

Appendix E

Phase I Environmental Site Assessment (ESA)

# California



## PRELIMINARY ENVIRONMENTAL SITE ASSESSMENT - PHASE I UPDATE

Approximately 115 Acres
Agricultural Land
1618 Doris Avenue and Surrounding Property
South of Doris Avenue
West of North Ventura Road and North of Teal Club Road
Oxnard, California 93030

**FOR** 

#### **SUNCAL COMPANIES**

21900 Burbank Boulevard, Suite 114 Woodland Hills, California 91367

Attention: Ms. Ky Spangler

CE Job No. EV104-2536

July 2007

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#### **EXECUTIVE SUMMARY**

An Environmental Site Assessment - Phase I Update was performed for the subject property consisting of approximately 115 acres located at 1618 Doris Avenue, Oxnard, California. The property is bound by Dons Avenue to the north, Patterson road to the west, Teal Club Road to the south, and Ventura Road to the east. The scope of work for the Phase I meets ASTM E 1527-05 Standard Practice for Preliminary Site Assessments. The purpose of the Phase I report was to provide information regarding the potential for hazardous material impacts to the soil and groundwater beneath the subject property. Such threats or material threats are identified in this report as recognized environmental conditions (REC). The extent of this evaluation in conjunction with owner/client supplied data is intended to satisfy the requirements of all appropriate inquiry into the previous ownership and uses of the property. The scope of the work included a site reconnaissance, research of land use records and other sources for preliminary indications of hazardous material use, storage, or disposal at the property and/or on contiguous parcels.

The subject property has historically been used for agricultural purposes. The agricultural use of the property has been ongoing for at least 60 years. A maintenance/storage area exists near the northeast corner of the property. This area contains several wood sheds and larger barns for storage and maintenance of farm equipment. Irrigation pipe, ploughs and other equipment are stored in this area. An aboveground diesel fuel storage tank (approximately 5,000-gallons) was also located in this area. The surrounding area has historically been used for agricultural purposes. The transition to residential development from agricultural use has occurred over the past 30 years.

The subject property is listed as a facility that generated and stored hazardous materials on the HIST UST and UST standard environmental record sources researched for this report. The subject property was also identified as a leaking underground storage tank site on the CORTESE and LUST databases where gasoline impacts to soil and groundwater were recognized. The remedial response at the site included excavation and removal of gasoline impacted soil and groundwater monitoring. Five groundwater monitor wells were installed around the area of the gasoline fuel hydrocarbon release. Low to non-detect levels of gasoline hydrocarbons were detected in groundwater obtained from the wells. The wells were monitored intermittently from 1989 through 1995. A request for closure was made to the County of Ventura and the County required one more round of groundwater sampling which occurred in 1997. The 1997 groundwater sampling showed nondetect levels of gasoline fuel hydrocarbons in all wells. Based on this finding, the County of Ventura issued final case closure for the property on February 9, 1998.

Approximately eight groundwater production wells for irrigation have historically been present on the property. Five of the eight wells list Borchard (Borchard family owned and operated the subject property) as the owner of the well. Three additional wells are identified by different owners. It is recommended that the wells be located and surveyed. The wells should be abandoned, as necessary, according to the guidelines issued by the County of Ventura Department of Public Works. If possible, residential construction directly above the abandoned groundwater wells should be avoided.

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### **EXECUTIVE SUMMARY**

(continued)

The existing aboveground storage tank (approximately 5,000 gallons) is considered an unpermitted aboveground storage tank facility. It is recommended that the aboveground tank be abandoned by removal under permits issued by the County of Ventura. Minor diesel soil contamination was recognized in the area of the aboveground tank. The shallow impacts in soil should be excavated and removed offsite during redevelopment.

It is recommended that a pre-demolition asbestos and lead based paint survey be performed on the remaining sheds and buildings located at the northeast corner of the property. Buried transite water pipe (assumed to be asbestos containing) may be found onsite during future grading activities. Transite pipe excavated during future grading work should be abandoned and disposed of as non friable asbestos containing waste.

Residual levels of chlorinated pesticides were found in soil beneath the property. The residual levels of pesticides were typically restricted to the upper 1 foot to 1 ½ feet below the ground surface. The most common pesticide found in soil beneath the property was toxaphene, which is ubiquitous on almost all agricultural properties within the Oxnard Plain. Toxaphene, along with DDT and its breakdown products were found to depths of up to 10 feet in the area of the underground storage tank removal and remediation work located at the northeast corner of the property. It is suspected that the residual pesticide contamination found at depth in this location is related to backfilling of the underground storage tank excavation with onsite soil.

The geotechnical engineer is recommending removal and recompaction of the upper agricultural disturbed soil for support of foundations for future single family residential construction. Future commercial construction is also contemplated. It is recommended that the USEPA *Preliminary Remediation Goals - Residential Sites* (PGRr) be utilized to set appropriate residual levels for the organochlorine pesticide contamination found. Performance of the geotechnical grading along with importation of approximately 500,000 cubic yards of clean fill will likely reduce the residual pesticide to levels below the recommended PRGr. Monitoring of the residual levels of pesticides should be confirmed both during and following completion of the grading activities. A portion of the subject property may be developed as a school site. Preparation of a Cal EPA-DTSC Compliant Preliminary Endangerment Assessment Report would be required for that portion of the property.

No data failure was encountered in the preparation of this report. Review of recorded land title records, including environmental liens, was included in this report. Environmental liens were not found on file for the subject property address.

This assessment has revealed no evidence of additional recognized environmental conditions in connection with the subject property. Additional site assessment research and/or subsurface assessment activities are not recommended.

#### INTRODUCTION

The following report presents the findings of the Environmental Site Assessment - Phase I Update performed for the subject property consisting of approximately 115 acres located at 1618 Doris Avenue, Oxnard, California. The scope of the Phase I study meets ASTM E 1527-05 Standard Practice for Environmental Site Assessments and included research of available land use records and other sources for preliminary indications of hazardous material use, storage or disposal at the property. The findings of this study are intended to provide information to the client regarding potential hazardous material impacts to the soil and groundwater beneath the site.

The scope of the investigation was performed in general accordance with ASTM Standard Practice for Environmental Site Assessments – Phase I, Environmental Site Assessment Process ASTM E 1527-05. The steps outlined in this practice are intended to permit a user (client) to satisfy one of the requirements to qualify for the innocent land owner, contiguous property owner, or bona fide purchaser limitations on CERCLA liability. Specifically, this report along with certain obligations of the client, constitutes All Appropriate Inquiry (AAI) into the previous ownership and uses of the property consistent with the standard of care as practiced in this area by environmental professionals. A main component of the assessment is to identify recognized environmental conditions as they may affect the subject property. As defined by ASTM E 1527-05, a recognized environmental condition (REC) means "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property."

An important component of complying with the ASTM E 1527-05 Standard is information to be obtained or in the possession of the client and/or seller of the property. Such information includes obtaining and review of a recent title report, any specialized information regarding the site or surrounding area which may give rise to identification of a recognized environmental condition, and/or reasons given by the seller should the purchase price be significantly lower than what would be reasonably expected for a property of similar size and value. Often a real estate appraiser is commissioned to evaluate the purchase or sale price of a property. Such an appraisal is outside the scope of this Phase I Assessment report.

The independent conclusions represent California Environmental's professional judgment based on the conditions that existed and the information and data available during the course of study. Factual information regarding operations, conditions, and test data provided by the client, the owner or their representatives have been assumed to be correct and complete. This report includes **GENERAL FINDINGS** and **CONCLUSIONS AND RECOMMENDATIONS**, which together with the remainder of this report are subject to the **NOTICE** at the end of the report.

The scope of work included:

- ♦ A walkover of the site.
- Review of building and grading permits on file for the City of Oxnard.
- Review of underground storage tank files and industrial waste records maintained by the County of Ventura.
- Review of historical USGS topographic maps.
- Research of historical Sanborn Fire Insurance Maps maintained by EDR Company.
- Contact with the Ventura County Environmental Health Department to review their files.

- Contact with the Ventura County Air Pollution Control District (APCD) to review their files.
- Review of Oil Field Maps and oil well records maintained by the State of California Division of Oil, Gas, and Geothermal Resources.
- Review of Regional Landfill Maps.
- Review of the following lists and maps of suspect or known contaminated sites:
  - ◆ California Regional Water Quality Control Board, (RWQCB) Computer Case Listing of Reported Underground Tank Leaks, covering Ventura County.
  - ◆ California Governor's Office of Planning and Research *Hazardous Waste and Substance Sites Cortese List and Contaminated Wells List, which includes the Bond Expenditure Plan* (BEP) sites.
  - ◆ California Environmental Protection Agency, Department of Toxic Substances Control CalSites List.
  - California Department of Health Services, *Hazardous Waste Information System* (HWIS) and Tanner Report.
  - ◆ California Integrated Waste Management Board, Solid Waste Information System (SWIS) List.
  - State Water Resources Control Board, Solid Waste Assessment Test Program (SWAT).
  - ♦ State Water Resources Control Board, *Hazardous Substance Storage Container Database* (UST).
  - U.S. Environmental Protection Agency Superfund Program National Priorities List (NPL).
  - ♦ U.S. Environmental Protection Agency Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS).
  - U.S. Environmental Protection Agency, *Toxic Release Inventory System* (TRIS).
  - ◆ U.S. Environmental Protection Agency, Resource Conservation and Recovery Information, System Treatment, Storage and Disposal Facilities, (RCRIS-TSDF).
  - ◆ U.S. Environmental Protection Agency, Resource Conservation and Recovery Information System, Large Quantity Generators, (RCRIS-LQG).
  - ◆ U.S. Environmental Protection Agency, Resource Conservation and Recovery Information System, Small Quantity Generators, (RCRIS-SQG).

- ◆ U.S. Environmental Protection Agency Superfund Amendment and Reauthorization Act, Title III, (SARA Title III).
- ◆ U.S. Environmental Protection Agency, *Emergency Response Notification System* (ERNS).
- ♦ U.S. Environmental Protection Agency, Facility Index System (FINDS).
- ◆ U.S. Environmental Protection Agency, *Civil Enforcement Docket* (DOCKET).
- ♦ A review of government records databases of suspect or known contaminated sites was performed by EDR Company. The results of the search are summarized in this report. The report is enclosed in **APPENDIX IV**.
- Preparation of this report.

#### SITE DESCRIPTION

#### LOCATION AND LEGAL DESCRIPTION

The subject property is located between Patterson Road and Ventura Road on the south side of Doris Avenue, in the City of Oxnard, Ventura County, California, see **VICINITY MAP**. The current street address associated with the property is 1618 Doris Avenue.

The legal description of the property is as follows: Rancho El Rio de Santa Clara O'La Colonia T2N, R22W; APN 183-007-009 and -014.

#### SITE RECONNAISSANCE

The site conditions were observed during a reconnaissance conducted by Mr. Christopher Rude of California Environmental on July 19, 2007. An Environmental Field Reconnaissance Questionnaire was completed during the site reconnaissance. An Environmental Field Interview Questionnaire was forwarded to Ms. Ky Spangler of Suncal Properties. The Environmental Field Questionnaires are

included in **APPENDIX I**. The features described below are shown on the enclosed **PLOT PLAN**. Photographs of the subject property are included as **PLATES 1-2**.

#### **Description of Property**

The subject property consists of approximately 115 acres of agricultural land. The property primarily consists of tilled agricultural land. A maintenance/storage area exists near the northeast corner of the property. This area contains several wood sheds and larger barns for storage and maintenance of farm equipment. Irrigation pipe, ploughs and other equipment are stored in this area. An aboveground diesel fuel storage tank (approximately 5,000-gallons) was also located in this area. Access the property is via the adjacent streets.

#### **Adjacent Properties**

The subject property is bound to the north by a single family residence (1558 West Doris Avenue) and Doris Avenue, with residential housing tract beyond; Patterson Road to the west, with agricultural land beyond; row crops, a residence, and Teal Club Road to the south; and Ventura Avenue to the east, with residential and commercial property beyond.

### **Topography and Drainage**

The subject property is nearly level. The regional topographic slope of the land is to the southwest towards the Pacific Ocean. Drainage on the property is controlled by a series of unlined drainage ditches which shunt agricultural and rainwater discharge into drainage channels located adjacent Patterson and Teal Club Roads. No evidence of surface drains or catch basins was observed on the property at the time of the site reconnaissance.

### Past Uses of the Property

No evidence of the past use, treatment, storage, disposal or generation of hazardous substances (other than fuels) was observed during the site reconnaissance. Agricultural pesticides associated with crop production have been used on the property.

#### **Use of Hazardous Substances**

No evidence of hazardous substance use was observed on the subject property at the time of the site reconnaissance.

#### **Storage Tanks**

An aboveground diesel fuel storage tank is present in the maintenance area at the northeast corner of the property. This facility appears to be an unpermitted, unregulated fuel tank without the required spill containment and overfill protection. No other evidence of existing underground storage tanks, clarifiers, sumps, or grease interceptors was observed on the subject property during the site reconnaissance.

### Containers of Hazardous or Unidentified Substances

No evidence of containers of hazardous or unidentified substances was observed on the subject property at the time of the site reconnaissance.

#### Solid Waste Disposal

One trash bin was observed near the farm structures. The trash bin contained nonhazardous debris at the time of the site reconnaissance. No evidence of onsite disposal or landfill of solid waste material was observed on the subject property at the time of the site reconnaissance.

## Poly-Chlorinated Biphenyl's (PCBs)

Various pole mounted and pad mounted electrical transformers are present adjacent to or on the subject property. No evidence of leakage or spillage of hydraulic oils was evidence from these facilities during the site walkover. The transformers are maintained and serviced by Southern California Edison.

## **Heating/Cooling Equipment**

Heating and cooling equipment was not observed at the time of the site reconnaissance.

## **Asbestos Containing Building Materials (ACM)**

Sampling of suspect asbestos containing material (ACM) was not included in the scope of work for this study. No evidence of suspect asbestos containing materials was observed during the site walkover. Asbestos may be present in various building components located on the buildings in the maintenance area. Buried transite water lines, which contain asbestos, may also be present on the property. It is recommended that a pre-demolition asbestos survey be performed on the subject buildings prior to their demolition.

#### Wastewater Disposal Systems

No evidence of wastewater treatment or disposal systems was observed on the subject property during the site reconnaissance.

#### Radon

Radon hazard assessment was not included in the scope of this study. However, the EDR research report indicates the levels of radon at 31 sites located within Ventura County were below one picoCurie per Liter (pCi/L). This concentration is well below the Federal Action level of four pCi/L.

#### Lead

Sampling of suspect lead in paint was not included in the scope of work for this project. Lead content in paint was significantly reduced in 1977. The paint coatings on the structures located within the maintenance area were in fair to good condition. A lead in construction materials survey should be performed prior to demolition of the buildings.

#### Wells

Several historic and existing groundwater production wells for irrigation are present on the property. The County of Ventura Department of Public Works was contacted for information regarding these existing and historic irrigation wells located on the subject property. Information provided by the County of Ventura indicates that up to eights wells have historically been present on the property. The approximate locations of the wells are shown on the attached **PLOT PLAN**. A well inventory is presented below on **TABLE I**. The groundwater well information previously obtained from the County of Ventura is attached in **APPENDIX III**.

Five shallow (34 feet deep) groundwater monitoring wells were installed on the property in 1987. The wells were installed as part of a subsurface assessment and monitoring program associated with an underground fuel storage release. The leak occurred beneath the maintenance area and was discovered

during the underground tank abandonment work. On January 21, 1998, Fluor Daniel GTI prepared a *Report of Groundwater Monitor Well Abandonment*. The report indicates that approximately 34 feet of 4 inch diameter PVC casing was removed from each well. The well bore was then drilled out and pressure grouted with cement bentonite slurry. The wells were abandoned under permit and observation by the County of Ventura Department of Public Works.

TABLE I Irrigation Well Inventory

State Well I.D.	Listed Owner	Depth	Status	
2N/22W-33N1	Borchard	250	Drilled 1949. Abandoned 11/81.	
			Sealed 6-135 ft.	
2N/22W-33 <b>N2</b>	Borchard	213	Unknown.	
2N/22W-33 <b>N3</b>	Borchard	100?	Unknown.	
2N/22W-33N4	Borchard	305	Drilled 1969 (Active).	
2N/22W-33 <b>N5</b>	Borchard	295	Drilled 1982 (Active).	
1N/22W-5 <b>B1</b>	Laubacker	208	Unknown,	
1N/22W-4 <b>D1</b>	Kawaguchi		Unknown. Active in 1981.	
1N/22W-4 <b>D2</b>	Kohara		Unknown. Active in 1981.	

#### Odor

No evidence of strong, pungent or noxious odors was noted on the subject property at the time of the site reconnaissance.

#### **Stressed Vegetation**

No evidence of stressed vegetation was observed on the subject property at the time of the site reconnaissance.

#### Staining or Residue

No evidence of staining or residue was observed on the subject property at the time of the site reconnaissance.

## Pits, Ponds, or Lagoons

No evidence of pits, ponds, and/or lagoons was observed on the subject property at the time of the site reconnaissance.

#### Potable Water Supply

Water is supplied to the subject property via onsite irrigation wells.

#### Sewage Disposal System

The subject property is not connected to the public sewage disposal system or a septic system.

### **Other Conditions of Concern**

No other conditions of environmental concern regarding potential sources for soil and groundwater contamination were observed on the subject property at the time of the site reconnaissance.

#### SITE DRIVE-BY

The area surrounding the subject property consists primarily of residential and agricultural property. Residential development borders the property to the north and east. A small commercial center is located adjacent to the northeast portion of the property. There are no service stations located on adjacent properties. A list of selected environmental risk sites identified within a one-quarter mile

radius of the subject property is included in the STANDARD ENVIRONMENTAL RECORDS SOURCES section of this report.

#### PREVIOUS WORK

Geolabs Westlake Village prepared a geotechnical study for the subject property, dated March 2004. The geotechnical study included excavation of borings to evaluate the soil conditions beneath the property for construction of a future residential subdivision. The report concluded the property was suitable for the proposed development and that slabs and foundations should be supported on new compacted fill.

California Environmental has performed a *Preliminary Environmental Site Assessment - Phase I* for the property located at 1618 Doris Avenue and Surrounding Property, South of Doris Avenue, West of North Ventura Road and North of Teal Club Road, Oxnard, California, dated June 2004. The Phase I Environmental Site Assessment research identified a historic recognized environmental condition and other environmental concerns associated with the property. Leaking underground tanks on the property were the subject of regulatory enforcement. The soil in the area of the fuel release was excavated and groundwater monitoring occurred from 1988 through 1997. In 1998, the County of Ventura issued a *no further action* status for the property indicating that remedial action was complete. The other environmental concern identified was the long term use of the property for agricultural production. It was suspected that residual levels of organochlorine pesticides in soil may be present on the property. California Environmental implemented subsurface assessment on the property in the form of soil and groundwater sampling. Soil and groundwater samples were obtained from the area of the underground

tank release on the eastern portion of the property. Shallow soil samples were also obtained throughout the balance of the property beneath agricultural production areas. The soil and groundwater samples were analyzed for organochlorine pesticides, fuel hydrocarbons, volatile organic compounds, and heavy metals.

Residual levels of chlorinated pesticides were found in soil beneath the property. The residual levels of pesticides were typically restricted to the upper 1 foot to 1 ½ feet below the ground surface. The most common pesticide found across the property was toxaphene, which is ubiquitous on almost all agricultural properties within the Oxnard Plain. Toxaphene, along with DDT and its breakdown products were found to depths of up to 10 feet in the area of the underground storage tank removal and remediation work located at the northeast corner of the property. It is suspected that the residual pesticide contamination found at depth in this location is related to backfilling of the underground storage tank excavation with onsite soil.

The geotechnical engineer is recommending removal and recompaction of the upper agricultural disturbed soil for support of foundations for future single family residential construction. Future commercial construction is also contemplated. It is recommended that the Cal EPA CHHSL's, dated January 2005 be utilized to set appropriate residual levels for the organochlorine pesticide contamination found. Performance of the geotechnical grading along with importation of approximately 500,000 cubic yards of clean fill will likely reduce the residual pesticide to levels below the recommended PRGr. Monitoring of the residual levels of pesticides should be confirmed both during and following completion of the grading activities.

West Coast Environmental (WCE) prepared an Evaluation of Residual Pesticide Concentrations, 115 Acre Parcel on Teal Club Road, Oxnard, California, dated March 17, 2004. The proposed project site may include residential construction, parks, open space, and a possible dedication of an approximate ten acre school site to the Oxnard Union School District. WCE reviewed the California Environmental laboratory data identifying toxaphene and chlordane in concentrations that exceeded Preliminary Remediation Goals (PRGr) for residential soils. Concentrations of chlordane, DDT, DDE, DDD were also found to exceed Total Threshold Limit Concentrations (TTLC) for the toxicity characteristic of hazardous waste in soil. Toxaphene levels exceeded the PRGr at depths of at least one foot below ground surface (bgs) and generally decreased to nondetect by 2.5 feet bgs. DDT, DDE, and DDD were less uniformly distributed and were detected at combined concentrations that exceed the TTLC at only one sampling location. DDT, DDE, and DDD were not detected above their respective PRGr. The concentrations generally decreased to nondetect by 2.5 feet bgs. Arsenic was also found above the PRGr to be uniformly distributed within the upper one foot below ground surface. Toxaphene, DDT, DDE, and DDD were also found at depths of approximately ten feet bgs in the excavation backfill of the former underground storage tanks. The detections were probably from using onsite soil rather than imported fill to backfill the excavation.

Remedial grading of the property to create a uniform cap for the proposed construction was recommended by the soils engineer. The grading would include the removal and replacement of soil to approximately four feet bgs and the import of about 500,000 cubic yards of soil. WCE performed a risk assessment to evaluate the cumulative risks of residual concentrations of toxaphene, DDT, DDE, DDD, and arsenic. The cumulative baseline carcinogenic risk for toxaphene, DDT, DDE, and arsenic did not exceed the target risk set by the program. A portion of the subject property may be developed as a

school site. Preparation of a Cal EPA Compliant Preliminary Endangerment Report would be required for that portion of the property.

### HYDROGEOLOGY

The subject property is located in the western portion of the Transverse Ranges Geomorphic Province within the Ventura Basin Coastal Plain. The property lies several miles to the east of the Pacific Ocean. The property overlies the Oxnard Plain Pressure Groundwater Basin which consists of two main groundwater aquifer systems. These systems include upper aquifers and lower aquifers. Overlying the two main groundwater production aquifers is a semi-perched zone which contains appreciable amounts of clayey and silty material with low transmissivities. Beneath the semi-perched zone is the upper groundwater production zone consisting of the Oxnard and Mugu aquifers. The deep productive groundwater resource underlies the upper zone and consists of the Hueneme and Fox Canyon aquifers. The base of the freshwater bearing zones (Fox Canyon) extend to a depth of approximately 1,800 feet below the ground surface.

Logs for the groundwater production wells located on the property indicate the onsite irrigation wells penetrate primarily into the underlying Oxnard Aquifer. The Oxnard Aquifer is delineated from the upper semi-perched zone by a laterally extensive clay layer which extends onsite from depths of about 95-135 feet below the ground surface. Water levels within the semi-perched zone above the Oxnard Aquifer occur in sandy lenses between the low permeability silts and clays. Historically, water onsite has been encountered at depths of 5, 45 and 80 feet below the ground surface in the semi-perched zone. Groundwater monitoring wells placed beneath the northeast portion of the property during the late

1980's and monitored through 1997 contained water levels which typically ranged from 8 ½ to 10 ½ feet below the ground surface. The groundwater wells were abandoned in 1998. The groundwater flow direction was calculated to be westerly to southwesterly within the shallow zone.

#### SITE UTILIZATION HISTORY

#### **BUILDING PERMIT RESEARCH**

The County of Ventura Division of Building and Safety was contacted for purpose of researching building permits and certificates of occupancies for the subject property. The building permit information found for the subject property address 1618 Doris Avenue is summarized below on **TABLE**II. Copies of the permits are included in **APPENDIX III**.

TABLE II
Building Permits

Date	Permit No.	Owner	Purpose and Description
11/2/88		Borchard, Raznick &	Electrical. Change old existing service to new 100
		Sons	amp.
5/6/03	C03-000708	FA Borchard and Sons,	Agricultural. Demo two structures (barn and wood
		Frances Joan Henson	tower).

#### UNDERGROUND STORAGE TANK PERMIT RESEARCH

The County of Ventura Environmental Health Division and State of California Geotracker database were contacted to obtain information on underground tanks records or industrial waste files maintained for the subject property. The County of Ventura maintains a UST file for the subject property and that file was obtained and reviewed. Information in the Ventura County file for the subject property indicate that gasoline fuel hydrocarbons were detected in soil during tank removal work which occurred in 1987.

The remedial response at the site included excavation and removal of gasoline impacted soil and groundwater monitoring. Five groundwater monitor wells were installed around the area of the gasoline fuel hydrocarbon release to soil. Low to non-detect levels of gasoline hydrocarbons were detected in groundwater obtained from the wells. The wells were monitored intermittently from 1989 through 1995. A request for closure was made to the County of Ventura and the County required one more round of groundwater sampling which occurred in 1997. The 1997 groundwater sampling showed nondetect levels of gasoline fuel hydrocarbons in all wells. Based on this finding, the County of Ventura issued final case closure for the property on February 9, 1998. The location of the removed underground tanks, the former groundwater monitor wells, and the approximate extent of the remedial excavation are shown on the attached PLOT PLAN DETAIL.

## VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT (APCD) FILE REVIEW

An inquiry letter was sent to the Ventura County Air Pollution Control District (APCD) for any information they may have regarding soil, water or air contamination at the subject property. The Ventura County APCD does not maintain a file for the subject property address.

#### HISTORICAL AERIAL PHOTOGRAPH RESEARCH

Historical aerial photographs were reviewed as part of this study. The photographs are part of the aerial photograph collections maintained by EDR Company. The photographs are summarized below in **TABLE III**.

TABLE III
Historical Aerial Photographs

Tristorical Aeriai i notographs		
Date	Description	
1945	The subject property is developed agricultural land and five farm structures near the northeast corner.	
	Agricultural land surrounds the subject site on all sides. Property is bound to the north by a residence,	
	orchards and Doris Avenue; to the south by agricultural land; to the west by Patterson Road, with	
	agricultural land beyond; and to the east by Ventura Road with agricultural land beyond.	
1959	Subject and adjacent properties remain as previously described with the exception of residential	
	development located beyond Ventura Road to the east.	
1964	Subject and adjacent properties remain as previously described in the 1959 aerial photograph.	
1977	Subject and adjacent properties remain as previously described in the 1964 aerial photograph.	
1989	The subject property is developed agricultural land and five farm structures near the northeast corner.	
	Property is bound to the north by a residence, orchards and Doris Avenue; to the south by agricultural	
	land and Teal Club Road; to the west by Patterson Road, with agricultural land beyond; and to the east	
	by Ventura Road with a residential tract beyond.	
1994	The subject property is developed agricultural land and five farm structures near the northeast corner.	
	Property is bound to the north by a residence, orchards and Doris Avenue; to the south by agricultural	
	land and Teal Club Road; to the west by Patterson Road, with agricultural land beyond; and to the east	
	by Ventura Road with a residential tract beyond.	
	1	

### HISTORICAL TOPOGRAPHIC MAP RESEARCH

Historical USGS topographic maps were provided by EDR Company. Maps covering the subject property from four time periods were obtained and reviewed. The map descriptions are summarized below in TABLE IV. Copies of select historical topographic maps are attached in the ILLUSTRATIONS section of this report.

TABLE IV
Historical Tonographic Mans

Date	Quadrangle	Description
1904	Hueneme	Subject and adjacent properties are undeveloped.
1949	Oxnard	Subject property is developed with three structures. Property is bound to the north by a residence, orchards and Doris Avenue; to the south by several structures and Teal Club Road; to the west by Patterson Road, with undeveloped land beyond; and to the east by Ventura Road with a residential tract beyond. Two irrigation wells are located onsite.
1951	Oxnard	Subject and adjacent properties remain as previously described in the 1949 topographic map.
1967	Oxnard	Subject property is developed with four structures. Property is bound to the north by a residence, orchards and Doris Avenue; to the south by several structures and Teal Club Road; to the west by Patterson Road, with undeveloped land beyond; and to the east by Ventura Road with a residential tract beyond.

#### HISTORICAL FIRE INSURANCE MAPS

The EDR Company was contacted to review historical fire insurance maps for the subject property.

There is no Sanborn historical fire insurance map coverage for the subject property.

#### NEARBY CONTAMINATED SITES

#### **LANDFILLS**

The Solid Waste Information Systems (SWIS), and the Waste Management Unit Database (WMUD) were reviewed to identify landfills and transfer stations located near the property. There were no landfills identified within a 2,000-foot radius of the subject property.

#### **OIL FIELD MAPS/METHANE ZONES**

Oil field maps published by the State of California, Division of Oil, Gas and Geothermal Resources (DOGGR) were researched to determine if oil production occurred on or near the subject property. Division of Oil and Gas Map No. 213 indicates that the western portion of the subject property is located on the eastern edge of the West Montalvo Oil Field. The closest oil well to the subject property is an abandoned well located approximately 2,250 feet west of Patterson Road. That well (Laubacher No. 1) is an abandoned oil well. The closest abandoned dry hole to the subject property is well Richfield-Doheny-Oxnard Airport which was drilled to a depth of 14,454 feet in 1956. That abandoned dry hole is located approximately 400 feet south of the southerly property line and 800 feet east of Patterson Road. These offsite wells are not expected to have an adverse impact on the subject property. The subject property is not located within a recognized methane hazard zone.

#### STANDARD ENVIRONMENTAL RECORD SOURCES

In addition to the above records, agency database lists were reviewed for known or suspected contaminated sites and for sites which store, generate or use hazardous materials near the subject property. The subject property is listed as a facility that generated and stored hazardous materials on the HIST UST and UST standard environmental record sources researched for this report. The property is also listed as a site that had a reportable release of fuel on the LUST and Cortese databases. The release of fuel is discussed in the **PREVIOUS WORKS** section of this report. The nearest listed contaminated site to the subject property is the closed Mobil Oil Service Station located at 600 Ventura Road. Mobil Oil had a release of gasoline in September 1988. Impacted soil was excavated and disposed offsite. The Regional Water Quality Control Board issued case closure in September 2001. Nearby risk sites and listed contaminated sites are tabulated below on **TABLE V**.

TABLE V
Standard Environmental Record Sources

Name	Address	Distance from Subject Property	Source(s)
F.A. Borchard & Sons	1618 Doris Avenue	Subject Property	LUST
			(case closed)
			Cortese
		·	HIST UST
			UST
Mobil Oil SS # 18-H4N	600 Ventura Road	1200 ft. NNE	LUST
			(case closed)
			Cortese
Gisler & Gaskins Service	550 N Ventura Road	1305 ft. NNE	HIST UST
Fremont Cleaners	690 Ventura	1420 ft. NNE	SLIC
Ven Oaks Plumbing	131 Mallard Way	1545 ft. SSW	HAZNET
			LUST
			(case closed)
			Cortese
			UST
			HIST UST
Tomra Pacific Inc/ Albertsons #6217	920 N Ventura Road	2335 ft. N	SWRCY
Proodos Properties Inc	2200 Teal Club Road	2430 ft. WSW	LUST
			(case closed)
		,	Cortese
California Recycling	440 S. Ventura Road	2630 ft. S	SWRCY
Services Corporation			

Note: A search of public information databases may omit some nearby contaminated sites due to missing or inaccurate information in the public record.

The orphan site summary in the EDR database report lists small quantity generators (i.e. auto repair and medical offices) of hazardous waste. The properties are located greater than 500 feet from the subject site and are not expected to have an impact on the subject property.

## **GENERAL FINDINGS**

During the research phase of this study, the following information was obtained:

- ♦ There was no Sanborn Fire Insurance Map coverage for the subject property
- ♦ Historical aerial photograph research indicates that the subject property has been used for agricultural purposes since the early 1940s.
- Building permit research found permits for demolition of two structures, a barn, and a wood tower and an electrical upgrade permit for the subject property address.
- ♦ Underground tank records are maintained for the property at the County of Ventura Environmental Health Division. The records indicate that two underground fuel tanks were removed from the maintenance area of the property during 1987. Excavation and removal of gasoline contaminated soil occurred along with groundwater monitoring. The County of Ventura issued a no further action for the property on February 9, 1998 relative to clean up of the gasoline impacted soil.
- ♦ There are no records maintained for the property at the Ventura County Air Pollution Control District.
- There are no landfills or transfer stations located within 2,000-foot radius of the subject property.
- ♦ There are no oil wells located within a 2,000-foot radius of the subject property.
- ◆ The subject property is listed on the CORTESE, LUST, UST and Historic UST databases.
- ♦ The nearest listed contaminated site is the former Mobil Oil station at 600 Ventura Road. That site had a release of gasoline to groundwater. Remediation is complete and the case has been closed.
- ◆ The depth to first groundwater beneath the subject property is 5-10 feet bgs.
- The regional direction of groundwater flow in the shallow zone is towards the west/southwest.

During the site reconnaissance, the following observations were made:

- The subject property is developed and used as agricultural property.
- A maintenance/storage area exists near the northeast corner of the property.
- The subject property is nearly level. The regional topographic slope of the land is to the southwest.
- Drainage on the property is controlled by a series of unlined drainage ditches which shunt agricultural and rainwater discharge into drainage channels located adjacent Patterson and Teal Club Roads.
- No evidence of hazardous substance use was observed on the subject property.
- An aboveground diesel fuel storage tank is present in the maintenance area at the northeast corner of the property.
- ♦ No evidence of containers of hazardous or unidentified substances was observed on the subject property.
- One trash bin was observed near the farm structures.
- ♦ No evidence of wastewater treatment or disposal systems was observed on the subject property.
- Several historic and existing groundwater production wells for irrigation are present on the property.
- Five shallow (34 feet deep) groundwater monitoring wells were installed on the property in 1987. The wells were installed as part of a subsurface assessment and monitoring program associated with an underground fuel storage release.
- ♦ The wells were abandoned under permit and observation by the County of Ventura Department of Public Works.
- ♦ No evidence of strong, pungent or noxious odors was noted on the subject property reconnaissance.
- No evidence of stressed vegetation was observed on the subject property.
- No evidence of staining or residue was observed on the subject property.
- ♦ No evidence of pits, ponds, and/or lagoons was observed on the subject property.
- Water is supplied to the subject property via onsite irrigation wells.
- ♦ The subject property is not connected to the public sewage disposal system or a septic system.

## CONCLUSIONS AND RECOMMENDATIONS

The subject property has historically been used for agricultural purposes. The agricultural use of the property has been ongoing for at least 60 years. A maintenance/storage area exists near the northeast corner of the property. This area contains several wood sheds and larger barns for storage and maintenance of farm equipment, and a single family residence. An aboveground diesel fuel storage tank (approximately 5,000-gallons) was also located in this area. The surrounding area has historically been used for agricultural purposes. The transition to residential development from agricultural use has occurred over the past 30 years.

The subject property is listed as a facility that generated and stored hazardous materials on the HIST UST and UST standard environmental record sources researched for this report. The subject property was also identified as a leaking underground storage tank site on the CORTESE and LUST databases where gasoline impacts to soil and groundwater were recognized. The remedial response at the site included excavation and removal of gasoline impacted soil and groundwater monitoring. Five groundwater monitor wells were installed around the area of the gasoline fuel hydrocarbon release to soil. Low to non-detect levels of gasoline hydrocarbons were detected in groundwater obtained from the wells. The wells were monitored intermittently from 1989 through 1995. The 1997 groundwater sampling showed nondetect levels of gasoline fuel hydrocarbons in all wells. Based on this finding, the County of Ventura issued final case closure for the property on February 9, 1998.

Approximately eight groundwater production wells for irrigation have historically been present on the property. Five of the eight wells list Borchard (Borchard family owned and operated the subject property) as the owner of the well. Three additional wells are identified by different owners. It is

recommended that the wells be located and surveyed. The wells should be abandoned, as necessary, according to the guidelines issued by the County of Ventura Department of Public Works. If possible, residential construction directly above the abandoned groundwater wells should be avoided.

The existing aboveground storage tank (approximately 5,000 gallons) is considered an unpermitted aboveground storage tank facility. It is recommended that the aboveground tank be abandoned by removal under permits issued by the County of Ventura. Minor diesel soil contamination was recognized in the area of the aboveground tank. The shallow impacts in soil should be excavated and removed offsite during redevelopment.

It is recommended that a pre-demolition asbestos and lead based paint survey be performed on the remaining sheds and buildings located at the northeast corner of the property. Buried transite water pipe (assumed to be asbestos containing) may be found onsite during future grading activities. Transite pipe excavated during future grading work should be abandoned and disposed of as non friable asbestos containing waste.

Residual levels of chlorinated pesticides were found in soil beneath the property. The residual levels of pesticides were typically restricted to the upper 1 foot to 1 ½ feet below the ground surface. The most common pesticide found across the property was toxaphene, which is ubiquitous on almost all agricultural properties within the Oxnard Plain. Toxaphene, along with DDT and its breakdown products were found to depths of up to 10 feet in the area of the underground storage tank removal and remediation work located at the northeast corner of the property. It is suspected that the residual

pesticide contamination found at depth in this location is related to backfilling of the underground storage tank excavation with onsite soil.

The geotechnical engineer is recommending removal and recompaction of the upper agricultural disturbed soil for support of foundations for future single family residential construction. Future commercial construction is also contemplated. It is recommended that the Cal EPA CHHSL's, dated January 2005 be utilized to set appropriate residual levels for the organochlorine pesticide contamination found. Performance of the geotechnical grading along with importation of approximately 500,000 cubic yards of clean fill will likely reduce the residual pesticide to levels below action levels. Monitoring of the residual levels of pesticides should be confirmed both during and following completion of the grading activities. A portion of the subject property may be developed as a school site. Preparation of a Cal EPA Compliant Preliminary Endangerment Report may be required for that portion of the property.

The nearest listed contaminated site to the subject property is the closed Mobil Oil Service Station located at 600 Ventura Road. Mobil Oil had a release of gasoline in September 1988. Impacted soil was excavated and disposed offsite. The Regional Water Quality Control Board issued case closure in September 2001. No impact to the subject property from this offsite property is anticipated.

No data failure was encountered in the preparation of this report. Review of recorded land title records, including environmental liens, was included in this report. Environmental liens were not found on file for the subject property address.

California Environmental has performed an Environmental Site Assessment - Phase I in conformance with the scope and limitations of ASTM 1527-05 for the property consisting of approximately 115 acres located at 1618 Doris Avenue, Oxnard, California. This assessment has revealed no additional evidence of recognized environmental conditions in connection with the subject property. Additional site assessment research and/or subsurface assessment activities are not recommended for the subject property.

This report is subject to the following **NOTICE**:

#### NOTICE

All properties are subject to some element of environmental risk and the risk cannot be eliminated. Industrial and commercial properties developed prior to modern environmental laws are especially risk prone to environmental hazards which include, but are not limited to, wastes which may be toxic, ignitable, corrosive or reactive. The potential for these environmental hazards to impact the use of the property can be reduced by the identification and mitigation of the hazards prior to development or redevelopment of the property. Due to the difficulty in locating underground wastes, in some cases it is not always possible to ascertain that hazardous wastes are present on the property prior to development.

A Phase I environmental site assessment does not utilize subsurface exploration to check for the presence of hazardous wastes on the property. The experience of the assessor, along with the research of available reports, aerial photographs and land use records are used to evaluate the potential for hazardous wastes to occur on the site. Based on the information gained from the historical research, subsurface exploration may be recommended to check for the presence of hazardous wastes. Preexisting environmental problems such as the presence of hazardous wastes in the soil or groundwater, can be concealed by grading activities and site improvements. If such wastes are present these wastes cannot be observed.

The undersigned, Charles I. Buckley declares that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in Section 312.10 of 40 CFR 312 and I have the 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 in §312.20.

This report was prepared with the skill and competence as commonly used by environmental professionals in this area. No warranty, expressed or implied, of any kind is made or intended in connection with this report, or by the fact you are being furnished this report, or by any other oral or written statement.

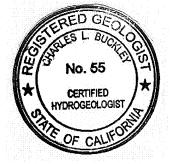
Should you have any questions or desire any additional information, please contact the undersigned.

Respectfully submitted,

Charles I. Buckley Certified Hydrogeologist No. 55

Christopher E. Rude Environmental Scientist

Christophe E. Kingl



## REFERENCES AND QUALIFICATIONS

- 1. Ventura County Department of Public Works, Groundwater Well Information, March 2004.
- 2. Ventura County Environmental Health Division, File Review, July 2007.
- 3. VCAPCD, File Review, July 2007.
- 4. EDR Aerial Photograph Collection, Photograph Research, March 2004.
- 5. EDR-Radius Map with Geocheck, Inquiry No. 1972943.1s, July 2007.
- 6. State of California, Division of Oil, Gas and Geothermal Resource Map No. 213.
- 7. GeoLabs, Geotechnical Engineering Report, March 2004.
- 8. State of California, Department of Water Resources, *Ventura County Cooperative Groundwater Investigation*, July 1975.
- 9. California Environmental, Phase I Environmental Site Assessment, dated June 2004.
- 10. West Coast Environmental and Engineering, Evaluation of Residual Pesticide Concentrations, 115 Acre Parcel on Teal Club Road, Oxnard, California, dated March 17, 2004.
- 11. Cal EPA, California Human Health Screening Levels, dated January 2005.

## CHARLES I. BUCKLEY, JR.

1161 Calle Suerte, Suite G Camarillo, CA 93012 Bus. Tele: (805) 445-7117

E-Mail:

cbuckley@calenviro.com

### **EDUCATION:**

Masters Work in Hydrogeology
 California State University, Los Angeles, 1980-1988

◆ Bachelor of Science, Geology (Engineering Geology)
University of California, Los Angeles, 1978

#### **REGISTRATIONS AND APPOINTMENTS:**

- ◆ State of California, Dept. of Conservation, Former Member, State Mining and Geology Board (Appointed by Gov. Pete Wilson and State Senate confirmed to 4 year term, 1997-2001)
- ◆ State of California, Certified Hydrogeologist, No. 55
- ◆ State of California, Registered Geologist No. 4035
- ◆ State of California, Certified Engineering Geologist No. 1250
- ♦ State of California, Registered Environmental Assessor No. 837
- ♦ State of California, Registered Environmental Assessor II No. 20116

#### PROFESSIONAL EXPERIENCE:

Jan 88-Present

CALIFORNIA ENVIRONMENTAL CEO - Principal Hydrogeologist

Founded California Environmental in January of 1988. Clients include Fortune 500 Corporations, County Government, Municipal Agencies, Financial Institutions, Land Developers, and Consultants. Principal Investigator for groundwater supply and groundwater contamination investigations. Project leader for groundwater remediation at a State of California Superfund Site. Principal hydrogeologist for design and implementation of a groundwater monitoring network for an existing Sanitary Landfill. Lead investigator to delineate structure of a California Groundwater Basin; Pioneered use of a cost effective soil/gas vapor technique used to track groundwater plumes. Conducted over 2000 Phase I Environmental Investigations in California. These investigations included the use and interpretation of historic topographic maps, Sanborn Insurance Maps, aerial photography, and other historic data sources. Successfully completed remedial clean-up on 500+ sites in southern California; including impacts associated with fuels, PCBs, metals, asbestos and chlorinated solvents. Expert consultant for environmental impairment of soil and groundwater: Port of Los Angeles, L.A. County Counsel, L.A. City Recreation and Parks and private attorneys.

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#### PROFESSIONAL EXPERIENCE: (continued)

Mar 84-Dec 87

KOVACS-BYER AND ASSOCIATES Manager Environmental Services Group

Spearheaded the development into the groundwater and environmental segments of consulting market. Ascended from project geologist status to manager of Environmental Services Group. Responsible for all aspects of project management including; organization and staffing, developing technical requirements needed to complete projects, client and agency liaison.

Provided technical leadership for groundwater testing including design and analysis of aquifer pump tests. Lead Geotechnical Investigator for remedial repair of complex landslide terrains. Prepared Seismic Analysis for critical facilities. Recommended specialized drainage systems for abatement of groundwater problems. Project Consultant for award winning projects on which severe geotechnical problems were overcome.

Mar 80-Mar 84 GEOTECHNICAL SERVICES GROUP; BUREAU OF ENGINEERING; CITY OF LOS ANGELES
Assistant Engineering Geologist

Performed geologic mapping in hillside areas of the City of Los Angeles. Reviewed Geotechnical Reports submitted to the City of Los Angeles for private development. Directed landslide investigations. Prepared Expert Opinion documents regarding groundwater and geologic issues for the City Engineer and City Attorney. Conducted field monitoring of known landslides within the City of Los Angeles.

Aug 79-Mar 80 UNITED STATES GEOLOGICAL SURVEY Field Assistant

Assisted in geological mapping for a uranium resource development project sponsored by the Department of Energy and the United States Geological Survey.

# CHARLES I. BUCKLEY, JR.

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# **CONTINUING EDUCATION:**

- ♦ "Advanced Data Analysis Techniques for Evaluating and Quantifying Natural Attenuation for Remediation of Contaminated Sites", NGWA Short Course, March 2007.
- "Technical Guidance for Indoor Air Vapor Intrusion", Severn Trent Laboratory, San Pedro, CA, February 22, 2005.
- ◆ "Low Cost Remediation Techniques", AGSE, San Francisco, CA 2002.
- "Remediation of MtBE", AGSE, Anaheim, CA 2002.
- ◆ "Assessment and Management of MtBE Impacted Sites", San Francisco, January 1999.
- "Workshop on MtBE Water Issues", Los Angeles, June 1997.
- "Management Action Programs Seminar", Newport Beach, November 1996.
- ◆ "ACWA Groundwater Workshop", Monterey, June 1995.
- "SeSoil Modeling Workshop" GSC, San Francisco, CA, October 1994
- "Groundwater Monitoring and Remediation", Short Course AEG, October 1992
- "Microbial Processes in Biodegradation", AGSE, Albuquerque NM, February, 1991
- ♦ "Introduction to Groundwater Geochemistry", National Water Well Association, San Francisco, CA, September, 1988.
- ♦ "Fate and Transport of Contaminants in the Subsurface", United States Environmental Protection Agency, San Francisco, CA, December, 1987.
- ◆ "How to Monitor and Sample the Vadose Zone"
   National Water Well Association, San Diego, CA, April, 1987.
- ◆ "Treatment Technology for Contaminated Groundwater" UCLA Fall, 1986.
- "Groundwater Contamination Detection, Monitoring and Cleanup", UCLA, April, 1986.
- "Introduction to Groundwater Modeling", National Water Well Association, Fullerton, CA 1985.

#### **ORAL PRESENTATIONS AND SEMINARS:**

- ♦ "Overview of Environmental Regulations, State and Federal Laws" Guest Lecturer, University of Southern California, 1991.
- "Environmental Risks and Underground Tank Leaks, Commercial Property Inspection"
   California Real Estate Inspectors Association, Santa Monica, CA., May, 1988.

### CHARLES I. BUCKLEY, JR.

1161 Calle Suerte, Suite G Camarillo, CA 93012

- ♦ "Modified Technique for Soil/Gas Surveys to Detect Groundwater Contamination".

  Association of Engineering Geologists, Southern California Section meeting. December, 1987.
- ♦ "Historic Aerial Photographic Evidence of Landslide Development, Potrero Canyon, CA." Association of Engineering Geologists Annual Meeting, San Francisco, CA., October, 1986.
- "Environmental Issues and Careers", Guest Lecturer, USC Department of Geology, Spring 1992.

## **PROFESSIONAL PAPERS:**

- ◆ "Geology, Landslides and Slope Stabilization. Potrero Canyon Park, Pacific Palisades, CA." Association of Engineering Geologists Guidebook, June 20, 1987.
- ◆ "Red Rose Landslide Stabilization, 3358-3400 Red Rose Drive, CA. with Hollingsworth, R.A.; Association of Engineering Geologists Guidebook. June 20, 1987.
- "Residential Development and Landsliding, Castellammare Mesa area, Los Angeles, CA." Association of Engineering Geologists Guidebook.
   June 2, 1984.

#### **AFFILIATIONS:**

Association of Engineering Geologists.
Association of Groundwater Scientists and Engineers.
California Groundwater Association.
Hazardous Waste Association of California.
Hydrology Section-American Geophysical Union.
National Water Well Association

# **CHRISTOPHER E. RUDE**

1161 Calle Suerte, Suite G Camarillo, CA 93012 Bus. Tele: (805) 445-7117

email:

chrisrude@earthlink.net

ceworks@calenviro.com

#### **EDUCATION:**

♦ Bachelor of Arts

**Environmental Studies and Planning - Hazardous Materials Management** Sonoma State University 1989-1992

#### **CONTINUED EDUCATION:**

- ♦ Course work in Certificate of Hazardous Materials Management Program, University of California, Santa Barbara.
- ♦ Seminar on National Pollutant Discharge Elimination Systems, Law Offices of Burke, Williams & Sorensen LLP, Riverside, California

## **PROFESSIONAL EXPERIENCE:**

1997 - Present

CALIFORNIA ENVIRONMENTAL

**Environmental Scientist** 

1992 - 1996

MSE ENVIRONMENTAL

**Environmental Specialist** 

Performed and provided project management for numerous Phase I Environmental Site Assessments on properties ranging from light industrial to large parcels of undeveloped land. Preparation of reports included site reconnaissance, review of historical documentation, interaction with property owners/tenants, and recommendations regarding recognized environmental conditions. Clients include redevelopment agencies, lenders, developers, and property owners. Also inspected and sampled properties for asbestos containing material, radon, and lead found in paint and/or drinking water.

Performed and provided project management on numerous Phase II Subsurface Site Assessments on properties involving chlorinated solvents, heavy metal, and/or fuel hydrocarbon impacts to soil or groundwater. Assessment activities included geophysical surveys, sampling of soil, soil vapor, or groundwater using Geoprobe, hollow stem auger or dual percussion drill rigs. Assessments also included monitoring for vapor intrusion and fixed gases such as methane.

Performed and provided hazardous waste management for small and large quantity generators, local municipalities and state agencies. Services ranged form the decontamination/decommissioning of industrial buildings to providing segregation and packaging of various hazardous and extremely hazardous materials. **CHRISTOPHER E. RUDE** 

2536.R02

California Environmental Geologists & Engineers Inc.

1161 Calle Suerte, Suite G Camarillo, CA 93012

Performed and provided project management for numerous nation-wide (30 states) Agricultural Chemical and Household Hazardous Waste Collection Events. Responsibilities included: preparing paperwork, preevent profiling, hazcatting, segregation and manifesting of hazardous wastes, and providing final documentation to the regulatory agencies.

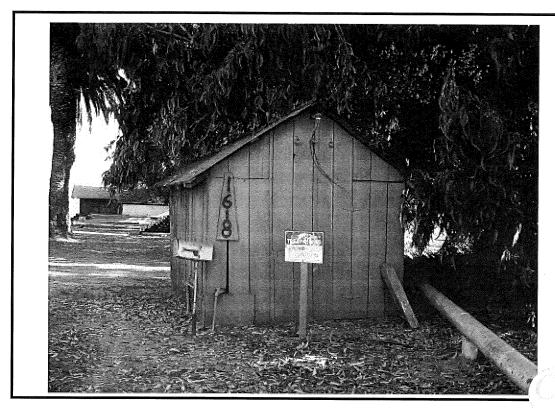
Provided project management, logistical preparation and coordination associated with the State of Pennsylvania, Department of Agricultural's ChemSweep Program. The ChemSweep program which began in 1993 provided a means for farmers to dispose of unwanted, suspended, or cancelled pesticide products. The program included both individual farm pick-ups and county wide agricultural chemical collections throughout the state. The three years of project management included assisting approximately 1,500 farmers in disposing of 238 tons of outdated and banned pesticides. The hazardous waste was containerized for shipment to an EPA approved incinerator.

#### **CERTIFICATIONS:**

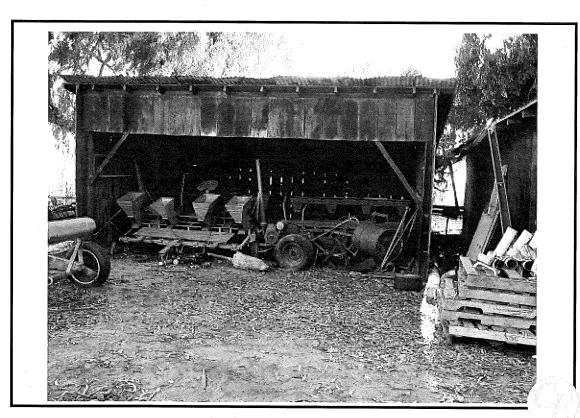
- ♦ OSHA Standard 29 CFR 1910.20 Hazardous Waste-Operations & Emergency Response
- Field Operations for Emergency Response
- ◆ DOT HM 126 F, Handling & Transportation of Hazardous Materials
- ♦ America Red Cross-CPR and First Aid Certification
- Disaster Service Worker, Community Emergency Response Team

# **ILLUSTRATIONS**

Site Photographs – Plates 1 & 2
Vicinity Map
Plot Plan
Plot Plan Detail
Soil Sampling Plot Plan

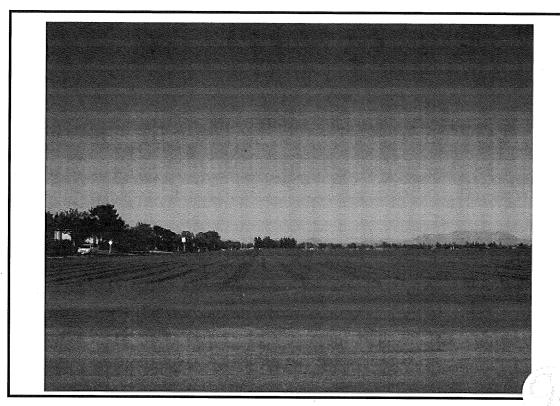


View of farm structure looking south from Doris Avenue. 1618 Doris Avenue and Surrounding Property, Oxnard, California

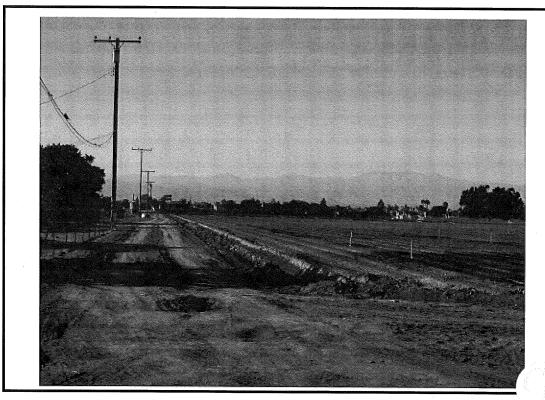


View of equipment and farm structure.

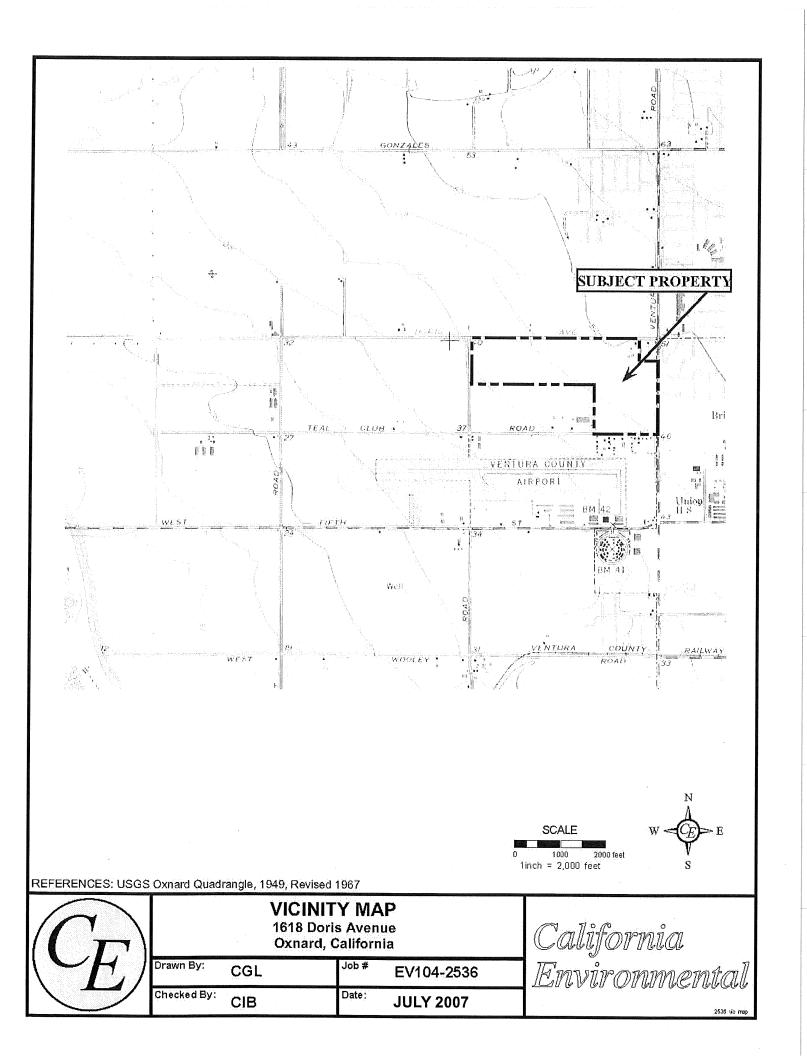
1618 Doris Avenue and Surrounding Property, Oxnard, California

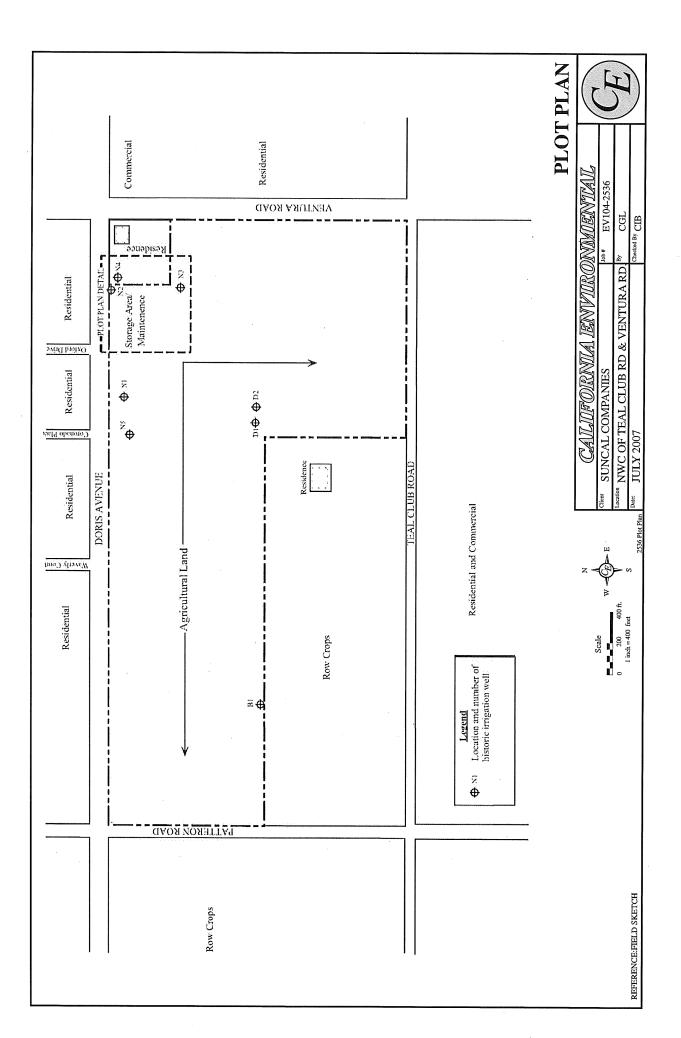


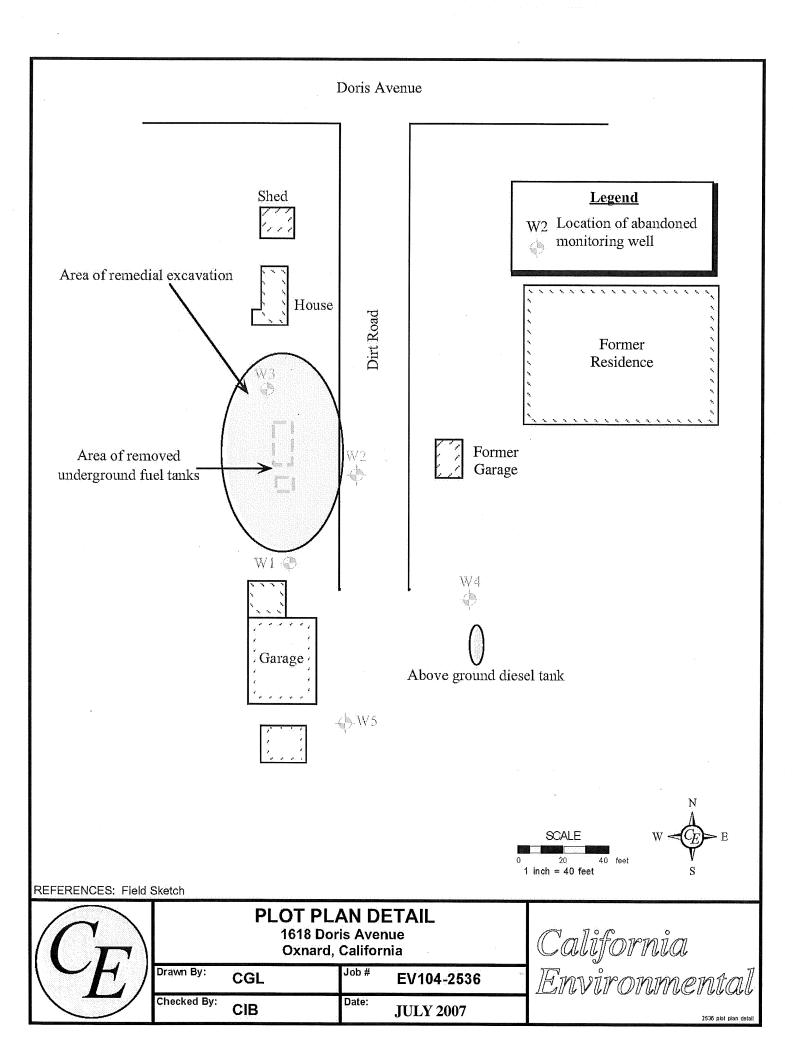
View of subject property from Patterson Road looking east. 1618 Doris Avenue and Surrounding Property, Oxnard, California

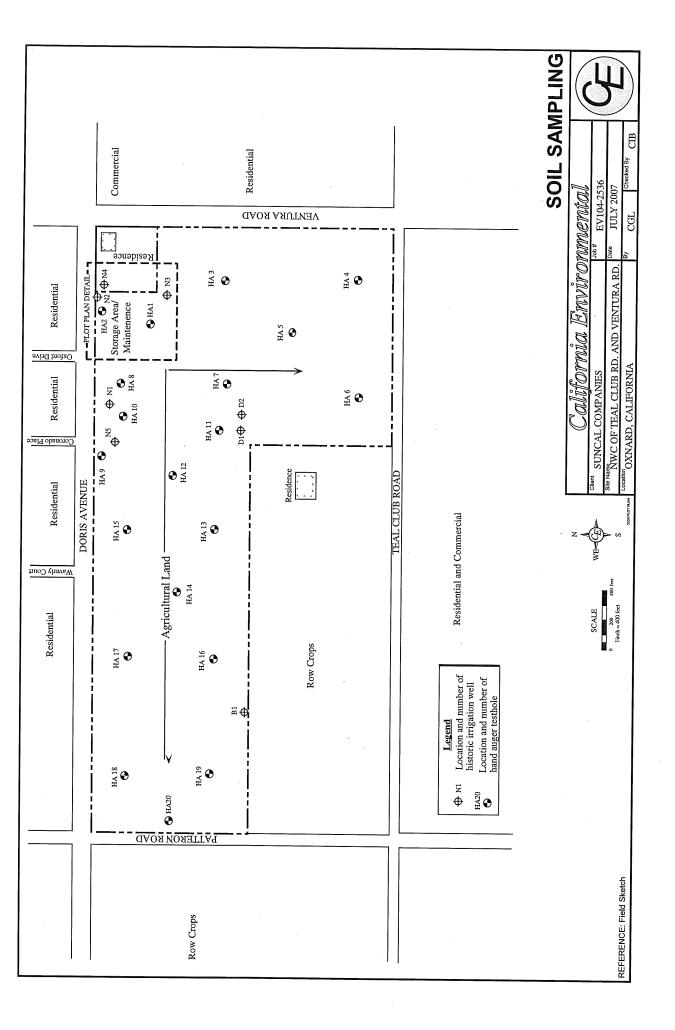


View of subject property from Teal Club Road looking north. 1618 Doris Avenue and Surrounding Property, Oxnard, California









Technical appendices to this Phase I Environmental Site Assessment are on file at City of Oxnard Planning Division offices, located at 214 South C Street in Oxnard, by appointment during regular business hours.