage (cfs)	Specified Detained Volume (cf)	Structure Length	Width* Depth* #	Storage (cfs)	Volume (cf)
1440	0.15	0.478	0.957	-0.442	-36855	100	100.00	-0.929	-80295	100.00	25.00	1.50	-80295
1200	0.17	0.518	1.035	-0.363	-24967	10695	141.81	-0.851	-61272	141.81	35.45	2.13	-61272
960	0.18	0.570	1.140	-0.259	-13832	5782	ft ² internal surface area	-0.746	-42989	5782			-42989
720	0.21	0.645	1.290	-0.108	-3743	4047	ft ² effective surface area	-0.596	-25731	4047			-25731
480	0.25	0.769	1.537	0.139	4746	1057.0	hrs estimated structure drainage time	-0.349	-10045	1057.0			-10045
360	0.28	0.870	1.741	0.342	8032			-0.146	-3143				-3143
240	0.33	1.037	2.073	0.675	10238			0.187	2699				2699
180	0.38	1.174	2.348	0.949	10695			0.462	4985				4985
120	0.45	1.398	2.797	1.398	10424			0.911	6556				6556
90	0.51	1.583	3.166	1.768	9852			1.280	6914				6914
60	0.60	1.886	3.772	2.374	8789			1.886	6790				6790
45	0.68	2.135	4.271	2.873	7964			2.385	6439				6439
30	0.82	2.544	5.088	3.690	6807			3.202	5763				5763
20	0.97	3.031	6.061	4.663	5728			4.175	5010				5010
15	1.10	3.431	6.862	5.464	5030			4.976	4479				4479
10	1.31	4.088	8.175	6.777	4156			6.289	3773				3773
5	1.77	5.513	11.027	9.628	2949			9.140	2742				2742

* For pipe, use the square root of the sectional area.
 # If cell values displayed are corrupted, enter zero for depth, then re-enter a positive numeric value within allowed range.

STRUCTURE DIMENSIONS FOR DETENTION

6914	ft ³ storage volume calculated
100	% void space assumed
6914	ft ³ excavated volume needed
Structure Length	Width* Depth*
Ratios	25.00 3.00 2.00
Dimen. (ft)	89.64 10.76 7.17

2 - Year Retention or Detention Storage Volume



RUNOFF RETENTION BY THE STORAGE PERCOLATION METHOD

Data Entry: PRESS TAB KEY & ENTER DESIGN VALUES Notes & Limitations on Use:

SS Ver:1.0

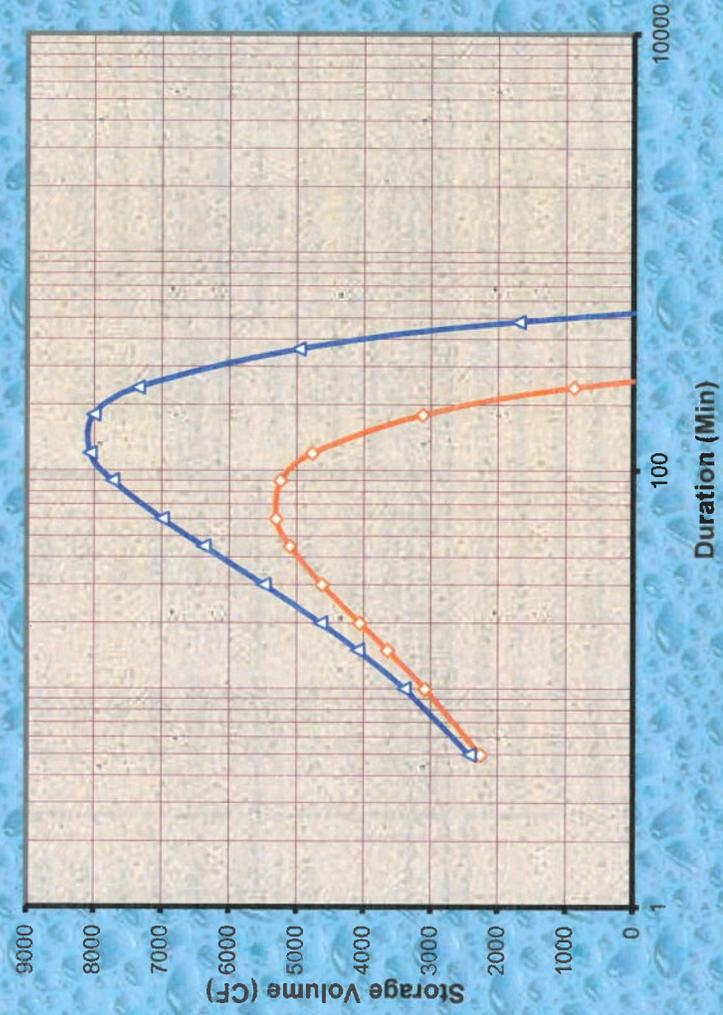
Site Location P60 Isoleth: 1.43 Fig. SWM-2
 Rational Coefficients Cpre: 0.35
 Cpost: 0.66
 Impervious Area: 339539 ft²
 Saturated Soil Permeability: 0.03 in/hr

Saturated soil permeability values may be used conservatively from the USDA-NRCS soil survey, or use actual test values.
 Site selection and design shall give proper consideration to the path for excess flows downstream of the designated retention area.
 Retention site location on, or immediately above, slopes exceeding 15% will require consulting a geotechnical engineer.
 Gravel packed structures shall use washed, angular, uniformly graded aggregate providing not less than 35% void space.
 Refer to the County of Santa Cruz Design Criteria, Stormwater Management - Section H, for complete method criteria.

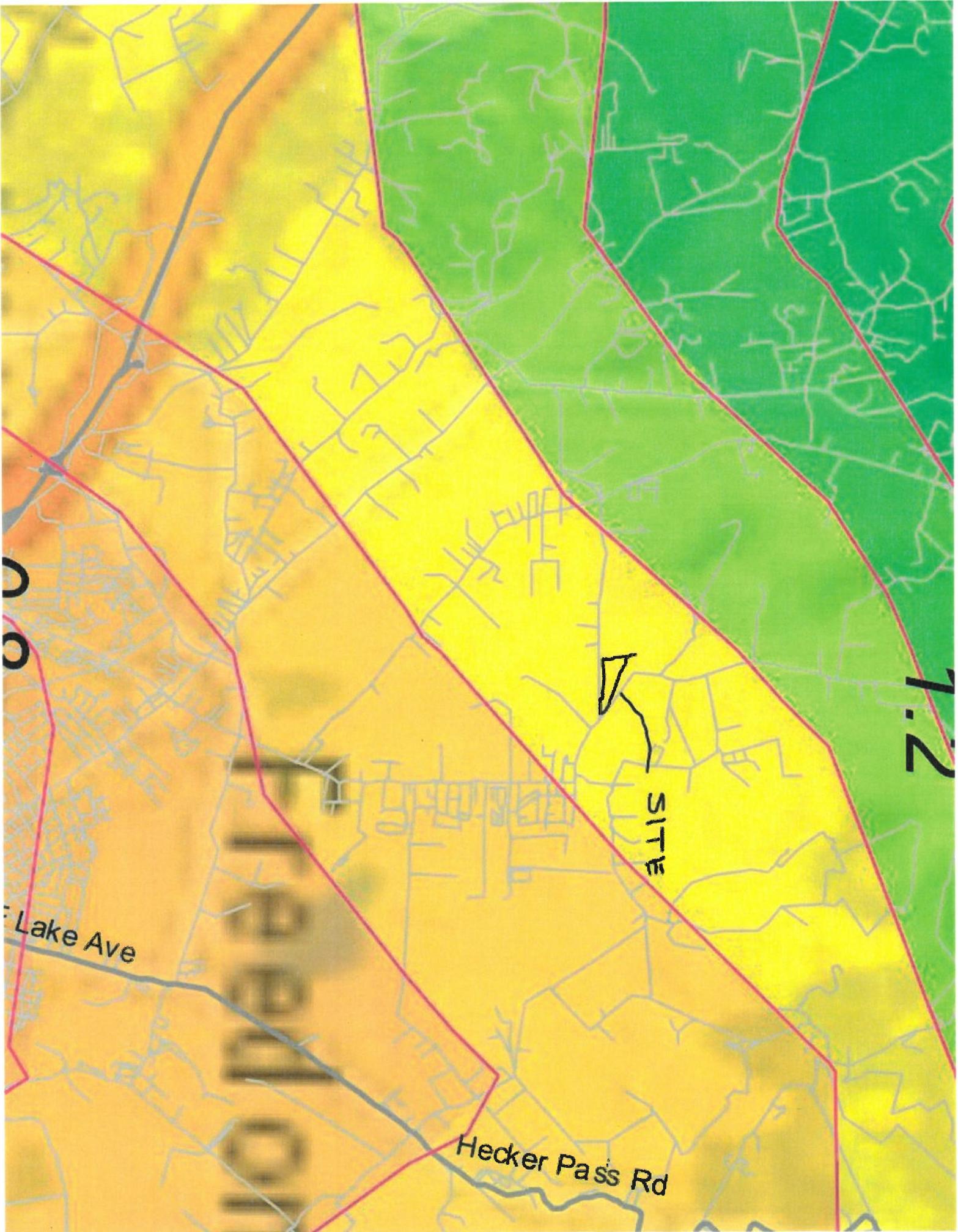
2 - YEAR DESIGN STORM				RETENTION @ 120 MIN.			STRUCTURE DIMENSIONS FOR RETENTION			DETENTION @ 60 MIN.			
Storm Duration (min)	2 - Year Intensity (in/hr)	Qpre (cfs)	Qpost (cfs)	Retention Rate To Storage (cfs)	Specified Retained Volume (cf)	8057 ft ³ storage volume calculated	8057 % void space assumed	Structure Ratios	Length	Width*	Depth* #	Detention Rate To Storage (cfs)	Specified Detained Volume (cf)
1440	0.15	0.422	0.796	-0.438	-37122				25.00	12.50	1.00	-0.868	-74982
1200	0.17	0.456	0.861	-0.373	-26187			Dimen. (ft)	73.85	36.93	2.95	-0.803	-57795
960	0.18	0.503	0.948	-0.286	-15876			3382	ft ² internal surface area			-0.716	-41223
720	0.21	0.569	1.073	-0.160	-6427			2367	ft ² effective surface area			-0.590	-25503
480	0.25	0.678	1.278	0.045	1698			1361.4	hrs estimated structure drainage time			-0.385	-11091
360	0.28	0.768	1.447	0.214	4969							-0.216	-4667
240	0.33	0.914	1.724	0.491	7348							0.061	875
180	0.38	1.035	1.952	0.719	8003							0.289	3119
120	0.45	1.233	2.326	1.092	8057							0.662	4768
90	0.51	1.396	2.633	1.400	7723							0.970	5236
60	0.60	1.663	3.137	1.903	6984							1.473	5304
45	0.68	1.883	3.552	2.318	6371							1.888	5098
30	0.82	2.244	4.231	2.998	5485							2.567	4621
20	0.97	2.673	5.040	3.807	4640							3.377	4052
15	1.10	3.026	5.707	4.473	4087							4.043	3639
10	1.31	3.605	6.798	5.565	3388							5.135	3081
5	1.77	4.862	9.169	7.936	2414							7.506	2252

* For pipe, use the square root of the sectional area.
 # If cell values displayed are corrupted, enter zero for depth, then re-enter a positive numeric value within allowed range.

2 - Year Retention or Detention Storage Volume



Attachment 10. 85th percentile rainfall depth map



00

1-2

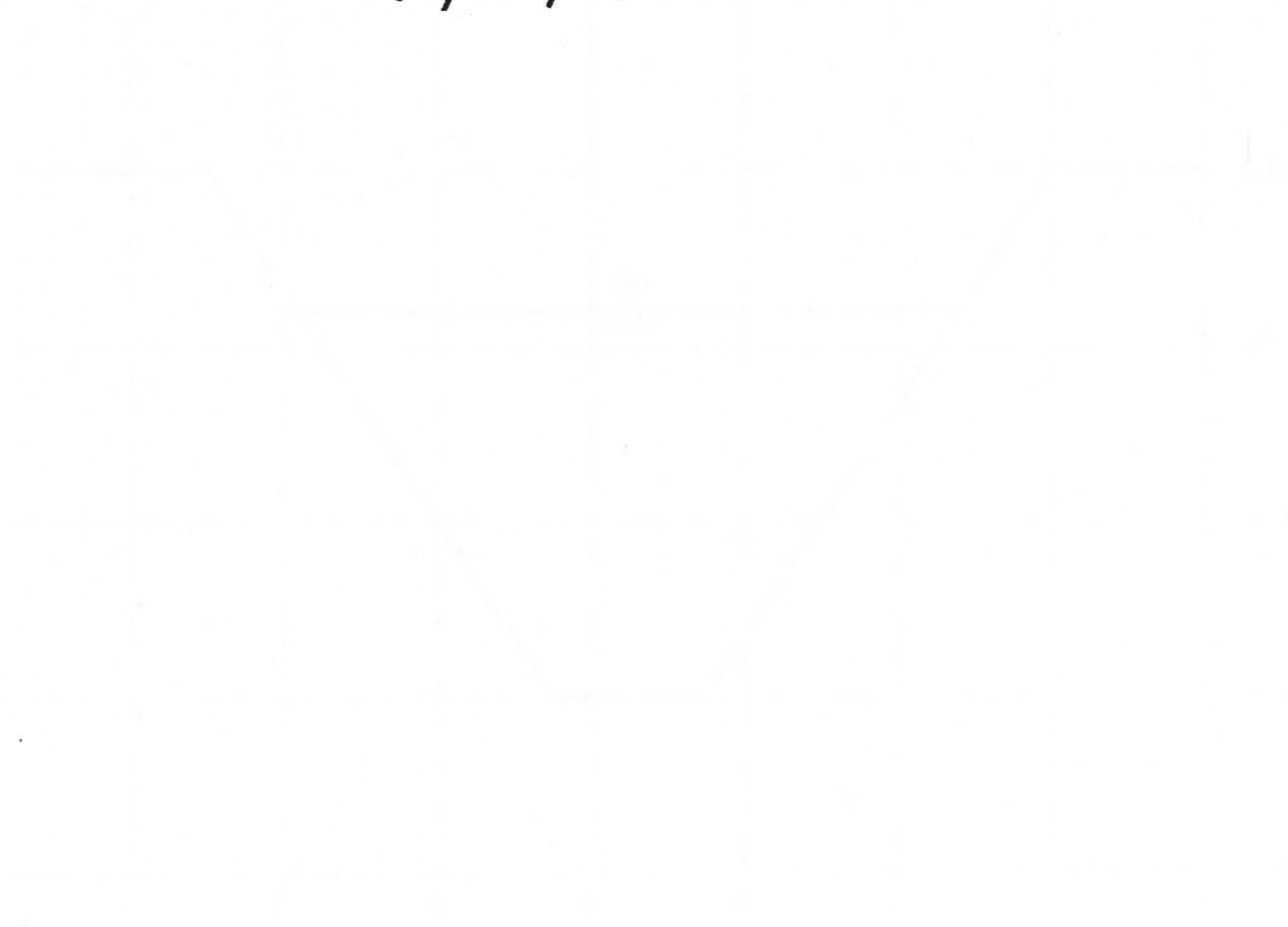
Lake Ave

Hecker Pass Rd

Hecker Pass Rd

SITE

Attachment 11. Hydraflow Express Results for 10-year, 15-min Flow



Channel Report

CH-5 to CH-7

Trapezoidal

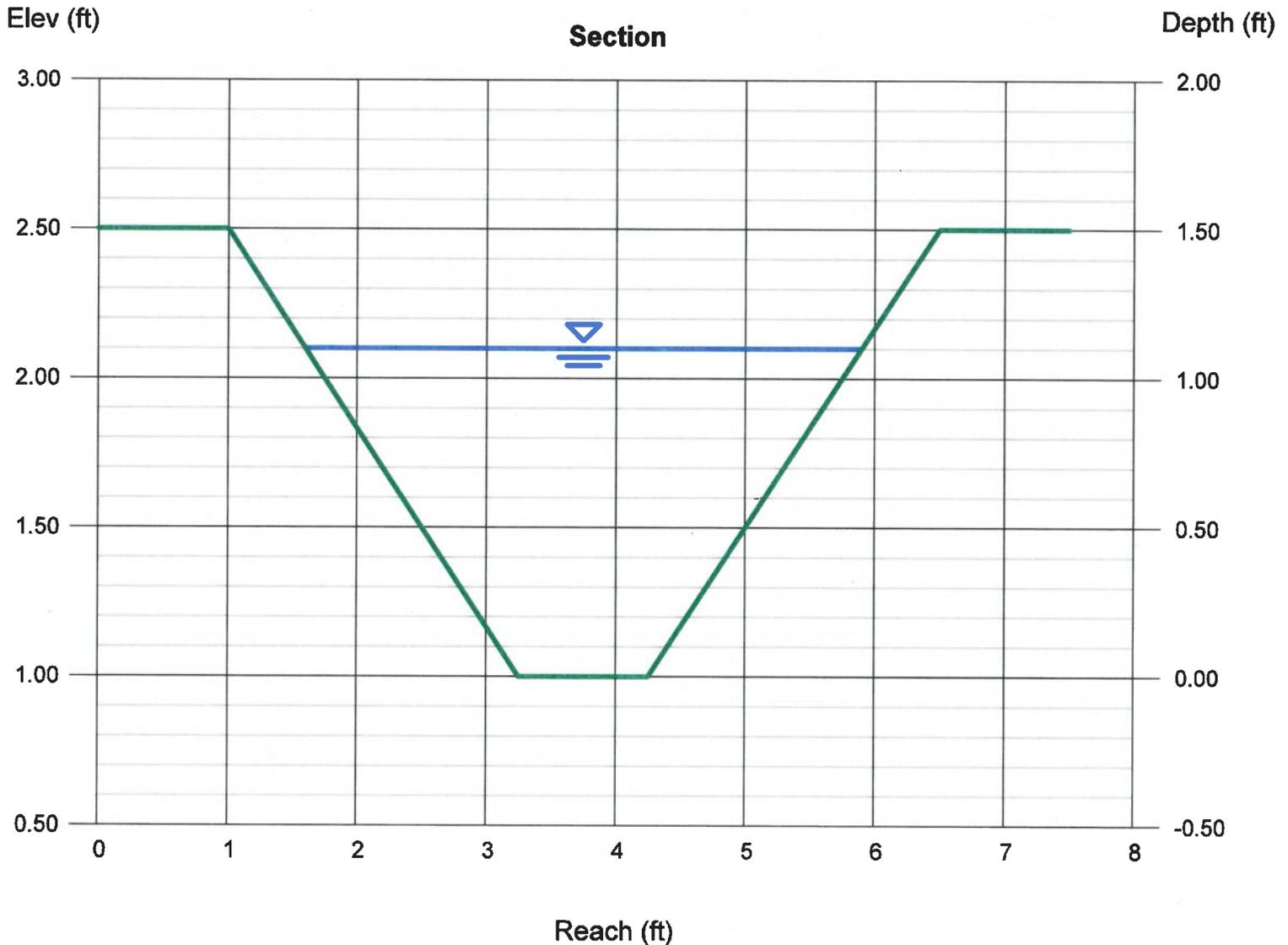
Bottom Width (ft) = 1.00
Side Slopes (z:1) = 1.50, 1.50
Total Depth (ft) = 1.50
Invert Elev (ft) = 1.00
Slope (%) = 0.01
N-Value = 0.030

Highlighted

Depth (ft) = 1.10
Q (cfs) = 1.000
Area (sqft) = 2.91
Velocity (ft/s) = 0.34
Wetted Perim (ft) = 4.97
Crit Depth, Yc (ft) = 0.28
Top Width (ft) = 4.30
EGL (ft) = 1.10

Calculations

Compute by: Known Q
Known Q (cfs) = 1.00



Channel Report

CH-12

Trapezoidal

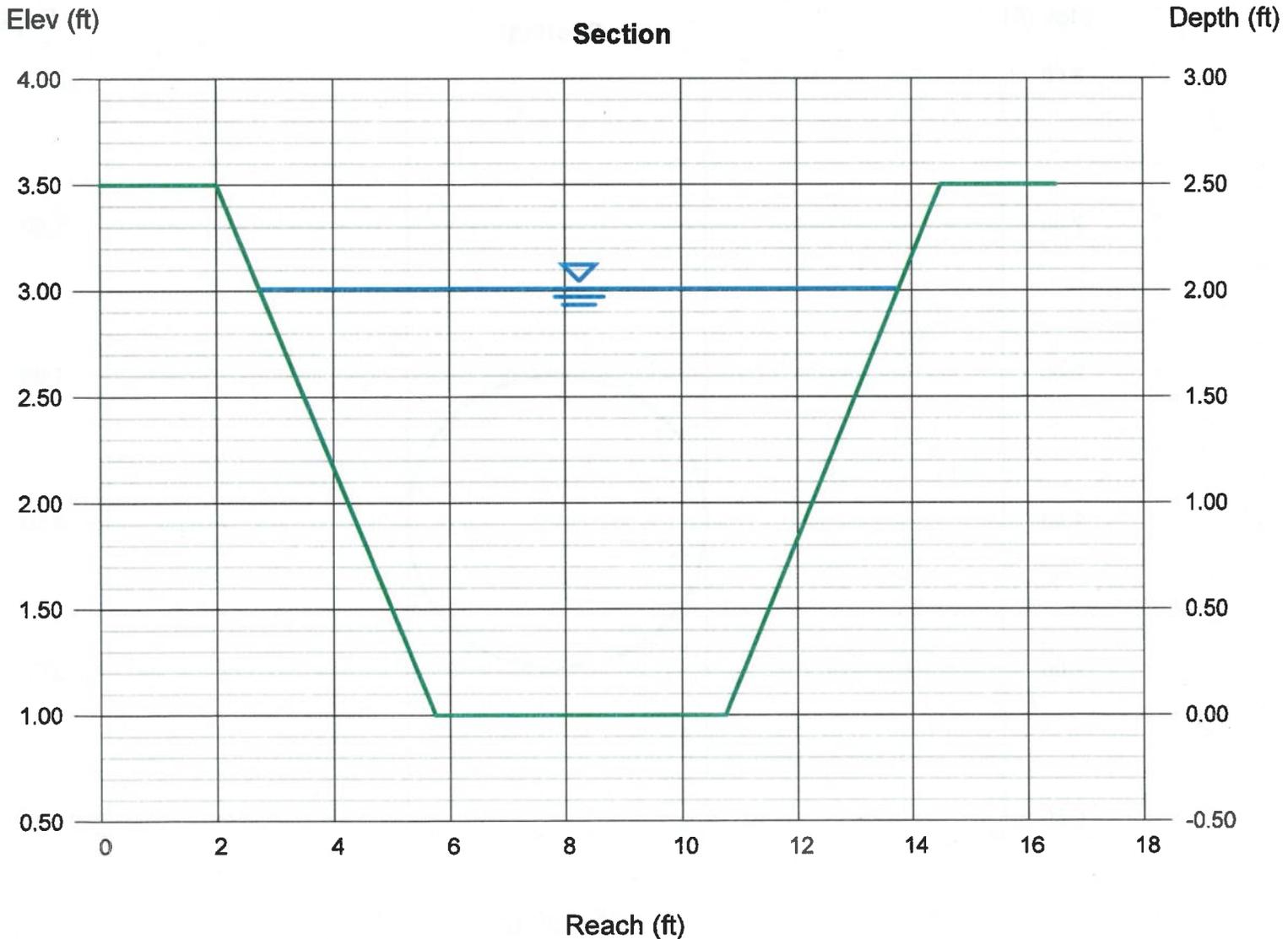
Bottom Width (ft) = 5.00
Side Slopes (z:1) = 1.50, 1.50
Total Depth (ft) = 2.50
Invert Elev (ft) = 1.00
Slope (%) = 0.01
N-Value = 0.030

Highlighted

Depth (ft) = 2.01
Q (cfs) = 9.500
Area (sqft) = 16.11
Velocity (ft/s) = 0.59
Wetted Perim (ft) = 12.25
Crit Depth, Yc (ft) = 0.46
Top Width (ft) = 11.03
EGL (ft) = 2.02

Calculations

Compute by: Known Q
Known Q (cfs) = 9.50



Pipe Report

P-12

Circular

Diameter (ft) = 1.00

Invert Elev (ft) = 1.00

Slope (%) = 1.09

N-Value = 0.009

Calculations

Compute by: Q vs Depth

No. Increments = 5

Highlighted

Depth (ft) = 1.00

Q (cfs) = 5.370

Area (sqft) = 0.79

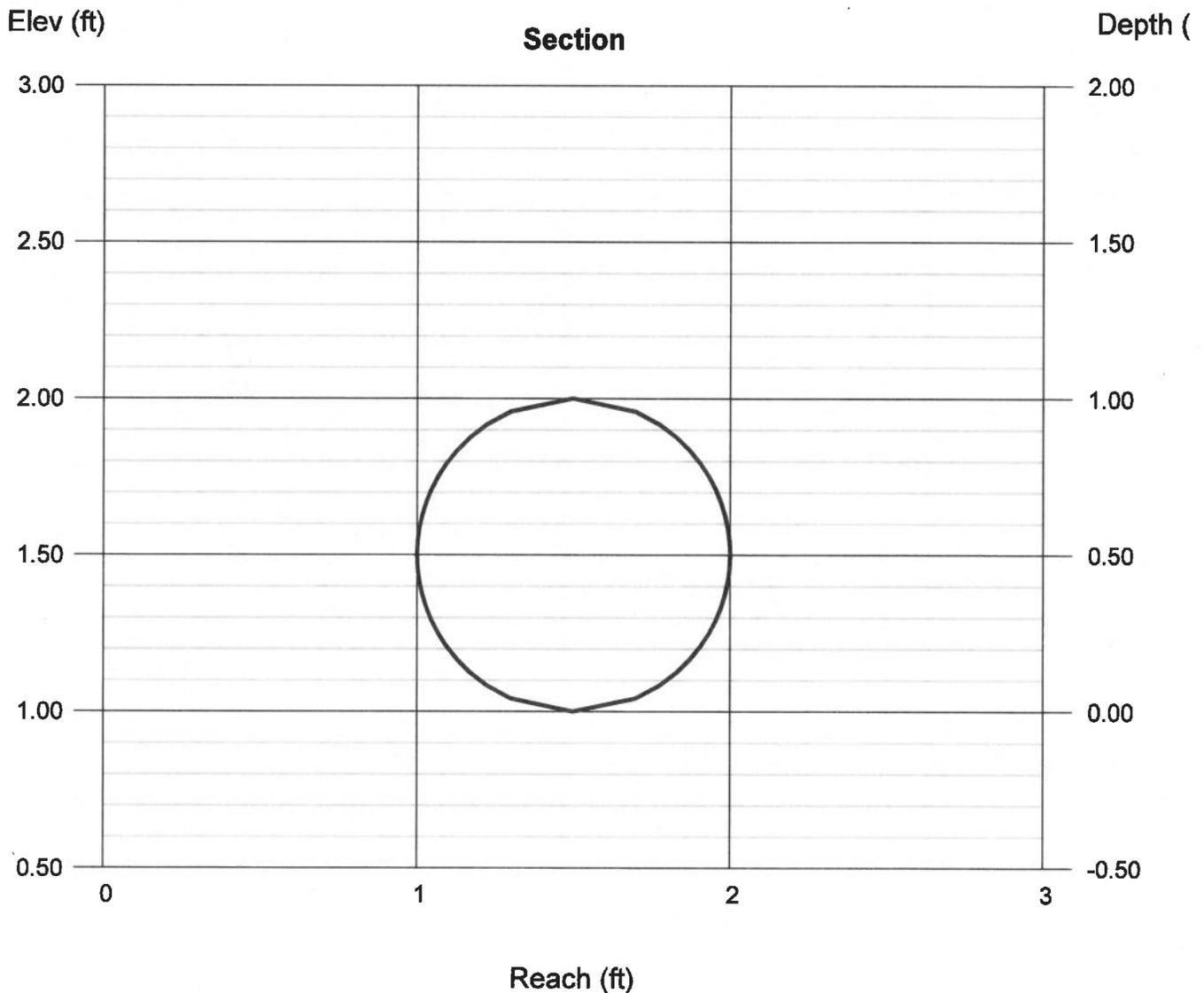
Velocity (ft/s) = 6.84

Wetted Perim (ft) = 3.14

Crit Depth, Y_c (ft) = 0.94

Top Width (ft) = 0.00

EGL (ft) = 1.73



**Attachment 12. Hydraflow Express Results for
25-year Flood Event**

Pipe Report

P-14

Circular

Diameter (ft) = 1.00

Invert Elev (ft) = 1.00

Slope (%) = 0.15

N-Value = 0.009

Calculations

Compute by: Q vs Depth

No. Increments = 5

Highlighted

Depth (ft) = 1.00

Q (cfs) = 1.992

Area (sqft) = 0.79

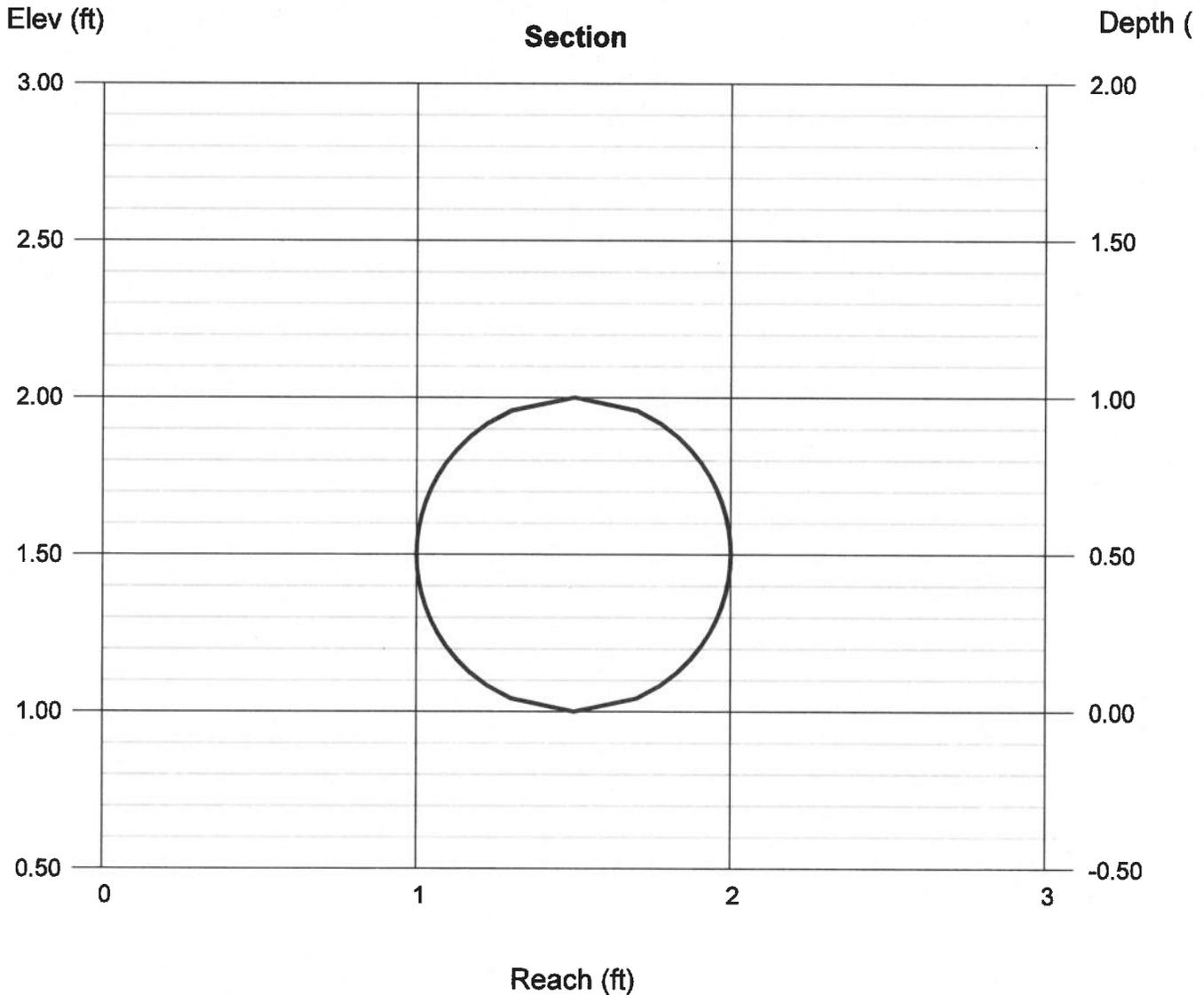
Velocity (ft/s) = 2.54

Wetted Perim (ft) = 3.14

Crit Depth, Yc (ft) = 0.61

Top Width (ft) = 0.00

EGL (ft) = 1.10



Channel Report

<Name>CH-5 to CH-7, 25-year

Trapezoidal

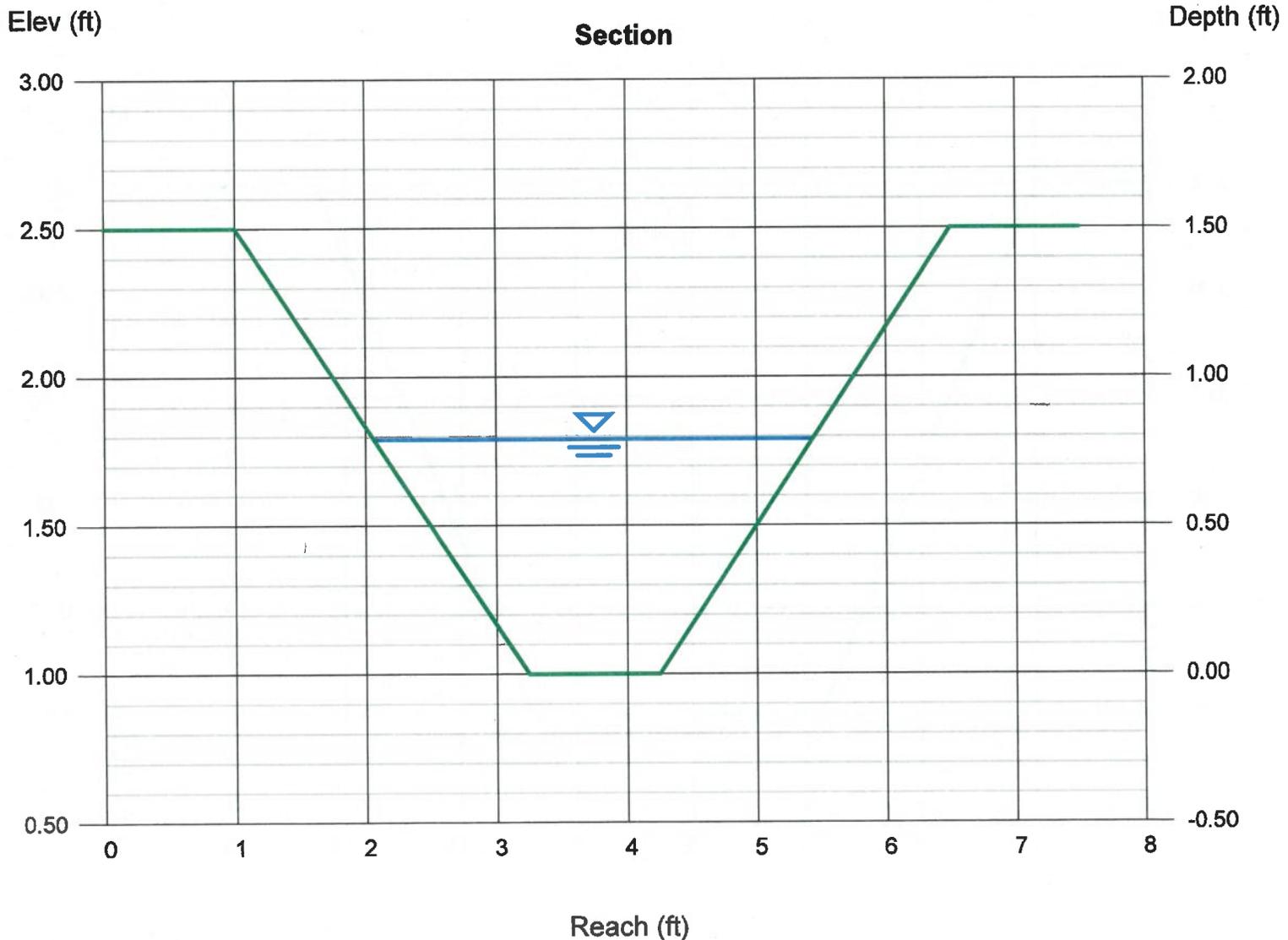
Bottom Width (ft) = 1.00
Side Slopes (z:1) = 1.50, 1.50
Total Depth (ft) = 1.50
Invert Elev (ft) = 1.00
Slope (%) = 0.03
N-Value = 0.030

Highlighted

Depth (ft) = 0.79
Q (cfs) = 0.850
Area (sqft) = 1.73
Velocity (ft/s) = 0.49
Wetted Perim (ft) = 3.85
Crit Depth, Y_c (ft) = 0.25
Top Width (ft) = 3.37
EGL (ft) = 0.79

Calculations

Compute by: Known Q
Known Q (cfs) = 0.85



Channel Report

CH-12

Trapezoidal

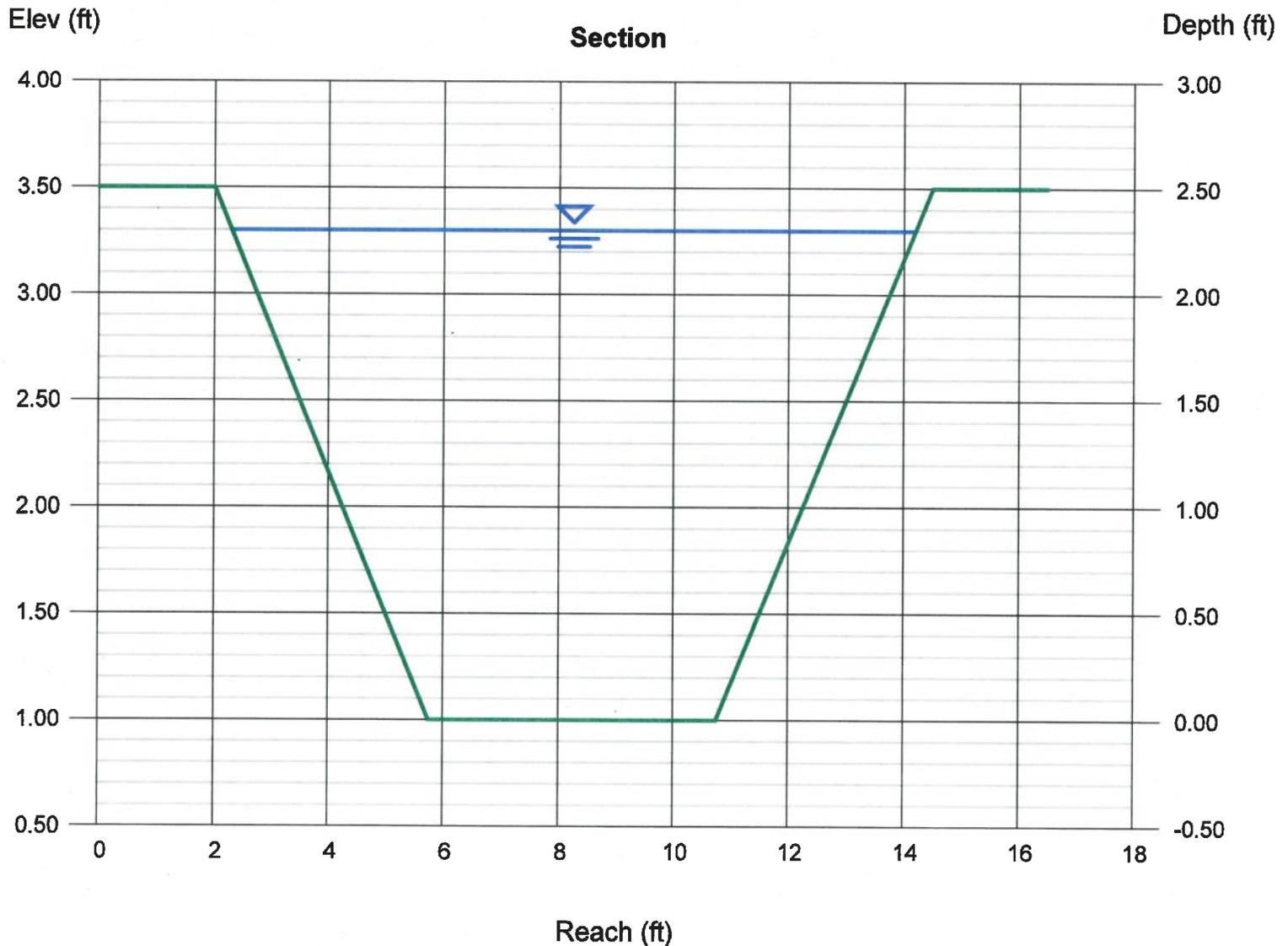
Bottom Width (ft) = 5.00
Side Slopes (z:1) = 1.50, 1.50
Total Depth (ft) = 2.50
Invert Elev (ft) = 1.00
Slope (%) = 0.01
N-Value = 0.030

Highlighted

Depth (ft) = 2.30
Q (cfs) = 12.34
Area (sqft) = 19.43
Velocity (ft/s) = 0.63
Wetted Perim (ft) = 13.29
Crit Depth, Yc (ft) = 0.55
Top Width (ft) = 11.90
EGL (ft) = 2.31

Calculations

Compute by: Known Q
Known Q (cfs) = 12.34



Exceedance Response Action (ESA) Evaluation

Application Number 181155

Attachment 6

Exceedance Response Action (ERA) Evaluation

Level 2 Technical Report

**Sun-Land Garden
Products, Inc.**

Watsonville, CA

Prepared by

SIDERA

ENVIRONMENTAL, INC

— *est 1995* —

ERA - Level 2 Technical Report

TABLE OF CONTENTS

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2.0 QISP INFORMATION.....	1
3.0 BACKGROUND	2
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5.0 LEVEL 1 REPORT AND LEVEL 2 ACTION PLAN SUMMARY	5
6.0 SELECTED TECHNICAL DEMONSTRATION(S).....	7
7.0 ERA OUTCOMES AND ADDITIONAL TASKS	8

LIST OF APPENDICES

- Appendix A: Facility/Site Map
- Appendix B: Grading and Erosion Control Plan
- Appendix C: Vegetated Storm Water Channels

1.0 - SITE INFORMATION

Table 1 – Site Information

Facility Name	Sun-Land Garden Products, Inc.
Address	90 Pioneer Rd.
Waste Discharge Identification Number	3 44I017406
SIC Code(s)	2875 – Fertilizers, Mixing Only
Designated Legally Responsible Person (LRP)	Martin Reyes Director of Operations
Discharger Contact Person	Martin Reyes
Phone Number	(831)-724-6500
E-Mail Address	martinr@sunlandgarden.com

2.0 - QISP INFORMATION

The General Permit requires the discharger to enlist the services of a Qualified Industrial Stormwater Practitioner (QISP) to assist with the Level 2 ERA Action Plan and prepare the ERA Level 2 Technical Report. Information related to the QISP assisting with these tasks is included below.

Table 2 – QISP Information

Name	Jared Dozal
QISP Cert. Number	00364
Affiliation	Consultant – Sidera Environmental, Inc.
Phone Number	530-648-4500
E-mail Address	jared.dozal@siderah2o.com
Scope of Services Provided	Level 1 ERA Evaluation/Report, Level 2 Action Plan and Technical Report, SWPPP and Site Map Amendments, BMP and Monitoring Guidance, Employee Training

3.0 - BACKGROUND

California's NPDES General Permit for Storm Water Discharges Associated with Industrial Activity – CAS000001, Water Quality Order: General Permit 2014:0057-DWQ (General Permit) requires an Exceedance Response Action (ERA) Level 2 Action Plan and Technical Report to be developed if there are Numeric Action Level (NAL) exceedances of parameters in Level 1 status, as defined in the General Permit.

By January 1st following commencement of Level 2 status, Sun-Land Garden Products, Inc. (SLG) is required to obtain the assistance of a Qualified Industrial Stormwater Practitioner (QISP) to develop and submit a Level 2 ERA Action Plan. The Action Plan shall include a schedule and detailed description of the tasks required to complete the discharger's selected demonstration(s): *Industrial Activity BMP Demonstration, Non-Industrial Pollutant Source Demonstration, and/or a Natural Background Pollutant Source Demonstration.*

As soon as practicable, but no later than January 1st of the reporting year following the submittal of the Level 2 ERA Action Plan, SLG must prepare and submit a Level 2 ERA Technical Report. This report shall include the selected demonstration(s), description and evaluation of all pollutant sources, evaluation of implemented Best Management Practices (BMPs), and additional data/information specific to the selected demonstration(s).

Dischargers that need additional time to submit the Level 2 ERA Technical Report shall be automatically granted a single time extension for up to six (6) months. SLG requested the time extension to analyze samples following the implementation of new BMPs and Control Measures implemented during the 2018/2019 reporting year.

4.0 - SUMMARY OF SAMPLE RESULTS

Table 3 - 2015/2016 Reporting Year - Sample Results

ANALYTICAL RESULTS									
reported in mg/L*									
Sample Date	Discharge Location	pH	TSS	O&G	N+N	P	Fe	Pb	Zn
11/2/15	Basin 2	6.4	3900	ND	2.1	7.8	94.0	0.055	0.430
11/9/15	Basin 2	6.8	6000	ND	4.33	13	240	0.140	0.710
12/22/15	Basin 2	6.9	140	ND	0.90	3.3	25.0	0.011	0.052
3/7/16	Basin 2	6.7	330	ND	0.37	3.1	2.4	0.0089	0.055
Annual Average		N/A	2593	0	1.93	6.8	90.4	0.054	0.31
Annual NAL		N/A	100	15	0.68	2.0	1.0	0.262	0.26
NAL Exceedance		No	Yes	No	Yes	Yes	Yes	No	Yes
Status for 2016/2017		Baseline	Level 1	Baseline	Level 1	Level 1	Level 1	Baseline	Level 1

*pH reported in SU
 ND - Non Detected (Below MDL)

Table 4 - 2016/2017 Reporting Year - Sample Results

ANALYTICAL RESULTS									
reported in mg/L*									
Sample Date	Discharge Location	pH	TSS	O&G	N+N	P	Fe	Pb	Zn
10/16/16	Outfall D-1	7.0	99	ND	ND	0.93	3.9	0.0019	0.150
10/28/16	Outfall D-1	6.1	46	ND	1.3	0.73	2.4	0.0009	0.100
12/11/16	Outfall D-1	7.1	22	7.1	ND	1.5	1.8	0.0007	0.049
1/14/17	Outfall D-1	6.8	25	ND	ND	0.82	2.0	0.0011	0.140
3/21/17	Outfall D-1	5.49	55	ND	ND	0.86	3.0	0.0017	0.077
3/22/17	West Driveway	6.32	4.3	ND	0.18	0.10	0.40	0.0003	0.018
Annual Average		N/A	41.8	1.2	0.26	0.25	2.62	0.0016	0.089
Annual NAL		N/A	100	15	0.68	2.0	1.0	0.262	0.26
NAL Exceedance		No	No	No	No	No	Yes	No	No
Status for 2017/2018		Baseline	Baseline	Baseline	Baseline	Baseline	Level 2	Baseline	Baseline

*pH reported in SU
 ND - Non Detected (Below MDL)

Table 5 – 2017/2018 Reporting Year - Sample Results

ANALYTICAL RESULTS									
reported in mg/L*									
Sample Date	Discharge Location	pH	TSS	O&G	N+N	P	Fe	Pb	Zn
11/16/17	Outfall D-1	7.1	82	ND	0.87	0.50	2.6	0.0018	0.063
1/8/18	Outfall D-1	7.6	77	ND	0.77	0.62	6.9	0.0057	0.120
3/2/18	Outfall D-1	6.0	97	ND	0.73	1.1	7.5	0.0038	0.048
3/13/18	Outfall D-1	6.2	110	ND	ND	1.2	11.0	0.0051	0.043
3/22/18	Outfall D-1	7.7	72	ND	ND	1.0	5.7	0.0032	0.067
Annual Average		N/A	88	0	0.47	0.8	6.7	0.0039	0.069
Annual NAL		N/A	100	15	0.68	2.0	1.0	0.262	0.26
NAL Exceedance		No	No	No	No	No	Yes	No	No
Status for 2018/2019		Baseline	Baseline	Baseline	Baseline	Baseline	Level 2	Baseline	Baseline

*pH reported in SU
 ND - Non Detected (Below MDL)

Table 6 – 2018/2019 Reporting Year - Sample Results

ANALYTICAL RESULTS									
reported in mg/L*									
Sample Date	Discharge Location	pH	TSS	O&G	N+N	P	Fe	Pb	Zn
11/28/18	Outfall D-1	7.0	15	ND	0.57	0.69	1.1	0.0012	0.05
1/7/19	Outfall D-1	7.4	22	ND	ND	1.6	1.4	0.0036	0.035
1/17/19	Outfall D-1	7.2	62	ND	ND	1.2	5.5	0.0032	0.077
2/5/19	Outfall D-1	7.2	30	ND	0.23	1.0	4.4	0.002	0.053
2/13/19	Outfall D-1	8.0	110	ND	ND	0.61	4.1	0.0021	0.030
Annual Average		N/A	47.8	0	0.25	1.0	3.3	0.0060	0.049
Annual NAL		N/A	100	15	0.68	2.0	1.0	0.262	0.26
NAL Exceedance		No	No	No	No	No	Yes	No	No
Status for 2019/2020		Baseline	Baseline	Baseline	Baseline	Baseline	Level 2	Baseline	Baseline

*pH reported in SU
 ND - Non Detected (Below MDL)

5.0 - LEVEL 1 REPORT AND LEVEL 2 ACTION PLAN SUMMARY

On 9/22/16, a site visit was conducted for the Level 1 ERA Evaluation. Sun-Land has a Standard Industrial Code (SIC) of 2875 – Fertilizers, Mixing Only, for establishments primarily engaged in mixing fertilizers from purchased fertilizer materials. The facility is located at 90 Pioneer Road in the city of Watsonville, Monterey County, CA. The facility occupies an approximately 22-acre site and the majority of the facility is unpaved, compacted soil and/or gravel used for materials storage areas (primarily bulk redwood) and driveways (approximately 70% of the site). There are six buildings in use at the facility related to industrial activities, which cover approximately fifteen percent of the site. Another fifteen percent of the site consists of paved areas adjacent to the south and west sides of the buildings, including the driveway to the west of the buildings. The primary activities at the facility include the receiving of raw materials, stockpiling materials, mixing and blending of materials, and packaging/load out of materials.

The primary materials handled at the facility are conifer-species lumber mill waste products including coastal redwood and Douglas fir wood/bark chips. Other bulk materials stored at the facility include Canadian sphagnum peat moss and coir. The majority of the discharge from the facility is conveyed to two detention basins via unpaved storm water channels. The original storm water channels and basins were constructed prior to the implementation of the design standards in the current NPDES Storm Water Permit. The old channels and basins were not properly designed and large amounts of soil were eroding from the steep side slopes of the unpaved conveyance system. Discharge only occurs at the primary sampling location when the detention basins fill up. The west driveway to Pioneers Road was identified as an additional potential discharge location during the Level 1 Evaluation. Discharge at the driveway is primarily from paved driveways where bulk materials are not exposed to storm water.

During the 2015/2016 reporting year there was an exceedance of the Annual Average NALs for Total Suspended Solids (TSS), Nitrate and Nitrite Nitrogen (N+N), Total Phosphorous (P), Iron (Fe), and Zinc (Zn). The extremely high levels of Total Suspended Solids (TSS) and Iron (Fe) in storm water samples collected during the 2015/2016 reporting year is a direct result of improper sampling methods in conjunction with a lack of exposure minimization BMPs, and an eroding storm water conveyance system. All storm water samples collected during the 2015/2016 reporting year were collected improperly due to a lack of understanding of the sampling requirements. Samples were collected directly from stirred up standing water in the detention basins and not from the outfall which discharges from the facility. These samples were not representative of industrial storm water discharges from the facility.

BMP and sampling deficiencies were addressed with additional training of the Pollution Prevention Team, as described in the Level 1 ERA Report. Following the Level 1 Evaluation, the Pollution Prevention Team was trained by a QISP, some additional areas were paved to prevent erosion from heavy equipment, large tarps were purchased and installed over the large redwood bark piles, and overhead coverage was installed over a metal bin of concern. An engineer was hired to design a new storm water conveyance system including new vegetated swales and detention basins that are appropriately sized for the drainage area. The new system has been designed to reduce mobilized pollutants and potentially prevent storm water discharges from the facility.

The installation of the vegetated swales commenced in the summer of 2018 and is scheduled for completion in the summer of 2019. The majority of the new vegetated channels have already been installed. The bioretention basins are scheduled for construction during the 2019/2020 reporting year. In addition, SLG is in the permitting process to install additional overhead coverage in the form of a permanent canopy over the mixing lines and is also considering overhead coverage for additional materials storage areas.

6.0 - SELECTED TECHNICAL DEMONSTRATION(S)

Section X.II.D.1 of the General Permit requires that for each NAL exceedance, the Level 2 Action Plan will identify which of the demonstrations listed in section X.II.D.2 that the discharger has selected to perform.

Table 7 – Demonstrations – Level 2 ERA Technical Report

Demonstration	Selected (Yes/No)	Parameter(s)	Drainage Area(s)
Industrial Activity BMP Demonstration; Option 1 Part XII.D.2.a.i-iii	Yes	Fe	Storm Water Channels – Organic Materials Storage Areas – Unpaved Drainage Areas
Non-Industrial Pollutant Source Demonstration	No	N/A	N/A
Natural Background Pollutant Source Demonstration	No	N/A	N/A

Option 1 of the **Industrial Activity BMP Demonstration** from section XII.D.2.a.i-iii of the general permit has been selected to be included in this Level 2 Technical Report. Additional BMPs implemented after October 15, 2016 appear to have addressed the exceedances of all parameters except for Fe. Covering the large bulk redwood piles with large tarps has effectively reduced N+N and P in storm water discharges by preventing exposure of these organic materials. The exceedances in Fe are believed to be primarily from sediment that is mobilized from the original improperly designed storm water channels and detention basins, which consisted of bare soil and unstable side slopes, as well as a few unpaved areas with disturbed soil. Some of the unpaved areas of concern near mix line 2 were paved with asphalt to prevent disturbance of soil by heavy equipment and subsequent erosion.

The majority of a new vegetated storm water conveyance system has already been installed, which is designed to replace the existing eroded channels. The final few channels that have yet to be upgraded will be completed during the summer of 2019. The bioretention basins are scheduled for construction during the 2019/2020 reporting year. Due to the high cost of design and construction, a three-year plan has been developed with a budget of \$50,000 per year to complete the new storm water conveyance system and detention basins. More than \$100,000 has already been invested on improvements to the facility, including \$20,000 for initial engineering designs, \$50,000 for the excavation and installation of the vegetated storm water channels, and \$25,000 in materials (including silt fences, large tarps, etc.). It is estimated that it will cost at least another \$100,000 to complete the project.

The facility is expecting to meet all NALs once the new bioretention basins are completed. If the new bioretention basins do not bring Fe below the Annual NAL, SLG will have the option to implement additional control measures and submit an update to the Technical Report that includes the BMP Demonstration under Option 1, or submit an additional Level 2 ERA Action Plan and Technical Report including the BMP Demonstration utilizing Option 2 from part XII.D.2.a.iv of the general permit.

7.0 - ERA OUTCOMES AND ADDITIONAL TASKS

Following employee training and the implementation of additional exposure minimization BMPs, there were significant improvements in sample results due to proper sampling and the reduced mobilization of pollutants. The facility managed to keep all parameters below the NALs for all parameters except for Fe following implementation of BMPs recommended in the Level 1 ERA Evaluation, during the 2016/2017 reporting year. The facility is expecting to meet the NAL for Fe once all improvements at the facility are completed. The installation of all vegetated storm water channels and detention basins will be completed by the end of October 2019. Additional control measures yet to be implemented include more paving with asphalt, additional permanent overhead coverage of mix lines and materials storage areas, as well as improvements to unpaved drainage areas between the buildings including drain inlet protection and erosion control measures.

7.1 Storm Water Containment and Discharge Reduction BMPs

The majority of the new vegetated storm water channels/swales have been installed at the facility. The channels in Drainage Area A were completed in the fall of 2018. The channels in Drainage Area B are scheduled to be completed by the summer of 2019. The new conveyance system is intended to replace the original storm water channels and ponds. The new storm water conveyance system and detention were designed to meet design standards, reduce all pollutants in storm water discharges, and reduce pollutant loads on nearby impaired water bodies. The detention basins have been sized to contain all storm water during storm events and potentially prevent storm water discharges from the facility. Due to the high cost of design and construction, a three-year plan has been developed with a budget of \$50,000 per year to complete the new storm water conveyance system and detention basins.

Construction of the new vegetated storm water channels commenced in February 2018. All of the channels in Drainage Area A have been completed. New channels were excavated, lined with biodegradable erosion control mats to stabilize the channels while vegetation takes root, and irrigation was installed. In addition, new silt fences were installed around the bulk redwood storage piles adjacent to the vegetated swales to reduce/prevent the mobilization of redwood bark. The channels in Drainage Area B surrounding the 2 large bulk redwood piles will be completed during the summer of 2019. The new bioretention basins are scheduled to be completed by the end of October 2019.

7.2 Exposure Minimization BMPs

Additional unpaved areas around the mix-lines shall be paved with asphalt if there is enough funds left over from the bioretention basin project. In addition, the facility is in the permitting process to construct large industrial canopies over the mix lines to reduce exposure of materials. This project is pending approval from the Santa Cruz planning department and will not commence until at least 2020. Tarps have been installed over the conveyor belts of the mix lines to reduce exposure of materials in the area. Additional overhead coverage is being considered for bulk redwood piles to reduce exposure and to reduce the amount of work hours required to apply and remove large tarps over bulk redwood piles.

7.3 Best Management Practices (BMPs) – Implementation Schedule

Table 8 – Industrial Activity BMP Demonstration – Option 1

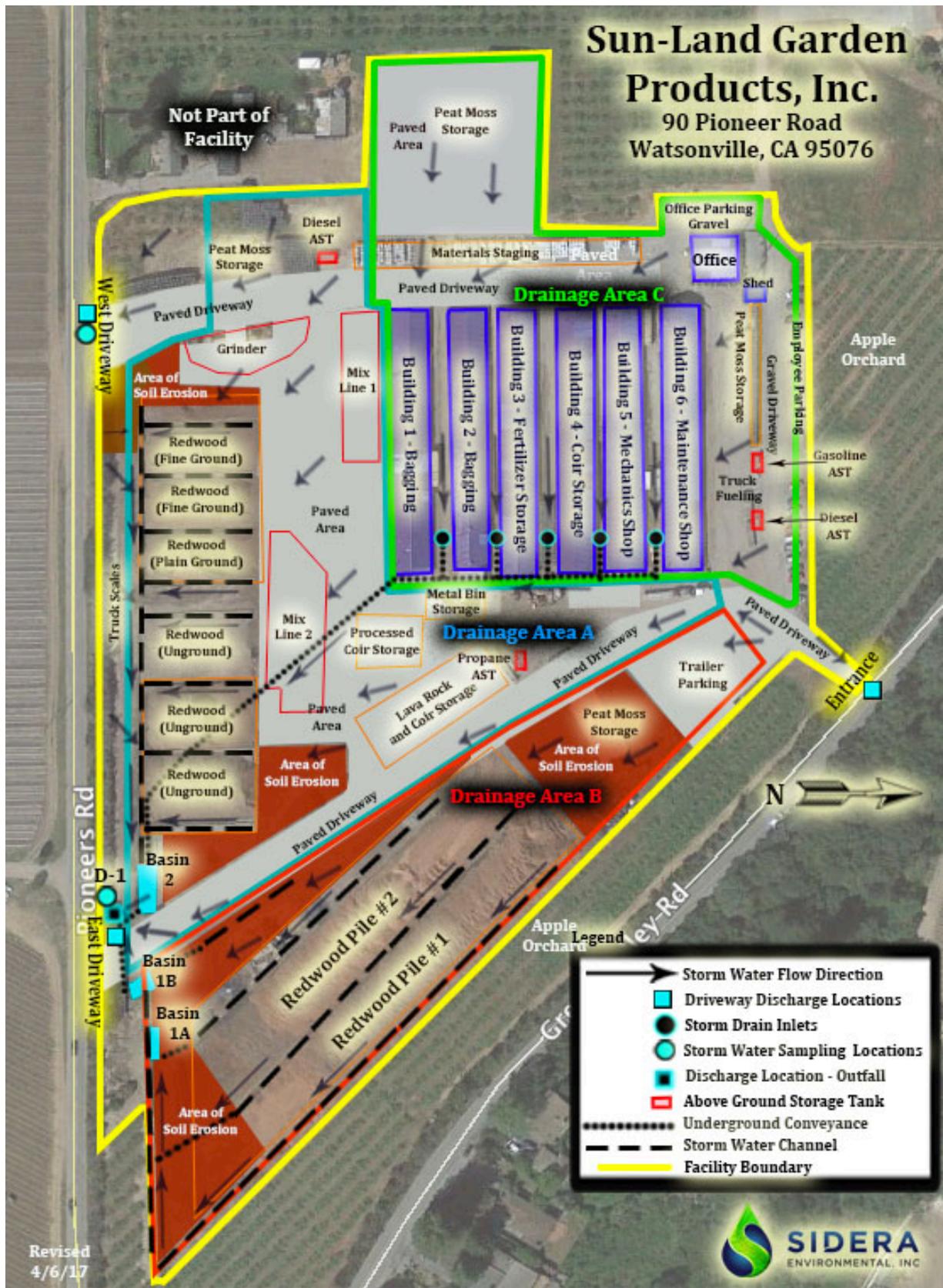
Drainage Area A	Mix Lines and Materials Storage	
Parameter Exceeded	Iron (Fe)	
Source(s)	Erosion of sediment from unstable side slopes of old storm water channels and existing detention basins. Mobilization of sediment and organic materials from drainage areas surrounding mix lines and buildings.	
Control Measures		Status
New vegetated storm water channels were installed and completed in the fall of 2018 surrounding the regular and fine ground redwood piles. Biodegradable erosion control mats were installed to stabilize the channels, irrigation was installed, and vegetation has been established.		Completed October 2018
Silt fences installed around fine and plain ground redwood bulk storage areas, along new vegetated storm water channels.		Completed October 2018
New vegetated detention basins have been designed to replace the existing basins. The new basins meet standards set forth in the NPDES Permit.		Scheduled for Completion October 2019

Table 8 – Industrial Activity BMP Demonstration – Option 1 (Continued)

Drainage Area A	Mix Lines and Materials Storage	
Parameter Exceeded	Iron (Fe)	
Source(s)	Mobilized organic materials (peat moss, choir, etc.) in paved areas surrounding mix lines and from bulk redwood piles.	
Control Measures	Status	
Unpaved area around mix lines paved with asphalt in the fall of 2017 to reduce disturbed sediment.	Completed October 2017	
Additional paving required for a few small areas where soil is disturbed by truck and equipment in the area.	Funding Pending	
Large tarps purchased to cover large bulk redwood piles. Tarps installed and secured with weights at the end of the workday and prior to anticipated storm events to prevent exposure of materials to storm water.	Completed October 2017	
Overhead coverage provided for metal bin containing empty bags of fertilizer used in mixes at the facility. Cover consists of spring-loaded frame to assist in covering the metal bins prior to anticipated storm events.	Completed October 2016	
Overhead coverage of mix lines to prevent exposure and mobilization of organic materials to storm water.	Currently in Permit Process	

Table 8 – Industrial Activity BMP Demonstration – Option 1 (Continued)

Drainage Area B	Redwood Piles	
Parameter Exceeded	Iron (Fe)	
Source(s)	Erosion of sediment from unstable side slopes of old storm water channels and existing detention basins. Mobilization of organic materials from bulk redwood piles.	
Control Measures	Status	
Large tarps purchased to cover large bulk redwood piles. Tarps installed and secured with weights at the end of the workday and prior to anticipated storm events to prevent exposure of materials to storm water.	Completed October 2017	
New vegetated storm water channels surrounding the regular and fine ground redwood piles are scheduled for installation. Biodegradable erosion control mats shall be installed to stabilize the channels, irrigation will be installed, and vegetation will be established.	Scheduled for Completion Summer 2019	
Silt fences have been partially installed around redwood bulk storage in this area. The remainder of silt fences shall be installed along with the remaining vegetated storm water channels.	Scheduled for Completion Summer 2019	
New vegetated detention basins have been designed to replace the existing basins. The new basins meet standards set forth in the NPDES Permit.	Scheduled for Completion October 2019	
Feasibility of installing a large canopy over bulk redwood storage piles is being looked into for this area. Overhead coverage would eliminate the man hours required to cover and uncover the materials stored in this area with giant tarps.	To be determined	



VEGETATED CHANNEL DIMENSIONS			
CHANNEL	DEPTH	TOP WIDTH	BOTTOM WIDTH
CH-1 TO CH-7	1.5'	5.5'	1'
CH-8	2.25'	10'	3'
CH-9	1.50'	5'	1'
CH-10	1.75'	7'	1.5'
CH-11	1.75'	7'	1.5'

