# APPENDIX L HAZARDOUS MATERIALS

This appendix contains supporting documentation for the assessment of Hazardous Materials for the Environmental Impact Statement and Environmental Impact Report.

THIS PAGE INTENTIONALLY LEFT BLANK

**EDR Radius Map Report** 

THIS PAGE INTENTIONALLY LEFT BLANK

# **5.0 Environmental Consequences**

The potential environmental impacts resulting from the construction of Alternative A (No Action), and Alternatives B and D are presented in this chapter. Alternative C is no longer being considered. These three alternatives are summarized below and discussed in detail in Chapter 3.0 of this DEIS:

- Alternative A No-Action The No-Action Alternative assumes the Proposed Project would not be implemented at the Gnoss Field Airport site, and the Gnoss Field Airport would continue to operate with its current runway configuration and length. No improvements would be made at the airport. This alternative is depicted on Exhibit 3-1.
- Alternative B Sponsor's Proposed Project Extend Runway to Northwest by 1,100 Feet This alternative is the sponsor's (FAA and County of Marin) Proposed Project, which is the focus of this DEIS and is depicted on Exhibit 3-2. This alternative consists of the extension of Runway 13/31 by 1,100 feet to the northwest, and the construction of 240-foot Safety Areas to the northwest and southeast. All proposed construction areas are part of the existing airport property.
- Alternative D Extend Runway to Southeast by 240 Feet and Northwest by 860
   <u>Feet</u> This alternative consists of the extension of Runway 13/31 by 240 feet to the southeast and 860 Feet to the northwest, and the construction of 240 foot Safety Areas to the southeast and northwest. The proposed construction would require the acquisition of 5.5 acres of land not currently part of the airport property to the southeast. This alternative is depicted on Exhibit 3 4.

Direct and indirect impacts associated with the three alternatives are identified and discussed in the following sections. Table 5-1 provides a summary of the environmental impacts associated with the implementation of the alternatives. These summary findings are discussed in further detail below.

In accordance with FAA Order 5050.4B, Paragraph 706e, this chapter describes only those environmental impact categories that could be potentially impacted by the Proposed Project and its reasonable alternatives.

Therefore, they are not included in Table 5-1, of discussed further within this DEIS.

According to the USDA Web Soil Survey and the site inspection, there are no prime farmland map units in the proposed project areas (USDA, <a href="https://www.websoilsurvey.arcs.usda.gov/app">www.websoilsurvey.arcs.usda.gov/app</a>). According to the federal Wild and Scenic Rivers website at <a href="https://www.rivers.gov">www.rivers.gov</a>, there are no listed Wild and Scenic Rivers within 50 miles of the proposed project area.

TABLE 5-1 SUMMARY OF ENVIRONMENTAL IMPACTS

Potential Impact Categories (from FAA Order 1050.1E)	A - No Action	B - Sponsor's Proposed Alternative	D – Extend to Southeast and Northwest
Air Quality	No		
Coastal Resources	No	No	No
Compatible Land Use	No		
Construction Impacts	No		
Department of Transportation Act: Section 4(f)	No		
Fish, Wildlife, and Plants	No		
Floodplains	No 4		>
Hazardous Materials, Pollution Prevention, Solid Waste	No	Yes	Yes
Historic, Architectural, Archaeological, and Cultural Resources	No		
Light Emissions and Visual Impacts	No		
Natural Resources and Energy Supply	No	√J7	
Noise	No		
Secondary (induced) Impacts	No		
Socioeconomic, Environmental Justice, Children's Environmental Health and Safety Risks	No		
Water Quality	No		
Wetlands	No		

Notes: Yes - Potential impacts. No - No impacts

Within this chapter of the DEIS, each subsection begins with a brief overview of impacts (printed in bold), followed by a description of the regulatory context and methodology used to determine impacts, and a quantification of the potential impacts. Mitigation measures are presented in Chapter 6.0, Mitigation, of this DEIS.

#### 5.2 Coastal Resources

This section assesses the potential impacts relative to Coastal Resources that would occur as a result of implementing the Sponsor's Proposed Project or its alternatives. This section provides our evaluation of the federal Coastal Zone Management Act (CZMA) for the San Francisco Bay segment of the California coastal zone regarding the jurisdictional extent of the CZMA for the proposed project alternatives.

# 5.2.1 Overview of Impacts

Implementation of Alternatives A (no action), B (extend runway to northwest), and D (extend runway to southeast and northwest) would not result in impacts to the Coastal Zone Management Act because Alternatives A, B, and D do not extend into areas within CMZA jurisdiction.

# 5.2.2 Regulatory Framework

The San Francisco Bay Conservation and Development Commission (BCDC) is charged with administering the federal Coastal Zone Management Act (CZMA) of 1972 (16 U.S.C 1451 through 1465) for the San Francisco Bay segment of the California coastal zone. The Act, administered by NOAA's Office of Ocean and Coastal Resource Management (OCRM), provides for management of the nation's coastal resources and balances economic development with environmental conservation. If a proposed project results in construction proposed within the CZMA, then the sponsor must apply for a permit and comply with the permit requirements.

# 5.2.3 Methodology

Kleinfelder staff reviewed available references and conducted a site visit to the project location on May 21, 2009, to evaluate for any conditions that may influence the extent of jurisdiction under the CZMA. Our preliminary observations and evaluation of the site was presented to the BCDC for the purpose of confirming the extent of jurisdiction under the CZMA in the vicinity of the project site.

On May 21, 2009, information was submitted by email to Bob Batha of BCDC for review and determination of jurisdiction. The information consisted of maps showing the potential extent of the project footprint under the various alternatives and identification of key features of the project site.

# 5.2.4 Potential Impacts and Mitigations

The potential environmental consequences or impacts to the two areas located at either end of the airport runway were considered relative to the three proposed alternatives and were reviewed for Coastal Resources concerns relative to Existing Conditions (prior to runway extension) and Future Conditions (during and post-construction).

# 5.2.4.1 Existing Conditions

Kleinfelder staff visited the site on May 21, 2009, to meet with the airport manager, Mr. Ken Robbins, at the airport office. During this meeting and site visit, it was concluded that most of the seasonal marsh area surrounding the airport runway is not connected directly to the Petaluma River (to the east) or Black John Slough (to the south), which connects directly to the Petaluma River. The entire area is bordered by a levee and water that enters into the marsh slowly drains to the northeast corner of the parcel, where it is pumped out of the system into the Petaluma River. There is a tide gate in the southeast corner of the marsh, but it has not been opened for many years and appears to be inoperable.

On the south end of the existing runway, there is seasonal marsh area, but it is not directly connected to the Petaluma River nor the surrounding marshlands outside the levee surrounding the airport. The water flow into the site is channeled into a drainage ditch that flows around the perimeter of the runway and then the water is pumped out into Black John Slough.

Black John Slough is a tidally-influenced channel with direct unblocked connection to the Petaluma River and thence to the San Francisco Bay. Because of the tidal nature of this channel, Black John Slough is within the CZMA jurisdiction of BCDC and construction activities within this zone would need to comply with BCD permit requirements. The jurisdiction extends 100 feet inland of the MHW tide line, so there is a 100-foot wide margin along Black John Slough that falls within the BCDC's jurisdiction.

# 5.2.4.2 Future Conditions

Alternatives A (no action), B (extend runway to northwest), and D (extend runway to southeast and northwest) do not extend into areas within CMZA jurisdiction. Accordingly, there is no impact to the CMZA from Alternatives A, B, and D, so long as the proposed construction activities do not extend southward to inside the 100 foot buffer zone north of Black John Slough.

# 5.9 Hazardous Materials, Pollution Prevention, and Solid Waste

This section assesses the potential exposure to or generation of hazardous materials, pollution prevention measures, and solid waste that would occur as a result of implementing the Sponsor's Proposed Project or its alternatives. Appendix L, EDR Radius Reports, includes supplemental information regarding the analysis of hazardous materials.

# 5.9.1 Overview of Impacts

Implementation of the No-Action Alternative would not result in hazardous materials impacts because no construction activities would occur and no improvements would be made to the existing airport.

The two variations of runway extension alternatives (Alternatives B and D) would result in short-term, temporary hazardous materials or solid waste impacts from fuels, lubricants and oils, asphalt, paints, solvents, and construction debris commonly associated with construction. The short-term, temporary construction impacts would be reduced to less-than-significant levels with the implementation of the mitigations discussed in this section. The contractor would be responsible for managing, recycling, or disposing of all hazardous and non-hazardous materials and waste associated with the construction project. Redwood Landfill, a Class III landfill, is located within one mile of the proposed construction areas and is licensed to accept the above-described construction debris. This construction debris is capable of being transported to and disposed of at the Redwood Landfill without resulting in impacts to the capacity of the landfill.

The lands within the areas where the runway extension alternatives would be constructed are undeveloped, previously-disturbed vacant lands that do not have a past history of hazardous or non-hazardous (i.e. solid waste) materials or waste storage or use, and do not contain evidence of hazardous or non-hazardous materials dumping or disposal.

None of the lands associated with the runway extension alternatives are located within areas that are known or suspected to contain sites or facilities known to contain environmental contamination.

# 5.9.2 Regulatory Framework

The primary laws governing the handling and disposal of hazardous materials, chemicals, substances, and wastes of most importance to the FAA in proposing actions to construct and operate facilities and navigational aids are (1) the Resource Conservation and Recovery Act of 1976 (RCRA), as amended by the Federal Facilities Compliance Act of 1992, and (2) the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA or Superfund) and the

Community Environmental Response Facilitation Act of 1992. RCRA governs the generation, treatment, storage, and disposal of hazardous and solid wastes. CERCLA provides for consultation with natural resources trustees and cleanup of any release of a hazardous substance, excluding petroleum, into the environment.

The RCRA is intended to provide "cradle to grave" management of hazardous and solid wastes and regulation of underground storage tanks (USTs) containing chemical and petroleum products. The RCRA allows the USEPA to set standards for entities producing, storing, handling, transporting, and disposing of hazardous waste. The RCRA was amended with the Hazardous and Solid Waste Amendments of 1984 (HSWA) that addressed corrective actions and permitting of hazardous waste issues. FAA Order 1050.1E states that the RCRA, as amended by the Federal Facilities Compliance Act of 1992, governs the generation, treatment, storage, and disposal of hazardous wastes.

The RCRA, which amended the Solid Waste Disposal Act, addresses non hazardous (Subtitle D) and hazardous (Subtitle C) waste management activities. RCRA established an Interagency Coordinating Committee on Federal Resource Conservation and Recovery Activities, which has the responsibility for coordinating all activities dealing with resource conservation and recovery from solid waste carried out by all other Federal agencies that conduct such activities pursuant to this chapter or any other act. The term "resource conservation and recovery activities" includes, but is not limited to, all research development and demonstration projects on resource conservation or energy; material recovery from solid waste; and all technical or financial assistance for State or local planning for, or implementation of, projects related to resource conservation, energy, or material recovery from solid waste.

The CERCLA of 1980 provides the authority with which the Federal government can compel people or companies responsible for creating hazardous waste sites to clean them up. Nicknamed "Superfund," it created a public trust fund to assist with the cleanup of inactive and abandoned hazardous waste sites and accidentally spilled or illegally dumped hazardous materials. The CERCLA, as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA or Superfund) and the Community Environmental Response Facilitation Act of 1992 provide for consultation with Natural Resources Trustees and cleanup of any release of hazardous substances (excluding petroleum) into the environment.

A waste is considered hazardous if it is listed in or meets the characteristics described in 40 CFR Part 261, including corrosivity, reactivity, ignitibility, or toxicity. Wastes excluded from regulation as hazardous waste include household wastes, animal wastes, fly ash, slag, and wastes from ore processing.

In accordance with 42 U.S.C. § 6901, a solid waste is considered to be any garbage, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and

agricultural operations, and from community activities. Solid waste does not include solid or dissolved material in domestic sewage or irrigation return flows, or industrial discharges that are point sources subject to permits under 33 U.S.C. § 1342, or source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended.

The Pollution Prevention Act of 1990 (PPA) established the national policy that pollution should be prevented or reduced at the source whenever feasible. The PPA was established to reduce or eliminate waste at the source by modifying production processes, promoting the use of non-toxic or less-toxic substances, implementing conservation techniques, and re-using materials rather than putting them into waste streams.

In addition, Executive Orders (E.O.) that may be relevant to the proposed project include E.O.s 12088 (Federal Compliance with Pollution Control Standards), 13101 (Greening the Government through Waste Prevention, Recycling, and Federal Acquisition), and 13148 (Greening the Government through Leadership in Environmental Management) and were created to support methods to prevent and control pollution in the environment. Additionally, the Federal Aviation Administration (FAA) must comply with applicable pollution control statutes and requirements that may include, but are not limited to those listed in Appendix 2 of FAA Order 1050.10B (Prevention, Control, and Abatement of Environmental Pollution at FAA Facilities), FAA Order 1050.14A (Polychlorinated Biphenyls in the National Airspace System), FAA Order 1050.15A (Underground Storage Tanks at FAA Facilities), and FAA Order 1050.18 (Chlorofluorocarbons and Halon Use at FAA Facilities).

Executive Order 12088, Federal Compliance with Pollution Control Standards, as amended, directs Federal agencies to comply with applicable pollution control standards in the prevention, control, and abatement of environmental pollution; and consult with the USEPA, State, interstate, and local agencies concerning the best techniques and methods available for the prevention, control, and abatement of environmental pollution.

Executive Order 12856, Federal Compliance with Right-to-Know Laws and Pollution Prevention, requires Federal agencies to report, in a public manner, toxic chemicals entering any waste-stream from their facilities, including any releases to the environment. This is required to ensure that generated waste is recycled to the maximum extent practicable, as well as to ensure that any remaining wastes are stored, treated, or disposed of in a manner protective of public health and the environment. This is further required in an effort to improve local emergency planning, response, and accident notification. Finally, the requirement is designed to encourage clean technologies and safe alternatives to extremely hazardous substances or toxic chemicals. This is to be accomplished through revisions to specifications and standards, the acquisition and procurement process, and the testing of innovative pollution prevention technologies at Federal facilities.

# 5.9.3 Methodology

A review of available information was conducted to evaluate if the proposed runway extension project at Gnoss Field Airport has or will generate any known hazardous material and/or solid waste concerns. This was accomplished by review of regulatory databases, historical aerial photographs and topographic maps, a city directory, and Sanborne maps, as available.

In addition, a field reconnaissance of the areas proposed for extension was conducted to visually observe the area for the presence or absence of hazardous materials, solid waste, dumping, or other evidence of hazardous materials and/or solid waste. No soil or water samples were obtained and no laboratory analyses were conducted as part of the field reconnaissance effort.

The alternatives were also evaluated to consider the nature and quantity of construction debris that may be generated during construction. The potential for temporary generation of solid wastes due to construction activities was based on the type of construction activities anticipated for each alternative.

# 5.9.4 Potential Impacts and Mitigations

The potential environmental consequences or impacts to the two areas located at either end of the airport runway were considered relative to the proposed alternatives and were reviewed for Hazardous Materials, Pollution Prevention, and Solid Waste concerns relative to Existing Conditions (prior to runway extension) and Future Conditions (during and post-construction).

# **5.9.4.1 Existing Conditions**

As discussed below, the existing conditions do not present any known impacts to the proposed alternatives.

The potential runway extension areas north and south of the existing runway were inspected on May 18, 2009. Evidence of hazardous materials, solid waste, discolored soil or water, stressed vegetation, above or underground storage tanks, pits, ponds, or lagoons was not observed during the site reconnaissance. No hazardous waste or solid waste is generated in the areas because the areas are not currently in use other than flight pathways at the ends of the existing runway.

The proposed runway extension and safety zone areas for Runway 13/31 extend into areas of previously developed or otherwise human-altered land. Review of historical topographic maps and aerial photographs indicate the current north-south airport runway configuration has existed since at least 1968. Previously, the airport runway was oriented generally east-west from at least 1952 to 1965. The local area of the airport, including the areas proposed for runway extension, have been highly disturbed by land use practices including: historical Bay/Delta-lands reclamation, historical and

on-going agricultural activities including cattle grazing, levee construction, channelization, and construction of the airport facilities and the railroad grade. Currently, the area proposed for runway extension is vacant.

The review of various federal, state, and other databases identified twelve records involving past, present, and potential generation, transportation, storage, uses, or releases of hazardous materials at locations at and within ASTM search distances for each record type. Appendix L presents the EDR Radius Report and includes two maps showing the locations of the sites discussed below. None of the locations were within the areas proposed for the runway extension and safety areas. As discussed below, none of the locations are considered to be able to have an impact on or be impacted by the proposed project.

Six locations (A1 through A6) were identified at the 451 Airport Road address located within the south-central portion of the airport property but not at or adjacent to the proposed runway extension or safety areas. The records for Locations A1, A2, and A4 were all for underground storage tanks (USTs) containing diesel, aviation fuel, or jet fuel. Only Location A1 had records indicating a release consisting of a leaking diesel UST reported and confirmed in 1995 during the closure of the UST. The database report did not include closure or no further action records for Site A1. However, the site is not listed on the state's GeoTracker website, indicating that the site is not active with the Regional Water Quality Control Board (RWQCB) or the Department of Toxic Substances Control (DTSC), the local regulatory agencies that would have regulatory jurisdiction. This suggests that the case was made inactive or closed in the past and is not considered to have an ongoing impact to soil or groundwater. Accordingly, the past and current presence of the USTs is not considered to be able to impact or be impacted by the proposed runway extension or safety areas.

The records for Location A3 reported the release of 40 gallons of aviation fuel from an aircraft that went off the runway and into a ditch adjacent to the runway on July 5, 2006. No further records were available and the status of the release is unknown. The airport manager, Ken Robbins, reported the release was probably more on the order of 5 to 10 gallons. Because of the relatively small volume of the release and the time that has passed since the release, the release is not considered to be able to impact or be impacted by the proposed runway extension or safety areas.

The records for location A5 are for an active NPDES permit with the RWQCB for the industrial storm water permit for the airport operations. This routine operations permit and its reporting activity is for the control of storm water runoff and is not considered to be able to impact or be impacted by the proposed runway extension or safety areas. The record for Location A6 indicates the airport facility produces approximately 0.33 tons per year of solid waste classified as household waste. This is a routine reporting activity and is not considered to be able to impact or be impacted by the proposed runway extension or safety areas.

The record for Location 7 was for a historical UST at 351 Airport Road in 1968. No records were provided indicating the status of this UST and there are no reports of any releases from this UST. Based on the location of Location 7 relative to the proposed runway extension and safety areas and the lack of any records indicating a release, the potential presence of a UST at Location 7 is not considered to be able to impact or be impacted by the proposed runway extension or safety areas.

The record for Location 8 was for the reported removal of 14 drums and fill from the intersection of Airport and Binford Roads, just west of the airport property in 1996. The records and a check of the state GeoTracker website indicate that the case was issued a no further action letter. Accordingly, the past presence of drums and fill at Location 8 is not considered to be able to impact or be impacted by the proposed runway extension or safety areas.

Locations B9 through B12 are located at 351 Airport Road. Each of the sites has one record of the presence of one or more active or removed USTs. There were no records of releases from any of these USTs. Accordingly, the past or current presence of USTs at Locations B9 through B12 are not considered to be able to impact or be impacted by the proposed runway extension or safety areas.

#### 5.9.4.2 Future Conditions

Three of the proposed alternatives may have hazardous materials, pollution prevention, or solid waste impacts on future conditions. However, the potential impacts can be reduced to less-than-significant levels with the mitigations discussed below.

This section discusses the potential impacts from the Sponsor's Proposed Project and its alternatives to or from reasonable and foreseeable future conditions. Specifically, the following discusses the potential impacts during and from the proposed construction activities.

# Alternative A - No Action

Because the No Action Alternative would not result in changes from the existing conditions, this alternative would have no reasonable and foreseeable future impacts relative to hazardous materials or solid waste. This assumes that future flights will continue to operate safely, i.e. certain planes will be required to fly with smaller fuel and cargo loads in order to safely use the current short runway.

# Alternatives B and D - Extend Runway and Construct Safety Areas

Based on the site inspection and records search discussed above, the construction activities during the extension of the runways to either the north or south are not expected to encounter any hazardous materials or solid waste because the areas are not anticipated to be put into any uses other than the current flight pathways at the ends of the existing runway.

**Potential Impact** - The construction activities during the extension of the runway are expected to include the short-term, temporary use or generation of hazardous and non-hazardous materials and waste common to construction including petroleum hydrocarbon-based fuels, lubricants, and oils, paints, and cleaning solvents for the construction equipment. In addition, the asphalt and/or asphaltic concrete materials used to construct the runway extension will be required to be managed appropriately. Pollution prevention measures will be required to control and properly manage the hazardous and non-hazardous materials.

**Mitigation -** Appropriate materials management would be followed to minimize their use, manage waste disposal, and prevent pollution. The use, management, and disposal of hazardous and non-hazardous materials are described below in Table 5.9.1.

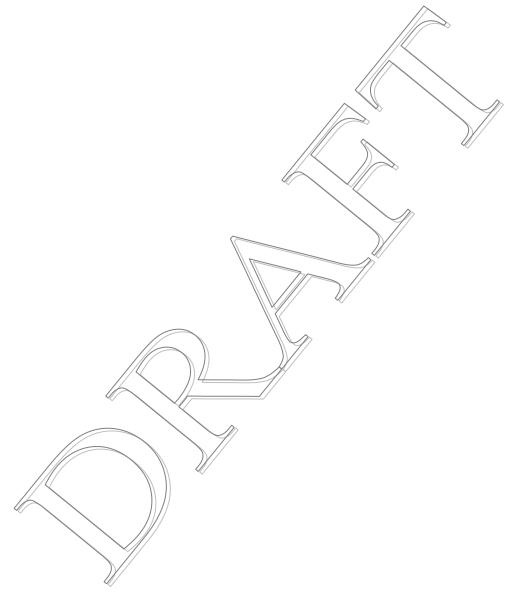


Table 5.9.1 Hazardous and Non-Hazardous Materials Usage and Waste Management During Construction

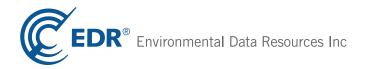
Material	Use	Management
Fuels (diesel, gasoline)	Fuel for construction equipment	Stored in above-ground tanks with secondary containment or within the equipment fuel tanks. Storage containers would be inspected periodically and spill cleanup materials would be available.
Hydraulic fluids, and lubricating oils and greases	Construction equipment	Stored in equipment or on impervious surface with spill cleanup materials available. Used oils would be collected for recycling.
Asphalt or asphaltic concrete	Runway material	Unused material and edge trimmings would be recycled or disposed at a licensed landfill.
Paints, primers, thinners, cleaning fluids, degreasers, adhesives, sealants	Construction materials	Stored onsite in limited quantities at any one time in locked building or trailer separate from any fuel storage. Small amounts of spent solvents would be transported offsite for recycling or disposal at a licensed facility. Waste generated from these activities would be managed by the construction contractor in accordance with federal, state, and local regulations.
Construction debris	Runway trimmings, lumber, cardboard, paper	Contractor would be responsible for removal of construction debris to licensed recycling or disposal facility.
Sewage	From portable toilets during construction	Vendor would remove contents of portable toilets during construction for proper disposal at a licensed facility. Vendor would remove the portable toilets upon completion of construction activities.

**Gnoss Airport** 451 Airport Road Novato, CA 94945

Inquiry Number: 2496047.2s

May 18, 2009

# The EDR Radius Map™ Report with GeoCheck®



# **TABLE OF CONTENTS**

SECTION	PAGE
Executive Summary	ES1
Overview Map	<b>2</b>
Detail Map.	<b> 3</b>
Map Findings Summary.	4
Map Findings	7
Orphan Summary	20
Government Records Searched/Data Currency Tracking	GR-1
GEOCHECK ADDENDUM	
Physical Setting Source Addendum	<b>A-1</b>
Physical Setting Source Summary	A-2
Physical Setting SSURGO Soil Map.	A-5
Physical Setting Source Map	A-8
Physical Setting Source Map Findings	<b>A-9</b>
Physical Setting Source Records Searched	A-17

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

#### **Disclaimer - Copyright and Trademark Notice**

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2009 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

#### TARGET PROPERTY INFORMATION

#### **ADDRESS**

451 AIRPORT ROAD NOVATO, CA 94945

#### **COORDINATES**

Latitude (North): 38.140900 - 38° 8' 27.2" Longitude (West): 122.560000 - 122° 33' 36.0"

Universal Tranverse Mercator: Zone 10 UTM X (Meters): 538557.9 UTM Y (Meters): 4221334.0

Elevation: 4 ft. above sea level

#### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 38122-B5 PETALUMA RIVER, CA

Most Recent Revision: 1980

#### **AERIAL PHOTOGRAPHY IN THIS REPORT**

Portions of Photo from: 2006, 2005 Source: USDA

#### TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 7 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
MARIN COUNTY AIRPORT GNOSS FIELD 451 AIRPORT RD	LUST Status: Open - Site Assessment	N/A
NOVATO, CA 94948	CA FID UST SWEEPS UST	
VINDAR AVIATION 451 AIRPORT RD NOVATO, CA 94947	HIST UST	N/A
GNOSS FIELD 451 AIRPORT RD GNOSS FIELD 451 AIRPORT RD NOVATO, CA	CHMIRS	N/A
MARIN AIR SERVICES 351/451 AIRPORT RD. NOVATO, CA 94947	UST	N/A

MARIN CO AIRPORT NPDES N/A
451 AIRPORT RD STE A CA WDS

NOVATO, CA 94945 HIST CORTESE

MARIN COUNTY AIRPORT (GNOSS FIELD HAZNET N/A

451 AIRPORT ROAD NOVATO, CA 94945

#### **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 CERCLIS NFRAP site List

CERC-NFRAP..... CERCLIS No Further Remedial Action Planned

#### Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

#### Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF...... RCRA - Transporters, 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

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

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

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

State and tribal leaking storage tank lists

SLIC..... Statewide SLIC Cases

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

AST..... Aboveground Petroleum Storage Tank Facilities INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP..... Voluntary Cleanup Priority Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

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

Local Lists of Landfill / Solid Waste Disposal Sites

DEBRIS REGION 9...... Torres Martinez Reservation Illegal Dump Site Locations

ODI...... Open Dump Inventory

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

Local Lists of Hazardous waste / Contaminated Sites

SCH...... School Property Evaluation Program

CDL...... Clandestine Drug Labs

Local Land Records

LIENS 2..... CERCLA Lien Information

LUCIS	Land Use Control Information System
	Environmental Liens Listing
DEED	Deed Restriction Listing

#### Records of Emergency Release Reports

HMIRS...... Hazardous Materials Information Reporting System LDS...... Land Disposal Sites Listing MCS...... Military Cleanup Sites Listing

#### Other Ascertainable Records

CONSENT...... Superfund (CERCLA) Consent Decrees

TRIS...... Toxic Chemical Release Inventory System

TSCA..... Toxic Substances Control Act

FTTS......FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide

Act)/TSCA (Toxic Substances Control Act)

HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing

SSTS..... Section 7 Tracking Systems

ICIS...... Integrated Compliance Information System

FINDS....... Facility Index System/Facility Registry System RAATS....... RCRA Administrative Action Tracking System

CA BOND EXP. PLAN..... Bond Expenditure Plan

Notify 65...... Proposition 65 Records DRYCLEANERS..... Cleaner Facilities

WIP..... Well Investigation Program Case List

EMI...... Emissions Inventory Data INDIAN RESERV..... Indian Reservations

SCRD DRYCLEANERS...... State Coalition for Remediation of Drycleaners Listing

#### **EDR PROPRIETARY RECORDS**

#### **EDR Proprietary Records**

Manufactured Gas Plants..... EDR Proprietary Manufactured Gas Plants

## SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in bold italics are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

#### 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 02/23/2009 has revealed that there is 1 ENVIROSTOR site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	<b>Direction / Distance</b>	Map ID	Page
NOVATO STORAGE PARK Status: No Further Action	AIRPORT / BINFORD ROADS	WSW 1/8 - 1/4 (0.140 mi.)	8	14

#### State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, and dated 04/08/2009 has revealed that there are 4 UST sites within approximately 0.25 miles of the target property.

Address	Direction / Distance	Map ID	Page
1 AIRPORT ROAD	W 1/8 - 1/4 (0.142 mi.)	B9	16
51 AIRPORT ROAD	W 1/8 - 1/4 (0.142 mi.)	B10	17
51 AIRPORT RD.	W 1/8 - 1/4 (0.142 mi.)	B11	18
31 AIRPORT ROAD	W 1/8 - 1/4 (0.142 mi.)	B12	19
	51 AIRPORT ROAD 51 AIRPORT ROAD 51 AIRPORT RD.	51 AIRPORT ROAD W 1/8 - 1/4 (0.142 mi.) 51 AIRPORT ROAD W 1/8 - 1/4 (0.142 mi.) 51 AIRPORT RD. W 1/8 - 1/4 (0.142 mi.)	51 AIRPORT ROAD W 1/8 - 1/4 (0.142 mi.) B9 51 AIRPORT ROAD W 1/8 - 1/4 (0.142 mi.) B10 51 AIRPORT RD. W 1/8 - 1/4 (0.142 mi.) B11

#### State and tribal voluntary cleanup sites

VCP: Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

A review of the VCP list, as provided by EDR, and dated 02/23/2009 has revealed that there is 1 VCP site within approximately 0.5 miles of the target property.

Equal/Higher Elevat	ion -	Address	Direction / Distance	Map ID	Page
NOVATO STORAGE PA	ARK	AIRPORT / BINFORD ROADS	WSW 1/8 - 1/4 (0.140 mi.)	8	14

#### 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 is 1 HIST UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	<b>Direction / Distance</b>	Map ID	Page
ALLANA CORPORATION	MARIN COUNTY AIRPORT	SW 0 - 1/8 (0.052 mi.)	7	13

#### Other Ascertainable Records

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES].

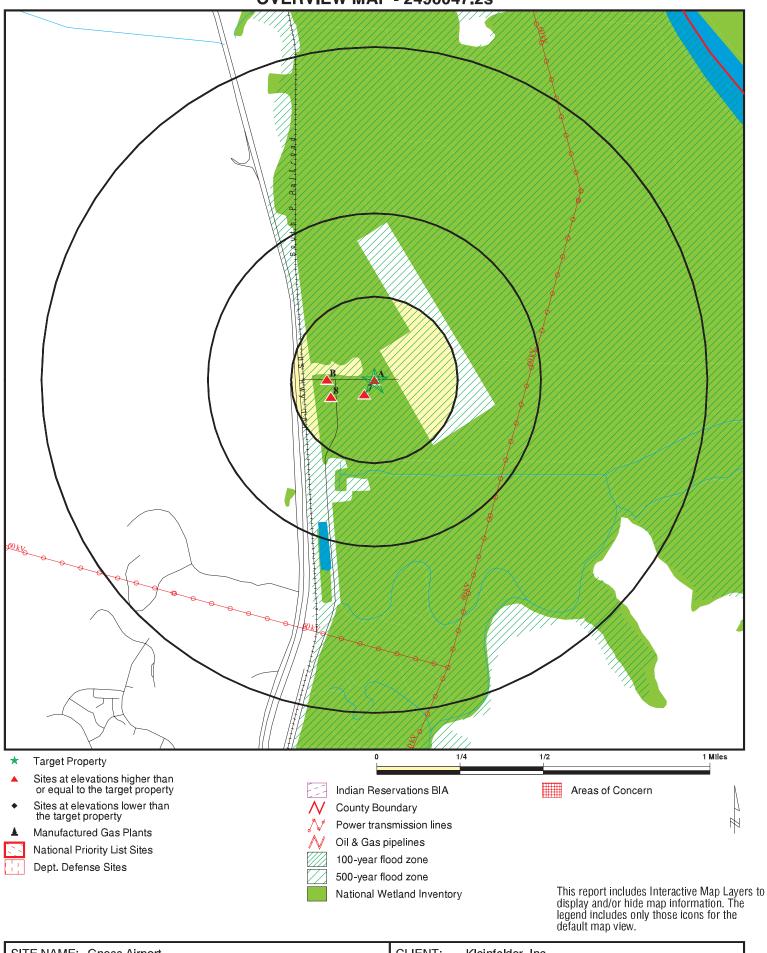
A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there is 1 HIST CORTESE site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NOVATO STORAGE PARK	AIRPORT / BINFORD ROADS	WSW 1/8 - 1/4 (0.140 mi.)	8	14

Due to poor or inadequate address information, the following sites were not mapped:

Site Name	Database(s)
US 101 EST BLYTHEDALE EXIT	CHMIRS, SLIC
LIVING HISTORY CENTER	UST
NOVATO SANITARY DISTRICT - RECLAMA	UST
SUPER IGNACIO SERVICE	UST
RUSH CREEK ESTATES	SLIC
NOVATO STORAGE PARK RANCHO DEL PAN	SLIC

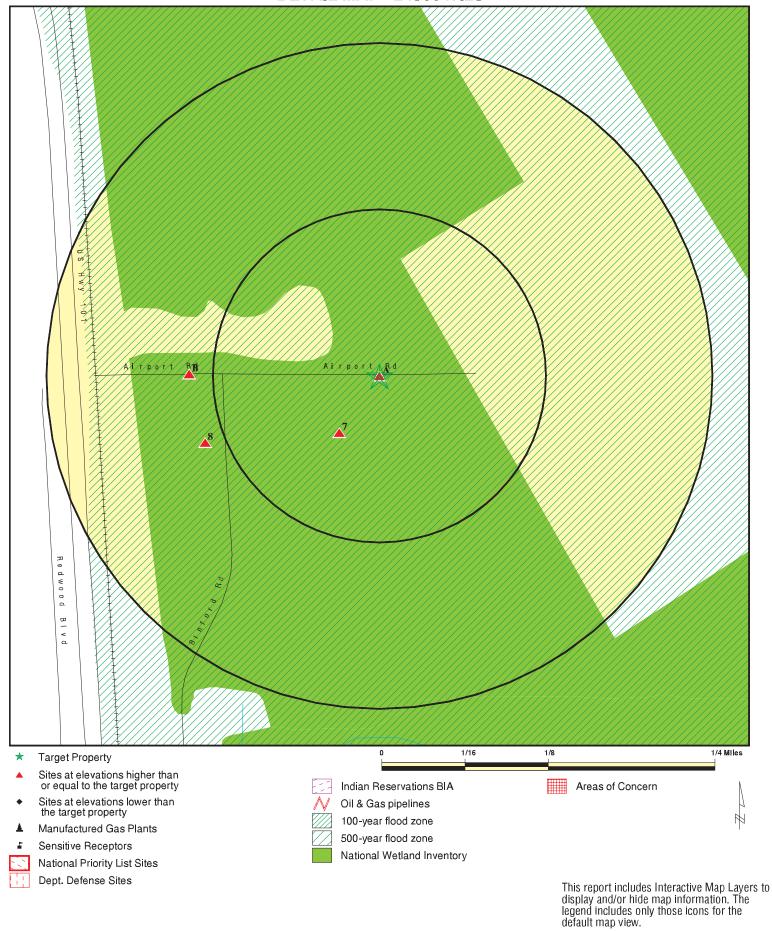
# **OVERVIEW MAP - 2496047.2s**



 SITE NAME: Gnoss Airport
 CLIENT: Kleinfelder, Inc.

 ADDRESS: 451 Airport Road Novato CA 94945
 CONTACT: Michael Burns INQUIRY #: 2496047.2s

 LAT/LONG: 38.1409 / 122.5600
 DATE: May 18, 2009 12:53 pm



SITE NAME: Gnoss Airport

ADDRESS: 451 Airport Road
Novato CA 94945

LAT/LONG: 38.1409 / 122.5600

CLIENT: Kleinfelder, Inc.
CONTACT: Michael Burns
INQUIRY #: 2496047.2s
DATE: May 18, 2009 12:57 pm

# **MAP FINDINGS SUMMARY**

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMEN	TAL RECORDS							
Federal NPL site list								
NPL Proposed NPL NPL LIENS		1.000 1.000 TP	0 0 NR	0 0 NR	0 0 NR	0 0 NR	NR NR NR	0 0 0
Federal Delisted NPL sit	te list							
Delisted NPL		1.000	0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS		0.500	0	0	0	NR	NR	0
Federal CERCLIS NFRA	P site List							
CERC-NFRAP		0.500	0	0	0	NR	NR	0
Federal RCRA CORRAC	TS facilities li	st						
CORRACTS		1.000	0	0	0	0	NR	0
Federal RCRA non-COR	RACTS TSD f	acilities list						
RCRA-TSDF		0.500	0	0	0	NR	NR	0
Federal RCRA generator	rs list							
RCRA-LQG RCRA-SQG RCRA-CESQG		0.250 0.250 0.250	0 0 0	0 0 0	NR NR NR	NR NR NR	NR NR NR	0 0 0
Federal institutional cor engineering controls reg								
US ENG CONTROLS US INST CONTROL		0.500 0.500	0 0	0 0	0 0	NR NR	NR NR	0 0
Federal ERNS list								
ERNS		TP	NR	NR	NR	NR	NR	0
State- and tribal - equiva	alent NPL							
RESPONSE		1.000	0	0	0	0	NR	0
State- and tribal - equiva	alent CERCLIS	8						
ENVIROSTOR		1.000	0	1	0	0	NR	1
State and tribal landfill a solid waste disposal site								
SWF/LF		0.500	0	0	0	NR	NR	0
State and tribal leaking	storage tank l	ists						
LUST SLIC INDIAN LUST	Х	0.500 0.500 0.500	0 0 0	0 0 0	0 0 0	NR NR NR	NR NR NR	0 0 0

# **MAP FINDINGS SUMMARY**

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted			
State and tribal registered storage tank lists											
UST AST INDIAN UST	Χ	0.250 0.250 0.250	0 0 0	4 0 0	NR NR NR	NR NR NR	NR NR NR	4 0 0			
State and tribal voluntary cleanup sites											
VCP INDIAN VCP		0.500 0.500	0 0	1 0	0 0	NR NR	NR NR	1 0			
ADDITIONAL ENVIRONMENTAL RECORDS											
Local Brownfield lists											
US BROWNFIELDS		0.500	0	0	0	NR	NR	0			
Local Lists of Landfill / Solid Waste Disposal Sites											
DEBRIS REGION 9 ODI WMUDS/SWAT SWRCY HAULERS INDIAN ODI		0.500 0.500 0.500 0.500 TP 0.500	0 0 0 0 NR 0	0 0 0 0 NR 0	0 0 0 0 NR 0	NR NR NR NR NR	NR NR NR NR NR	0 0 0 0 0			
Local Lists of Hazardous waste / Contaminated Sites											
US CDL HIST Cal-Sites SCH Toxic Pits CDL		TP 1.000 0.250 1.000 TP	NR 0 0 0 NR	NR 0 0 0 NR	NR 0 NR 0 NR	NR 0 NR 0 NR	NR NR NR NR NR	0 0 0 0			
Local Lists of Registere	d Storage Tar	nks									
CA FID UST HIST UST SWEEPS UST	X X X	0.250 0.250 0.250	0 1 0	0 0 0	NR NR NR	NR NR NR	NR NR NR	0 1 0			
Local Land Records											
LIENS 2 LUCIS LIENS DEED		TP 0.500 TP 0.500	NR 0 NR 0	NR 0 NR 0	NR 0 NR 0	NR NR NR NR	NR NR NR NR	0 0 0			
Records of Emergency Release Reports											
HMIRS CHMIRS LDS MCS	Х	TP TP TP TP	NR NR NR NR	NR NR NR NR	NR NR NR NR	NR NR NR NR	NR NR NR NR	0 0 0			
Other Ascertainable Records											
RCRA-NonGen		0.250	0	0	NR	NR	NR	0			

# **MAP FINDINGS SUMMARY**

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DOT OPS		TP	NR	NR	NR	NR	NR	0
DOD		1.000	0	0	0	0	NR	0
FUDS		1.000	0	0	0	0	NR	0
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
UMTRA		0.500	0	0	0	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0
TSCA FTTS		TP TP	NR NR	NR NR	NR NR	NR NR	NR	0
HIST FTTS		TP	NR NR	NR NR	NR NR	NR NR	NR NR	0 0
SSTS		TP	NR	NR	NR	NR	NR	0
ICIS		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
MLTS		TP	NR	NR	NR	NR	NR	0
RADINFO		TP	NR	NR	NR	NR	NR	0
FINDS		TP	NR	NR	NR	NR	NR	Ö
RAATS		TP	NR	NR	NR	NR	NR	Ő
CA BOND EXP. PLAN		1.000	0	0	0	0	NR	Ö
CA WDS	Χ	TP	NR	NR	NR	NR	NR	Ö
NPDES	X	TP	NR	NR	NR	NR	NR	0
Cortese		0.500	0	0	0	NR	NR	0
HIST CORTESE	X	0.500	0	1	0	NR	NR	1
Notify 65		1.000	0	0	0	0	NR	0
DRYCLEANERS		0.250	0	0	NR	NR	NR	0
WIP		0.250	0	0	NR	NR	NR	0
HAZNET	X	TP	NR	NR	NR	NR	NR	0
EMI		TP	NR	NR	NR	NR	NR	0
INDIAN RESERV		1.000	0	0	0	0	NR	0
SCRD DRYCLEANERS		0.500	0	0	0	NR	NR	0
EDR PROPRIETARY RECOR	<u>DS</u>							
EDR Proprietary Records								
Manufactured Gas Plants		1.000	0	0	0	0	NR	0
		1.000	0	0	0	0	NR	0

# NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS Map ID

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

Α1 MARIN COUNTY AIRPORT GNOSS FIELD LUST S101588497

**Target 451 AIRPORT RD CA FID UST** N/A **SWEEPS UST NOVATO, CA 94948 Property** 

Site 1 of 6 in cluster A

LUST:

Actual: STATE 4 ft. Region: T0604100280 Global Id: Latitude: 38.1313 Longitude: -122.5715

> Case Type: **LUST Cleanup Site** Status: Open - Site Assessment 1995-07-06 00:00:00 Status Date:

SAN FRANCISCO BAY RWQCB (REGION 2) Lead Agency:

Case Worker: Not reported Local Agency: MARIN COUNTY RB Case Number: 21-0298

LOC Case Number: 21-0298 File Location: Not reported

Potential Media Affect: Other Groundwater (uses other than drinking water)

Potential Contaminats of Concern: Diesel Site History: Not reported

LUST:

2 Region: 21-0298 Facility Id:

Facility Status: Leak being confirmed

Case Number: 21-0298 How Discovered: Tank Closure Leak Cause: UNK UNK Leak Source: Date Leak Confirmed: 7/6/1995 Oversight Program: LUST

Prelim. Site Assesment Wokplan Submitted: Not reported Preliminary Site Assesment Began: Not reported Pollution Characterization Began: Not reported Pollution Remediation Plan Submitted: Not reported Date Remediation Action Underway: Not reported Date Post Remedial Action Monitoring Began: Not reported

CA FID UST:

Facility ID: 21001081 Regulated By: UTNKA Regulated ID: 00035761 Cortese Code: Not reported SIC Code: Not reported Facility Phone: 4158977101 Mail To: Not reported P O BOX Mailing Address: Mailing Address 2: Not reported **NOVATO 94947** Mailing City, St, Zip: Contact: Not reported Not reported Contact Phone: **DUNs Number:** Not reported NPDES Number: Not reported Not reported EPA ID: Comments: Not reported

MAP FINDINGS Map ID

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

#### MARIN COUNTY AIRPORT GNOSS FIELD (Continued)

S101588497

Status: Active

SWEEPS UST:

Status: Α Comp Number: 35761 Number: 9

44-013874 Board Of Equalization: 01-09-90 Ref Date: Act Date: 01-09-90 Created Date: 12-31-88 Tank Status: Α

Owner Tank Id: 3

Swrcb Tank Id: 21-000-035761-000001

Actv Date: 07-01-85 Capacity: 10000 Tank Use: M.V. FUEL Stg: Content: JET FUEL

Number Of Tanks:

Status: Α Comp Number: 35761 Number:

44-013874 Board Of Equalization: Ref Date: 01-09-90 01-09-90 Act Date: Created Date: 12-31-88 Tank Status: Owner Tank Id:

21-000-035761-000002 Swrcb Tank Id:

07-01-85 Actv Date: Capacity: 10000 Tank Use: M.V. FUEL Stg: Ρ

AVIA. GAS Content: Number Of Tanks: Not reported

Status: 35761 Comp Number: Number: 9 Board Of Equalization: 44-013874 Ref Date: 01-09-90 Act Date: 01-09-90 12-31-88 Created Date: Tank Status: Α Owner Tank Id:

Swrcb Tank Id: 21-000-035761-000003

07-01-85 Actv Date: 10000 Capacity: M.V. FUEL Tank Use:

Stg:

Content: AVIA. GAS Number Of Tanks: Not reported Map ID MAP FINDINGS

Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

A2 VINDAR AVIATION HIST UST U001600321
Target 451 AIRPORT RD N/A

Site 2 of 6 in cluster A

**NOVATO, CA 94947** 

Actual: 4 ft.

**Property** 

HIST UST:

Region: STATE
Facility ID: 00000035761
Facility Type: Other

Other Type: AVIATION FUEL

Total Tanks: 0003

Contact Name: LEROY RUSCH
Telephone: 4158977101
Owner Name: C. C. KEMP INC.
Owner Address: 451 AIRPORT RD
Owner City,St,Zip: NOVATO, CA 94947

Tank Num: 001
Container Num: 03
Year Installed: 1969
Tank Capacity: 00010000
Tank Used for: PRODUCT

Type of Fuel: 06

Tank Construction: Not reported

Leak Detection: Visual, Stock Inventor

Tank Num: 002
Container Num: 01
Year Installed: 1968
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: 06

Tank Construction: Not reported Leak Detection: Visual

Tank Num: 003
Container Num: 02
Year Installed: 1968
Tank Capacity: 00010000
Tank Used for: PRODUCT

Type of Fuel: 06

Tank Construction: Not reported Leak Detection: Visual

A3 CHMIRS S109043087
Target GNOSS FIELD 451 AIRPORT RD N/A

Target GNOSS FIELD 451 AIRPORT RD Property NOVATO, CA

Site 3 of 6 in cluster A

Actual: CHMIRS: 4 ft. OES Ir

OES Incident Number: 06-3966

OES notification: 7/5/2006 11:14:19 AM

OES Date: Not reported
OES Time: Not reported
Incident Date: Not reported
Date Completed: Not reported
Property Use: Not reported
Agency Id Number: Not reported

TC2496047.2s Page 9

MAP FINDINGS

Map ID Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

(Continued) S109043087

Agency Incident Number: Not reported Time Notified: Not reported Not reported Time Completed: Not reported Surrounding Area: Estimated Temperature: Not reported Property Management: Not reported Not reported Special Studies 1: Special Studies 2: Not reported Special Studies 3: Not reported Special Studies 4: Not reported Special Studies 5: Not reported Special Studies 6: Not reported

More Than Two Substances Involved?: Not reported Resp Agncy Personel # Of Decontaminated: Not reported Responding Agency Personel # Of Injuries: Not reported Responding Agency Personel # Of Fatalities: Not reported Others Number Of Decontaminated: Not reported Others Number Of Injuries: Not reported Others Number Of Fatalities: Not reported Others Number Of Fatalities: Not reported

Vehicle Make/year: Not reported Vehicle License Number: Not reported Vehicle State: Not reported Vehicle Id Number: Not reported CA/DOT/PUC/ICC Number: Not reported Company Name: Not reported Reporting Officer Name/ID: Not reported Report Date: Not reported Comments: Not reported Facility Telephone: Not reported Not reported Waterway Involved:

Waterway: Marin County Petaluma River

Spill Site: Not reported Cleanup By: Unknown Containment: Not reported What Happened: Not reported Not reported Type: Measure: Not reported Other: Not reported Date/Time: Not reported Year: 2006 Novato Fire Agency:

Incident Date: 7/5/2006 12:00:00 AM

Admin Agency: Marin County Waste Management Office

Amount: Not reported
Contained: Unknown
Site Type: Other
E Date: Not reported
Substance: Aviation fuel
Quantity Released: Not reported

BBLS: 0
Cups: 0
CUFT: 0
Gallons: 40
Grams: 0
Pounds: 0
Liters: 0
Ounces: 0

MAP FINDINGS Map ID

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

(Continued) S109043087

Pints: 0 0 Quarts: Sheen: 0 Tons: 0 Unknown:

Description: Not reported

Evacuations: 0 Number of Injuries: 0 Number of Fatalities:

Description: A cessna 182 went off the runway into a ditch. Fuel has leaked from

the plane and is impacting the Petaluma River.

U004130046 Α4 **MARIN AIR SERVICES** UST **Target** 351/451 AIRPORT RD. N/A

Property **NOVATO, CA 94947** 

Site 4 of 6 in cluster A

UST: Actual:

Facility Id: Not reported 4 ft.

> Tank Number: Not reported Tank Status: Not reported Not reported Tank Contents: Certficate Number: Not reported Not reported Last Inspected: Active: Not reported Program: Not reported Not reported Location: Pulled Date: Not reported Reason: Not reported

MARIN CO AIRPORT **NPDES** S102432987 Α5 **CA WDS Target 451 AIRPORT RD STE A** N/A **Property NOVATO, CA 94945 HIST CORTESE** 

Site 5 of 6 in cluster A

Actual:

4 ft. Npdes Number: Not reported Facility Status: Active 29848 Agency Id: Region: 2

Regulatory Measure Id: 182126 Order No: Not reported Order No Of General Order: 97-03-DWQ

Storm water industrial Regulatory Measure Type:

239491 Place Id: WDID: 2 211000647 INDSTW Program Type: Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 3/17/1992 Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported Discharge Name: Marin Cnty Discharge Address: PO Box 4186 Map ID MAP FINDINGS

Direction Distance

Elevation Site Database(s) EPA ID Number

MARIN CO AIRPORT (Continued)

S102432987

**EDR ID Number** 

Discharge Address2:

Discharge City:

Discharge State:

CA

Discharge Zip:

Not reported

San Rafael

CA

94913

CA WDS:

Facility ID: San Francisco Bay 211000647

Facility Type: Industrial - Facility that treats and/or disposes of liquid or

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:

Facility Telephone: 4158971754
Facility Contact: KEN ROBBINS
Agency Name: MARIN CO
Agency Address: PO Box 4186

Agency City, St, Zip: San Rafael 949134186

Agency Contact: KEN ROBBINS
Agency Telephone: 4158971754
Agency Type: County
SIC Code: 0

SIC Code 2: Not reported Primary Waste: 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 TTWQ 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.

Complexity: Category C - Facilities having no waste treatment systems, such as

cooling water dischargers or thosewho 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.

CORTESE:

Region: CORTESE Facility County Code: 21
Reg By: LTNKA
Reg Id: 21-0298

Direction Distance

Elevation Site Database(s) EPA ID Number

A6 MARIN COUNTY AIRPORT (GNOSS FIELD) HAZNET S105722175
Target 451 AIRPORT ROAD N/A

Target 451 AIRPORT ROAD Property NOVATO, CA 94945

Site 6 of 6 in cluster A

Actual: HAZNET: 4 ft. Gepaid:

ft. Gepaid: CAH111000330
Contact: JESS ROWLES
Telephone: 4154996548
Facility Addr2: Not reported
Mailing Name: Not reported

Mailing Address: 3501 CIVIC CENTER DRIVE Mailing City,St,Zip: SAN RAFAEL, CA 949030000

Gen County: Marin
TSD EPA ID: Not reported
TSD County: San Bernardino
Waste Category: Household waste
Disposal Method: Not reported
Tons: 0.33

Facility County: Not reported

7 ALLANA CORPORATION HIST UST U001600325 SW MARIN COUNTY AIRPORT N/A

SW MARIN COUNTY AIRPORT < 1/8 NOVATO, CA 94948 0.052 mi.

0.052 mi. 274 ft.

Relative: HIST UST: Higher Region:

 Facility ID:
 00000015458

 Actual:
 Facility Type:
 Gas Station

 5 ft.
 Other Type:
 Not reported

Total Tanks: 0001

Contact Name: CHARLES COYNE
Telephone: 4158975185
Owner Name: W.C. ERSTED

Owner Address: 650 BAIR ISLAND ROAD - SUITE #
Owner City,St,Zip: REDWOOD CITY, CA 94063

STATE

001 Tank Num: Container Num: 1 Year Installed: 1968 Tank Capacity: 00010000 Tank Used for: **PRODUCT** Type of Fuel: Not reported Tank Construction: UNKNOWN unknown Leak Detection: Stock Inventor

TC2496047.2s Page 13

**EDR ID Number** 

Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

**HIST CORTESE** 

8 NOVATO STORAGE PARK VCP S100181583
WSW AIRPORT / BINFORD ROADS ENVIROSTOR N/A

1/8-1/4 0.140 mi. 738 ft.

Relative: VCP:

Higher Facility ID: 21420001

**NOVATO, CA 94945** 

Site Type: Voluntary Cleanup

Actual: Site Type Detail: Voluntary Cleanup

5 ft. Acres: Not reported

National Priorities List: NO
Cleanup Oversight Agencies: SMBRP
Lead Agency: SMBRP
Lead Agency Description: DTSC - Sit
Project Manager: Not reported
Supervisor: Karen Toth
Division Branch: Berkeley
Site Code: Not reported

Assembly: 06 Senate: 03

Special Programs Code: Voluntary Cleanup Program

Status: No Further Action Status Date: 1996-05-16 00:00:00

Restricted Use: NO

Funding: Not reported

Lat/Long: 38.1406 / -122.5618

Alias Name: 21420001

Alias Type: Envirostor ID Number
Alias Name: 110033612277
Alias Type: EPA (FRS #)

APN: NONE SPECIFIED APN Description: Not reported

Comments: Completed VCA. No further action required at the site based on the

submission of a 1987 report showing the result of a detailed investigation of the drums, their contents, and the soil beneath them. Soil and drum were disposed at a Class III landfiSite Discovery. Facility identified by workplan received by

DTSC.Completed Site Screening. Approximately fourteen 55-gallon

drums were found in fill. A soil investigation is needed to characterize both the vertical and lateral extent of the soil contamination and see if there is potentail leachate into bay

mudunderlying the fill. Recommended PEA.II.

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 1990-02-06 00:00:00

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: \* Discovery

Completed Date: 1987-01-25 00:00:00

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: \*Voluntary Cleanup Agreement Completion

Completed Date: 1996-05-16 00:00:00

Direction Distance

Elevation Site Database(s) EPA ID Number

## **NOVATO STORAGE PARK (Continued)**

S100181583

**EDR ID Number** 

Confirmed: 31000 Confirmed Description: No Contami Not reported Future Area Name: Not reported Future Sub Area Name: Future Document Type: Not reported Future Due Date: Not reported Media Affected: NMA Media Affected Desc: Not reported

Management:

Management Required: NONE SPECIFIED Management Required Desc: Not reported

Potential: NONE SPECIFIED,31000

Potenital Description: Not reported Potenital Description: No Contami Not reported Schedule Area Name: Not reported Schedule Sub Area Name: Schedule Document Type: Not reported Schedule Due Date: Not reported Schedule Revised Date: Not reported PastUse: NONE

## **ENVIROSTOR:**

Site Type: Voluntary Cleanup Site Type Detailed: Voluntary Cleanup Acres: Not reported NPL: NO Regulatory Agencies: **SMBRP SMBRP** Lead Agency: Not reported Program Manager: Karen Toth Supervisor: Division Branch: Berkeley Facility ID: 21420001 Site Code: Not reported

Assembly: 06 Senate: 03

Special Program: Voluntary Cleanup Program

Status: No Further Action
Status Date: 1996-05-16 00:00:00

Restricted Use: NO

Funding: Not reported
Latitude: 38.1406
Longitude: -122.5618
Alias Name: 21420001

Alias Type: Envirostor ID Number
Alias Name: 110033612277
Alias Type: EPA (FRS #)

APN: NONE SPECIFIED APN Description: Not reported

Comments: Completed VCA. No further action required at the site based on the

submission of a 1987 report showing the result of a detailed investigation of the drums, their contents, and the soil beneath them. Soil and drum were disposed at a Class III landfiSite Discovery. Facility identified by workplan received by

DTSC.Completed Site Screening. Approximately fourteen 55-gallon

drums were found in fill. A soil investigation is needed to

MAP FINDINGS Map ID

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

## **NOVATO STORAGE PARK (Continued)**

S100181583

characterize both the vertical and lateral extent of the soil contamination and see if there is potentail leachate into bay

mudunderlying the fill. Recommended PEA.II.

Completed Info:

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported Completed Document Type: Site Screening 1990-02-06 00:00:00 Completed Date:

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported Completed Document Type: \* Discovery

1987-01-25 00:00:00 Completed Date:

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: \*Voluntary Cleanup Agreement Completion

Completed Date: 1996-05-16 00:00:00

Confirmed: 31000 Confirmed Description: No Contami Future Area Name: Not reported Future Sub Area Name: Not reported Future Document Type: Not reported Future Due Date: Not reported Media Affected: **NMA** Media Affected Desc: Not reported

Management:

NONE SPECIFIED Management Required: Management Required Desc: Not reported

Potential: NONE SPECIFIED, 31000

Potenital Description: Not reported Potenital Description: No Contami Schedule Area Name: Not reported Not reported Schedule Sub Area Name: Schedule Document Type: Not reported Schedule Due Date: Not reported Schedule Revised Date: Not reported PastUse: NONE

CORTESE:

Region: CORTESE Facility County Code: 21 **CALSI** Reg By: Reg Id: 21420001

U003935975 **B9 AERO FUEL, INC** UST West **351 AIRPORT ROAD** N/A

1/8-1/4 **NOVATO, CA** 0.142 mi.

748 ft. Site 1 of 4 in cluster B

UST: Relative:

Facility Id: 60-0558 Higher

Actual: Tank Number: 1

5 ft.

TC2496047.2s Page 16

Direction Distance

Elevation Site Database(s) EPA ID Number

**AERO FUEL, INC (Continued)** 

Tank Status: Active

Tank Contents: Motor vehicle fuel Certficate Number: Not reported 10/15/2008 Active: Yes

Program: Not reported Location: Not reported Pulled Date: Not reported Reason: Not reported

Tank Number: 1

Tank Status: Tank Removed
Tank Contents: Motor vehicle fuel
Certficate Number: Not reported
Last Inspected: 3/10/1998
Active: No

Program: Not reported Location: Not reported Pulled Date: Not reported Reason: Not reported

Tank Number: 2
Tank Status: Active

Tank Contents: Motor vehicle fuel Certficate Number: Not reported 10/15/2008

Active: Yes

Program: Not reported Location: Not reported Pulled Date: Not reported Reason: Not reported

Tank Number: 2

Tank Status: Tank Removed
Tank Contents: Motor vehicle fuel
Certficate Number: Not reported
Last Inspected: 3/10/1998
Active: No

Program: Not reported Location: Not reported Pulled Date: Not reported Reason: Not reported

B10 EMC AVIATION SERVICES/EMC PETROLEUM

West 351 AIRPORT ROAD 1/8-1/4 NOVATO, CA

0.142 mi.

748 ft. Site 2 of 4 in cluster B

Relative: UST:

Higher Facility Id: 60-0530

Actual: Tank Number: 1
5 ft. Tank Status: Ac

Tank Status: Active Tank Contents: Not reported

TC2496047.2s Page 17

U003973463

N/A

UST

**EDR ID Number** 

U003935975

MAP FINDINGS Map ID

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

## **EMC AVIATION SERVICES/EMC PETROLEUM (Continued)**

Not reported

U003973463

U003783588

N/A

Certficate Number: 15801 11/9/2004 Last Inspected: Active: No Program: Not reported Location: Not reported Pulled Date: Not reported

Tank Number: 2 Tank Status: Active Tank Contents: Not reported 15801 Certficate Number: Last Inspected: 11/9/2004 Active: No

Program: Not reported Not reported Location: Pulled Date: Not reported Reason: Not reported

B11 **AERO FUEL C/O INDUSTRIAL REALTY** 

West 351 AIRPORT RD. 1/8-1/4 **NOVATO, CA 94945** 

0.142 mi.

752 ft. Site 3 of 4 in cluster B

UST: Relative:

Higher Global ID: 12908 Latitude: 38.14093

Reason:

Actual: Longitude: -122.56271 5 ft.

UST:

Facility Id: Not reported

Tank Number: Not reported Tank Status: Not reported Not reported Tank Contents: Not reported Certficate Number: Last Inspected: Not reported Active: Not reported Program: UST Location: Not reported 1/16/1987 Pulled Date: Reason: Not reported

Tank Number: Not reported Not reported Tank Status: Not reported Tank Contents: Certficate Number: Not reported Last Inspected: Not reported Active: Not reported Program: UST

Location: Closed Files Pulled Date: 1/6/1987 Reason: Not reported

Direction Distance

Distance EDR ID Number
Elevation Site EDR ID Number

B12 NORTHERN LIGHTS AVIATION UST U004051133
West 351 AIRPORT ROAD N/A

West 351 AIRPORT ROAL 1/8-1/4 NOVATO, CA

0.142 mi.

752 ft. Site 4 of 4 in cluster B

Relative: UST:

**Higher** Facility Id: 60-0477

Actual: Tank Number: Not reported 5 ft. Tank Status: Not reported

Tank Contents: Not reported Certficate Number: Not reported Last Inspected: Not reported

Active: No

Program: Not reported Location: Not reported Pulled Date: Not reported Reason: Not reported

# ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip Database(s)
MARIN COUNTY	S105632050		US 101 EST BLYTHEDALE EXIT	CHMIRS, SLIC
NOVATO	U003914617	003914617 LIVING HISTORY CENTER	1410 HWY. 37	34945 UST
NOVATO	U004130062	J004130062 NOVATO SANITARY DISTRICT - RECLAMA	HIGHWAY 37	UST
NOVATO	S106235160	106235160 RUSH CREEK ESTATES	ATHERTON AVE @ BINFORD RD	SLIC
NOVATO	U004051168	004051168 SUPER IGNACIO SERVICE	5778 REDWOOD HIGHWAY	UST
NOVATO	S106234950	106234950 NOVATO STORAGE PARK RANCHO DEL PAN	UNKNOWN AIRPORT RD / BINFORD	34945 SLIC

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

## 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: 02/02/2009 Source: EPA
Date Data Arrived at EDR: 02/12/2009 Telephone: N/A

Date Made Active in Reports: 03/30/2009 Last EDR Contact: 04/20/2009

Number of Days to Update: 46 Next Scheduled EDR Contact: 07/27/2009
Data Release Frequency: Quarterly

**NPL Site Boundaries** 

Sources

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: 202-564-7333

EPA Region 1 EPA Region 6

Telephone 617-918-1143 Telephone: 214-655-6659

EPA Region 3 EPA Region 7

Telephone 215-814-5418 Telephone: 913-551-7247

EPA Region 4 EPA Region 8

Telephone 404-562-8033 Telephone: 303-312-6774

EPA Region 5 EPA Region 9

Telephone 312-886-6686 Telephone: 415-947-4246

EPA Region 10

Telephone 206-553-8665

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: 02/02/2009 Source: EPA
Date Data Arrived at EDR: 02/12/2009 Telephone: N/A

Number of Days to Update: 46 Next Scheduled EDR Contact: 07/27/2009
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.

Source: EPA

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

Telephone: 202-564-4267 Last EDR Contact: 05/17/2009

Next Scheduled EDR Contact: 08/17/2009 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: 02/02/2009 Date Data Arrived at EDR: 02/12/2009

Date Made Active in Reports: 03/30/2009

Number of Days to Update: 46

Source: EPA Telephone: N/A

Last EDR Contact: 04/20/2009

Next Scheduled EDR Contact: 07/27/2009 Data Release Frequency: Quarterly

#### Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 01/09/2009 Date Data Arrived at EDR: 01/30/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 101

Source: EPA

Telephone: 703-412-9810 Last EDR Contact: 05/15/2009

Next Scheduled EDR Contact: 07/13/2009 Data Release Frequency: Quarterly

#### Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 12/03/2007 Date Data Arrived at EDR: 12/06/2007 Date Made Active in Reports: 02/20/2008

Number of Days to Update: 76

Source: EPA

Telephone: 703-412-9810 Last EDR Contact: 03/16/2009

Next Scheduled EDR Contact: 06/15/2009 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: 03/25/2009 Date Data Arrived at EDR: 04/02/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 39

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 03/03/2009

Next Scheduled EDR Contact: 06/01/2009 Data Release Frequency: Quarterly

## Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Transporters, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 11/12/2008 Date Data Arrived at EDR: 11/18/2008 Date Made Active in Reports: 03/16/2009

Number of Days to Update: 118

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 04/23/2009

Next Scheduled EDR Contact: 07/20/2009 Data Release Frequency: Quarterly

## Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 11/12/2008 Date Data Arrived at EDR: 11/18/2008 Date Made Active in Reports: 03/16/2009

Number of Days to Update: 118

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 04/23/2009

Next Scheduled EDR Contact: 07/20/2009 Data Release Frequency: Quarterly

## RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 11/12/2008 Date Data Arrived at EDR: 11/18/2008 Date Made Active in Reports: 03/16/2009

Number of Days to Update: 118

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 04/23/2009

Next Scheduled EDR Contact: 07/20/2009 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: 11/12/2008
Date Data Arrived at EDR: 11/18/2008
Date Made Active in Reports: 03/16/2009

Number of Days to Update: 118

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 04/23/2009

Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

## Federal institutional controls / engineering controls registries

## US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 03/31/2009 Date Data Arrived at EDR: 04/22/2009 Date Made Active in Reports: 05/05/2009

Number of Days to Update: 13

Source: Environmental Protection Agency Telephone: 703-603-0695

Last EDR Contact: 03/30/2009

Next Scheduled EDR Contact: 06/29/2009 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: 03/31/2009 Date Data Arrived at EDR: 04/22/2009 Date Made Active in Reports: 05/05/2009

Number of Days to Update: 13

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 03/30/2009

Next Scheduled EDR Contact: 06/29/2009 Data Release Frequency: Varies

## 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: 12/31/2007 Date Data Arrived at EDR: 01/23/2008 Date Made Active in Reports: 03/17/2008

Number of Days to Update: 54

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180 Last EDR Contact: 05/12/2009

Next Scheduled EDR Contact: 07/20/2009 Data Release Frequency: Annually

## State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity.

These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 02/23/2009 Date Data Arrived at EDR: 02/24/2009 Date Made Active in Reports: 04/08/2009

Number of Days to Update: 43

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 02/24/2009

Next Scheduled EDR Contact: 05/25/2009 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 identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 02/23/2009 Date Data Arrived at EDR: 02/24/2009 Date Made Active in Reports: 04/08/2009

Number of Days to Update: 43

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 02/24/2009

Next Scheduled EDR Contact: 05/25/2009 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: 03/09/2009 Date Data Arrived at EDR: 03/10/2009 Date Made Active in Reports: 04/08/2009

Number of Days to Update: 29

Source: Integrated Waste Management Board

Telephone: 916-341-6320 Last EDR Contact: 03/10/2009

Next Scheduled EDR Contact: 06/08/2009 Data Release Frequency: Quarterly

## State and tribal leaking storage tank lists

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources

Control Board's LUST database.

Date of Government Version: 03/01/2001 Date Data Arrived at EDR: 04/23/2001 Date Made Active in Reports: 05/21/2001

Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)

Telephone: 858-637-5595 Last EDR Contact: 04/13/2009

Next Scheduled EDR Contact: 07/13/2009

Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer

to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005 Date Data Arrived at EDR: 02/15/2005 Date Made Active in Reports: 03/28/2005

Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)

Telephone: 909-782-4496 Last EDR Contact: 05/04/2009

Next Scheduled EDR Contact: 08/03/2009 Data Release Frequency: Varies

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003 Date Data Arrived at EDR: 09/10/2003 Date Made Active in Reports: 10/07/2003

Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)

Telephone: 530-542-5572 Last EDR Contact: 03/03/2009

Next Scheduled EDR Contact: 06/01/2009 Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004 Date Data Arrived at EDR: 02/26/2004 Date Made Active in Reports: 03/24/2004

Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)

Telephone: 760-776-8943 Last EDR Contact: 05/18/2009

Next Scheduled EDR Contact: 08/17/2009 Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005 Date Data Arrived at EDR: 06/07/2005 Date Made Active in Reports: 06/29/2005

Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)

Telephone: 760-241-7365 Last EDR Contact: 03/30/2009

Next Scheduled EDR Contact: 06/29/2009 Data Release Frequency: No Update Planned

LUST: Geotracker's Leaking Underground Fuel Tank Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 04/08/2009 Date Data Arrived at EDR: 04/08/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 33

Source: State Water Resources Control Board

Telephone: see region list Last EDR Contact: 04/08/2009

Next Scheduled EDR Contact: 07/06/2009 Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001 Date Data Arrived at EDR: 02/28/2001 Date Made Active in Reports: 03/29/2001

Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)

Telephone: 707-570-3769 Last EDR Contact: 05/18/2009

Next Scheduled EDR Contact: 08/17/2009 Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa

Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004 Date Data Arrived at EDR: 10/20/2004 Date Made Active in Reports: 11/19/2004

Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)

Telephone: 510-622-2433 Last EDR Contact: 04/07/2009

Next Scheduled EDR Contact: 07/06/2009 Data Release Frequency: Quarterly

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003 Date Data Arrived at EDR: 05/19/2003 Date Made Active in Reports: 06/02/2003

Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)

Telephone: 805-542-4786 Last EDR Contact: 05/11/2009

Next Scheduled EDR Contact: 08/10/2009 Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control

Board's LUST database.

Date of Government Version: 09/07/2004 Date Data Arrived at EDR: 09/07/2004 Date Made Active in Reports: 10/12/2004

Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)

Telephone: 213-576-6710 Last EDR Contact: 03/23/2009

Next Scheduled EDR Contact: 06/22/2009 Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008 Date Data Arrived at EDR: 07/22/2008 Date Made Active in Reports: 07/31/2008

Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)

Telephone: 916-464-4834 Last EDR Contact: 04/20/2009

Next Scheduled EDR Contact: 07/20/2009 Data Release Frequency: Quarterly

SLIC: Statewide SLIC Cases

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 04/08/2009 Date Data Arrived at EDR: 04/08/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 33

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 04/08/2009

Next Scheduled EDR Contact: 07/06/2009 Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003 Date Data Arrived at EDR: 04/07/2003 Date Made Active in Reports: 04/25/2003

Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)

Telephone: 707-576-2220 Last EDR Contact: 05/18/2009

Next Scheduled EDR Contact: 08/17/2008

Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004 Date Data Arrived at EDR: 10/20/2004 Date Made Active in Reports: 11/19/2004

Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)

Telephone: 510-286-0457 Last EDR Contact: 04/07/2009

Next Scheduled EDR Contact: 07/06/2009 Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006 Date Data Arrived at EDR: 05/18/2006 Date Made Active in Reports: 06/15/2006

Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)

Telephone: 805-549-3147 Last EDR Contact: 05/11/2009

Next Scheduled EDR Contact: 08/10/2009 Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004 Date Data Arrived at EDR: 11/18/2004 Date Made Active in Reports: 01/04/2005

Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)

Telephone: 213-576-6600 Last EDR Contact: 04/20/2009

Next Scheduled EDR Contact: 07/20/2009

Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005 Date Data Arrived at EDR: 04/05/2005 Date Made Active in Reports: 04/21/2005

Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)

Telephone: 916-464-3291 Last EDR Contact: 03/30/2009

Next Scheduled EDR Contact: 06/29/2009 Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005 Date Data Arrived at EDR: 05/25/2005 Date Made Active in Reports: 06/16/2005

Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch

Telephone: 619-241-6583 Last EDR Contact: 03/30/2009

Next Scheduled EDR Contact: 06/29/2009 Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004 Date Data Arrived at EDR: 09/07/2004 Date Made Active in Reports: 10/12/2004

Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region

Telephone: 530-542-5574 Last EDR Contact: 03/03/2009

Next Scheduled EDR Contact: 06/01/2009
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004 Date Data Arrived at EDR: 11/29/2004 Date Made Active in Reports: 01/04/2005

Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region

Telephone: 760-346-7491 Last EDR Contact: 05/17/2009

Next Scheduled EDR Contact: 08/17/2009 Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008 Date Data Arrived at EDR: 04/03/2008 Date Made Active in Reports: 04/14/2008

Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)

Telephone: 951-782-3298 Last EDR Contact: 03/30/2009

Next Scheduled EDR Contact: 06/29/2009 Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007 Date Data Arrived at EDR: 09/11/2007 Date Made Active in Reports: 09/28/2007

Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)

Telephone: 858-467-2980 Last EDR Contact: 02/23/2009

Next Scheduled EDR Contact: 05/25/2009 Data Release Frequency: Annually

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 12/15/2008 Date Data Arrived at EDR: 12/16/2008 Date Made Active in Reports: 03/16/2009

Number of Days to Update: 90

Source: Environmental Protection Agency

Telephone: 415-972-3372 Last EDR Contact: 05/17/2009

Next Scheduled EDR Contact: 08/17/2009 Data Release Frequency: Quarterly

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 02/15/2009 Date Data Arrived at EDR: 02/27/2009 Date Made Active in Reports: 03/16/2009

Number of Days to Update: 17

Source: EPA Region 6 Telephone: 214-665-6597 Last EDR Contact: 05/17/2009

Next Scheduled EDR Contact: 08/17/2009 Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 03/03/2009 Date Data Arrived at EDR: 03/04/2009 Date Made Active in Reports: 03/30/2009

Number of Days to Update: 26

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 05/17/2009

Next Scheduled EDR Contact: 08/17/2009 Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/01/2008 Date Data Arrived at EDR: 12/03/2008 Date Made Active in Reports: 12/23/2008

Number of Days to Update: 20

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 02/20/2009

Next Scheduled EDR Contact: 05/18/2009 Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 03/13/2009 Date Data Arrived at EDR: 03/17/2009 Date Made Active in Reports: 03/30/2009

Number of Days to Update: 13

Source: EPA Region 8 Telephone: 303-312-6271 Last EDR Contact: 05/17/2009

Next Scheduled EDR Contact: 08/17/2009 Data Release Frequency: Quarterly

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 02/19/2009 Date Data Arrived at EDR: 02/19/2009 Date Made Active in Reports: 03/16/2009

Number of Days to Update: 25

Source: EPA Region 1 Telephone: 617-918-1313 Last EDR Contact: 05/17/2009

Next Scheduled EDR Contact: 08/17/2009 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: 02/24/2009 Date Data Arrived at EDR: 03/03/2009 Date Made Active in Reports: 05/05/2009

Number of Days to Update: 63

Source: EPA Region 4 Telephone: 404-562-8677 Last EDR Contact: 05/17/2009

Next Scheduled EDR Contact: 08/17/2009 Data Release Frequency: Semi-Annually

## State and tribal registered storage tank lists

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 04/08/2009 Date Data Arrived at EDR: 04/08/2009 Date Made Active in Reports: 05/14/2009

Number of Days to Update: 36

Source: SWRCB Telephone: 916-480-1028 Last EDR Contact: 04/08/2009

Next Scheduled EDR Contact: 07/06/2009 Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities Registered Aboveground Storage Tanks.

Date of Government Version: 11/01/2007 Date Data Arrived at EDR: 02/10/2009 Date Made Active in Reports: 04/14/2009

Number of Days to Update: 63

Source: State Water Resources Control Board

Telephone: 916-341-5712 Last EDR Contact: 05/11/2009

Next Scheduled EDR Contact: 07/27/2009 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: 02/19/2009 Date Data Arrived at EDR: 02/19/2009 Date Made Active in Reports: 03/16/2009

Number of Days to Update: 25

Source: EPA, Region 1 Telephone: 617-918-1313 Last EDR Contact: 05/17/2009

Next Scheduled EDR Contact: 08/17/2009 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, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 02/24/2009 Date Data Arrived at EDR: 03/03/2009 Date Made Active in Reports: 05/05/2009

Number of Days to Update: 63

Source: EPA Region 4 Telephone: 404-562-9424 Last EDR Contact: 05/17/2009

Next Scheduled EDR Contact: 08/17/2009 Data Release Frequency: Semi-Annually

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: 09/08/2008 Date Data Arrived at EDR: 09/19/2008 Date Made Active in Reports: 10/16/2008

Number of Days to Update: 27

Source: EPA Region 5 Telephone: 312-886-6136 Last EDR Contact: 05/17/2009

Next Scheduled EDR Contact: 08/17/2009 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 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/06/2009 Date Data Arrived at EDR: 04/07/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 34

Source: EPA Region 6 Telephone: 214-665-7591 Last EDR Contact: 05/17/2009

Next Scheduled EDR Contact: 08/17/2009 Data Release Frequency: Semi-Annually

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: 04/01/2008 Date Data Arrived at EDR: 12/30/2008 Date Made Active in Reports: 03/16/2009

Number of Days to Update: 76

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 02/20/2009

Next Scheduled EDR Contact: 05/18/2009 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 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 03/13/2009 Date Data Arrived at EDR: 03/17/2009 Date Made Active in Reports: 03/30/2009

Number of Days to Update: 13

Source: EPA Region 8 Telephone: 303-312-6137 Last EDR Contact: 05/17/2009

Next Scheduled EDR Contact: 08/17/2009 Data Release Frequency: Quarterly

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: 03/03/2009 Date Data Arrived at EDR: 03/04/2009 Date Made Active in Reports: 03/30/2009

Number of Days to Update: 26

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 05/17/2009

Next Scheduled EDR Contact: 08/17/2009 Data Release Frequency: Quarterly

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: 12/15/2008 Date Data Arrived at EDR: 12/16/2008 Date Made Active in Reports: 03/16/2009

Number of Days to Update: 90

Source: EPA Region 9 Telephone: 415-972-3368 Last EDR Contact: 05/17/2009

Next Scheduled EDR Contact: 08/17/2009 Data Release Frequency: Quarterly

## State and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

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

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 04/02/2008 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 1 Telephone: 617-918-1102 Last EDR Contact: 04/20/2009

Next Scheduled EDR Contact: 07/20/2009

Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 02/23/2009 Date Data Arrived at EDR: 02/24/2009 Date Made Active in Reports: 04/08/2009

Number of Days to Update: 43

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 02/24/2009

Next Scheduled EDR Contact: 05/25/2009 Data Release Frequency: Quarterly

## ADDITIONAL ENVIRONMENTAL RECORDS

## Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 10/01/2008 Date Data Arrived at EDR: 11/14/2008 Date Made Active in Reports: 12/23/2008

Number of Days to Update: 39

Source: Environmental Protection Agency

Telephone: 202-566-2777 Last EDR Contact: 05/15/2009

Next Scheduled EDR Contact: 07/13/2009 Data Release Frequency: Semi-Annually

## Local Lists of Landfill / Solid Waste Disposal Sites

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: 03/25/2008 Date Data Arrived at EDR: 04/17/2008 Date Made Active in Reports: 05/15/2008

Number of Days to Update: 28

Source: EPA, Region 9 Telephone: 415-972-3336 Last EDR Contact: 04/07/2009

Next Scheduled EDR Contact: 06/22/2009 Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985 Date Data Arrived at EDR: 08/09/2004 Date Made Active in Reports: 09/17/2004

Number of Days to Update: 39

Source: Environmental Protection Agency

Telephone: 800-424-9346 Last EDR Contact: 06/09/2004 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

## WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000 Date Data Arrived at EDR: 04/10/2000 Date Made Active in Reports: 05/10/2000

Number of Days to Update: 30

Source: State Water Resources Control Board

Telephone: 916-227-4448 Last EDR Contact: 03/04/2009

Next Scheduled EDR Contact: 06/01/2009 Data Release Frequency: Quarterly

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 04/07/2009 Date Data Arrived at EDR: 04/08/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 33

Source: Department of Conservation

Telephone: 916-323-3836 Last EDR Contact: 04/08/2009

Next Scheduled EDR Contact: 07/06/2009 Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing A listing of registered waste tire haulers.

Date of Government Version: 04/07/2009 Date Data Arrived at EDR: 04/07/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 34

Source: Integrated Waste Management Board

Telephone: 916-341-6422 Last EDR Contact: 04/07/2009

Next Scheduled EDR Contact: 06/08/2009 Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998 Date Data Arrived at EDR: 12/03/2007 Date Made Active in Reports: 01/24/2008

Number of Days to Update: 52

Source: Environmental Protection Agency

Telephone: 703-308-8245 Last EDR Contact: 02/23/2009

Next Scheduled EDR Contact: 05/25/2009

Data Release Frequency: Varies

#### Local Lists of Hazardous waste / Contaminated Sites

## 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: 07/01/2008 Date Data Arrived at EDR: 10/31/2008 Date Made Active in Reports: 12/23/2008

Number of Days to Update: 53

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 03/26/2009

Next Scheduled EDR Contact: 06/22/2009 Data Release Frequency: Quarterly

#### HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005 Date Data Arrived at EDR: 08/03/2006 Date Made Active in Reports: 08/24/2006

Number of Days to Update: 21

Source: Department of Toxic Substance Control

Telephone: 916-323-3400 Last EDR Contact: 02/23/2009

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: 02/23/2009 Date Data Arrived at EDR: 02/24/2009 Date Made Active in Reports: 04/08/2009

Number of Days to Update: 43

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 02/24/2009

Next Scheduled EDR Contact: 05/25/2009 Data Release Frequency: Quarterly

#### TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995 Date Data Arrived at EDR: 08/30/1995 Date Made Active in Reports: 09/26/1995

Number of Days to Update: 27

Source: State Water Resources Control Board

Telephone: 916-227-4364 Last EDR Contact: 01/26/2009

Next Scheduled EDR Contact: 04/27/2009 Data Release Frequency: No Update Planned

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 09/30/2008 Date Data Arrived at EDR: 10/06/2008 Date Made Active in Reports: 10/13/2008

Number of Days to Update: 7

Source: Department of Toxic Substances Control

Telephone: 916-255-6504 Last EDR Contact: 04/24/2009

Next Scheduled EDR Contact: 07/20/2009

Data Release Frequency: Varies

## Local Lists of Registered Storage Tanks

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994 Date Data Arrived at EDR: 09/05/1995 Date Made Active in Reports: 09/29/1995

Number of Days to Update: 24

Source: California Environmental Protection Agency

Telephone: 916-341-5851 Last EDR Contact: 12/28/1998 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 04/07/2009 Date Data Arrived at EDR: 04/07/2009 Date Made Active in Reports: 05/14/2009

Number of Days to Update: 37

Source: Department of Public Health Telephone: 707-463-4466

Last EDR Contact: 04/07/2009

Next Scheduled EDR Contact: 06/22/2009

Data Release Frequency: Varies

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990 Date Data Arrived at EDR: 01/25/1991 Date Made Active in Reports: 02/12/1991

Number of Days to Update: 18

Source: State Water Resources Control Board

Telephone: 916-341-5851 Last EDR Contact: 07/26/2001 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained.

The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994 Date Data Arrived at EDR: 07/07/2005 Date Made Active in Reports: 08/11/2005

Number of Days to Update: 35

Source: State Water Resources Control Board

Telephone: N/A

Last EDR Contact: 06/03/2005 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

Local Land Records

#### LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/06/2009 Date Data Arrived at EDR: 03/20/2009 Date Made Active in Reports: 05/05/2009

Number of Days to Update: 46

Source: Environmental Protection Agency

Telephone: 202-564-6023 Last EDR Contact: 05/18/2009

Next Scheduled EDR Contact: 08/17/2009 Data Release Frequency: Varies

#### LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/09/2005 Date Data Arrived at EDR: 12/11/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 31

Source: Department of the Navy Telephone: 843-820-7326 Last EDR Contact: 03/09/2009

Next Scheduled EDR Contact: 06/08/2009

Data Release Frequency: Varies

#### LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 02/13/2009 Date Data Arrived at EDR: 02/17/2009 Date Made Active in Reports: 04/08/2009

Number of Days to Update: 50

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 05/04/2009

Next Scheduled EDR Contact: 08/03/2009

Data Release Frequency: Varies

## **DEED: Deed Restriction Listing**

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 03/30/2009 Date Data Arrived at EDR: 03/31/2009 Date Made Active in Reports: 04/08/2009

Number of Days to Update: 8

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 12/30/2009

Next Scheduled EDR Contact: 06/29/2009 Data Release Frequency: Semi-Annually

## Records of Emergency Release Reports

## HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/2008 Date Data Arrived at EDR: 01/30/2009 Date Made Active in Reports: 05/05/2009

Number of Days to Update: 95

Source: U.S. Department of Transportation

Telephone: 202-366-4555 Last EDR Contact: 04/16/2009

Next Scheduled EDR Contact: 07/13/2009 Data Release Frequency: Annually

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/2007 Date Data Arrived at EDR: 05/09/2008 Date Made Active in Reports: 06/20/2008

Number of Days to Update: 42

Source: Office of Emergency Services

Telephone: 916-845-8400 Last EDR Contact: 05/18/2009

Next Scheduled EDR Contact: 08/17/2009 Data Release Frequency: Varies

LDS: Land Disposal Sites Listing

The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management

units.

Date of Government Version: 04/08/2009 Date Data Arrived at EDR: 04/08/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 33

Source: State Water Qualilty Control Board

Telephone: 866-480-1028 Last EDR Contact: 04/08/2009

Next Scheduled EDR Contact: 07/06/2009 Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing

The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 04/08/2009 Date Data Arrived at EDR: 04/08/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 33

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 04/08/2009

Next Scheduled EDR Contact: 07/06/2009 Data Release Frequency: Quarterly

## Other Ascertainable Records

RCRA-NonGen: RCRA - Non Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous

waste.

Date of Government Version: 11/12/2008 Date Data Arrived at EDR: 11/18/2008 Date Made Active in Reports: 03/16/2009

Number of Days to Update: 118

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 04/23/2009

Next Scheduled EDR Contact: 07/20/2009 Data Release Frequency: Varies

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 05/14/2008 Date Data Arrived at EDR: 05/28/2008 Date Made Active in Reports: 08/08/2008

Number of Days to Update: 72

Source: Department of Transporation, Office of Pipeline Safety

Telephone: 202-366-4595 Last EDR Contact: 02/24/2009

Next Scheduled EDR Contact: 05/25/2009

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: 11/10/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 62

Source: USGS

Telephone: 703-692-8801 Last EDR Contact: 05/08/2009

Next Scheduled EDR Contact: 08/03/2009 Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2007 Date Data Arrived at EDR: 09/05/2008

Date Made Active in Reports: 09/23/2008

Number of Days to Update: 18

Source: U.S. Army Corps of Engineers

Telephone: 202-528-4285 Last EDR Contact: 03/30/2009

Next Scheduled EDR Contact: 06/29/2009

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: 01/27/2009 Date Data Arrived at EDR: 04/23/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 18

Source: Department of Justice, Consent Decree Library

Telephone: Varies

Last EDR Contact: 04/21/2009

Next Scheduled EDR Contact: 07/20/2009

Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 01/27/2009 Date Data Arrived at EDR: 02/04/2009 Date Made Active in Reports: 05/05/2009

Number of Days to Update: 90

Source: EPA

Telephone: 703-416-0223 Last EDR Contact: 03/30/2009

Next Scheduled EDR Contact: 06/29/2009 Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 01/05/2009 Date Data Arrived at EDR: 05/07/2009 Date Made Active in Reports: 05/08/2009

Number of Days to Update: 1

Source: Department of Energy Telephone: 505-845-0011 Last EDR Contact: 03/16/2009

Next Scheduled EDR Contact: 06/15/2009 Data Release Frequency: Varies

MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/19/2009 Date Data Arrived at EDR: 03/24/2009 Date Made Active in Reports: 05/05/2009

Number of Days to Update: 42

Source: Department of Labor, Mine Safety and Health Administration

Telephone: 303-231-5959 Last EDR Contact: 03/24/2009

Next Scheduled EDR Contact: 06/22/2009 Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2006 Date Data Arrived at EDR: 02/29/2008 Date Made Active in Reports: 04/18/2008

Number of Days to Update: 49

Source: EPA

Telephone: 202-566-0250 Last EDR Contact: 04/09/2009

Next Scheduled EDR Contact: 06/15/2009 Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant

Date of Government Version: 12/31/2002 Date Data Arrived at EDR: 04/14/2006 Date Made Active in Reports: 05/30/2006

Number of Days to Update: 46

Source: EPA

Telephone: 202-260-5521 Last EDR Contact: 04/14/2009

Next Scheduled EDR Contact: 07/13/2009 Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA,

TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the

Agency on a quarterly basis.

Date of Government Version: 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: 03/16/2009

Next Scheduled EDR Contact: 06/15/2009 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: 03/16/2009

Next Scheduled EDR Contact: 06/15/2009 Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 12/17/2007

Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 12/17/2008

Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2006 Date Data Arrived at EDR: 03/14/2008 Date Made Active in Reports: 04/18/2008

Number of Days to Update: 35

Source: EPA

Telephone: 202-564-4203 Last EDR Contact: 12/04/2008

Next Scheduled EDR Contact: 07/13/2009 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: 03/20/2009 Date Data Arrived at EDR: 03/20/2009 Date Made Active in Reports: 05/05/2009

Number of Days to Update: 46

Source: Environmental Protection Agency

Telephone: 202-564-5088 Last EDR Contact: 04/13/2009

Next Scheduled EDR Contact: 07/13/2009 Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 12/04/2007 Date Data Arrived at EDR: 02/07/2008 Date Made Active in Reports: 03/17/2008

Number of Days to Update: 39

Source: EPA

Telephone: 202-566-0500 Last EDR Contact: 05/04/2009

Next Scheduled EDR Contact: 08/03/2009 Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 01/07/2009 Date Data Arrived at EDR: 01/15/2009 Date Made Active in Reports: 03/30/2009

Number of Days to Update: 74

Source: Nuclear Regulatory Commission

Telephone: 301-415-7169 Last EDR Contact: 03/30/2009

Next Scheduled EDR Contact: 06/29/2009 Data Release Frequency: Quarterly

**RADINFO: Radiation Information Database** 

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 04/28/2009 Date Data Arrived at EDR: 04/29/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 12

Source: Environmental Protection Agency

Telephone: 202-343-9775 Last EDR Contact: 04/29/2009

Next Scheduled EDR Contact: 07/27/2009 Data Release Frequency: Quarterly

## FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 01/20/2009 Date Data Arrived at EDR: 01/23/2009 Date Made Active in Reports: 05/05/2009

Number of Days to Update: 102

Source: EPA

Telephone: (415) 947-8000 Last EDR Contact: 03/30/2009

Next Scheduled EDR Contact: 06/29/2009 Data Release Frequency: Quarterly

## RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995 Date Data Arrived at EDR: 07/03/1995 Date Made Active in Reports: 08/07/1995

Number of Days to Update: 35

Source: EPA

Telephone: 202-564-4104 Last EDR Contact: 06/02/2008

Next Scheduled EDR Contact: 09/01/2008 Data Release Frequency: No Update Planned

## BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 03/06/2007 Date Made Active in Reports: 04/13/2007

Number of Days to Update: 38

Source: EPA/NTIS Telephone: 800-424-9346 Last EDR Contact: 02/19/2009

Next Scheduled EDR Contact: 06/08/2009 Data Release Frequency: Biennially

#### 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

## NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 03/09/2009 Date Data Arrived at EDR: 03/13/2009 Date Made Active in Reports: 04/08/2009

Number of Days to Update: 26

Source: State Water Resources Control Board

Telephone: 916-445-9379 Last EDR Contact: 03/13/2009

Next Scheduled EDR Contact: 06/08/2009 Data Release Frequency: Quarterly

#### CA WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007 Date Data Arrived at EDR: 06/20/2007 Date Made Active in Reports: 06/29/2007

Number of Days to Update: 9

Source: State Water Resources Control Board

Telephone: 916-341-5227 Last EDR Contact: 03/16/2009

Next Scheduled EDR Contact: 06/15/2009 Data Release Frequency: Quarterly

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites). This listing is no longer updated by the state agency.

Date of Government Version: 04/20/2009 Date Data Arrived at EDR: 04/22/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 19

Source: CAL EPA/Office of Emergency Information

Telephone: 916-323-3400 Last EDR Contact: 04/22/2009

Next Scheduled EDR Contact: 07/20/2009 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

[SWF/LS], and the Department of Toxic Substances Control [CALSITES].

Date of Government Version: 04/01/2001 Date Data Arrived at EDR: 01/22/2009 Date Made Active in Reports: 04/08/2009

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

NOTIFY 65: Proposition 65 Records

Proposition 65 Notification Records, NOTIFY 65 contains facility notifications about any release which could impact drinking water and thereby expose the public to a potential health risk.

Date of Government Version: 10/21/1993 Date Data Arrived at EDR: 11/01/1993 Date Made Active in Reports: 11/19/1993

Number of Days to Update: 18

Source: State Water Resources Control Board

Telephone: 916-445-3846 Last EDR Contact: 04/13/2009

Next Scheduled EDR Contact: 07/13/2009 Data Release Frequency: No Update Planned

**DRYCLEANERS: Cleaner Facilities** 

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 05/06/2009 Date Data Arrived at EDR: 05/07/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 4

Source: Department of Toxic Substance Control

Telephone: 916-327-4498 Last EDR Contact: 04/17/2009

Next Scheduled EDR Contact: 03/30/2009 Data Release Frequency: Annually

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 03/31/2009 Date Data Arrived at EDR: 04/24/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 17

Source: Los Angeles Water Quality Control Board

Telephone: 213-576-6726 Last EDR Contact: 04/24/2009

Next Scheduled EDR Contact: 07/20/2009

Data Release Frequency: Varies

**HAZNET: Facility and Manifest Data** 

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/2007 Date Data Arrived at EDR: 02/17/2009 Date Made Active in Reports: 04/08/2009

Number of Days to Update: 50

Source: California Environmental Protection Agency

Telephone: 916-255-1136 Last EDR Contact: 05/08/2009

Next Scheduled EDR Contact: 08/03/2009 Data Release Frequency: Annually

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2006 Date Data Arrived at EDR: 10/16/2008 Date Made Active in Reports: 11/26/2008

Number of Days to Update: 41

Source: California Air Resources Board

Telephone: 916-322-2990 Last EDR Contact: 04/17/2009

Next Scheduled EDR Contact: 04/13/2009 Data Release Frequency: Varies

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater

than 640 acres.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 12/08/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 34

Source: USGS

Telephone: 202-208-3710 Last EDR Contact: 05/08/2009

Next Scheduled EDR Contact: 08/03/2009 Data Release Frequency: Semi-Annually

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, 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.

Date of Government Version: 12/08/2008 Date Data Arrived at EDR: 12/09/2008 Date Made Active in Reports: 03/16/2009

Number of Days to Update: 97

Source: Environmental Protection Agency

Telephone: 615-532-8599 Last EDR Contact: 05/11/2009

Next Scheduled EDR Contact: 08/10/2009

Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated 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: 02/06/2006 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: 05/08/2009

Next Scheduled EDR Contact: 08/03/2009

Data Release Frequency: N/A

## **EDR PROPRIETARY RECORDS**

## EDR Proprietary Records

Manufactured Gas Plants: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A Date Data Arrived at EDR: N/A Date Made Active in Reports: N/A

Number of Days to Update: N/A

Source: EDR, Inc. Telephone: N/A Last EDR Contact: N/A

Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

## **COUNTY RECORDS**

## ALAMEDA COUNTY:

#### Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 04/24/2009 Date Data Arrived at EDR: 04/28/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 13

Source: Alameda County Environmental Health Services

Telephone: 510-567-6700 Last EDR Contact: 04/20/2009

Next Scheduled EDR Contact: 07/20/2009 Data Release Frequency: Semi-Annually

#### **Underground Tanks**

Underground storage tank sites located in Alameda county.

Date of Government Version: 04/24/2009 Date Data Arrived at EDR: 04/28/2009 Date Made Active in Reports: 05/14/2009

Number of Days to Update: 16

Source: Alameda County Environmental Health Services

Telephone: 510-567-6700 Last EDR Contact: 04/20/2009

Next Scheduled EDR Contact: 07/20/2009 Data Release Frequency: Semi-Annually

#### CONTRA COSTA COUNTY:

## Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 02/24/2009 Date Data Arrived at EDR: 02/25/2009 Date Made Active in Reports: 04/08/2009

Number of Days to Update: 42

Source: Contra Costa Health Services Department

Telephone: 925-646-2286 Last EDR Contact: 02/23/2009

Next Scheduled EDR Contact: 05/25/2009 Data Release Frequency: Semi-Annually

## FRESNO COUNTY:

## **CUPA Resources List**

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 04/17/2009 Date Data Arrived at EDR: 04/17/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 24

Source: Dept. of Community Health Telephone: 559-445-3271 Last EDR Contact: 05/04/2009

Next Scheduled EDR Contact: 08/03/2009 Data Release Frequency: Semi-Annually

## KERN COUNTY:

Underground Storage Tank Sites & Tank Listing Kern County Sites and Tanks Listing.

> Date of Government Version: 03/30/2009 Date Data Arrived at EDR: 03/31/2009 Date Made Active in Reports: 04/09/2009

Number of Days to Update: 9

Source: Kern County Environment Health Services Department

Telephone: 661-862-8700 Last EDR Contact: 03/30/2009

Next Scheduled EDR Contact: 06/01/2009 Data Release Frequency: Quarterly

#### LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 12/31/1998 Date Data Arrived at EDR: 07/07/1999 Date Made Active in Reports: N/A

Number of Days to Update: 0

Source: EPA Region 9 Telephone: 415-972-3178 Last EDR Contact: 04/13/2009

Next Scheduled EDR Contact: 07/13/2009 Data Release Frequency: No Update Planned

HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 11/26/2008 Date Data Arrived at EDR: 01/27/2009 Date Made Active in Reports: 04/08/2009

Number of Days to Update: 71

Source: Department of Public Works

Telephone: 626-458-3517 Last EDR Contact: 05/11/2009

Next Scheduled EDR Contact: 08/10/2009 Data Release Frequency: Semi-Annually

List of Solid Waste Facilities

Solid Waste Facilities in Los Angeles County.

Date of Government Version: 04/21/2009 Date Data Arrived at EDR: 04/21/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 20

Source: La County Department of Public Works

Telephone: 818-458-5185 Last EDR Contact: 05/12/2009

Next Scheduled EDR Contact: 08/10/2009

Data Release Frequency: Varies

City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 03/05/2009 Date Data Arrived at EDR: 03/10/2009 Date Made Active in Reports: 04/08/2009

Number of Days to Update: 29

Source: Engineering & Construction Division

Telephone: 213-473-7869 Last EDR Contact: 03/10/2009

Next Scheduled EDR Contact: 06/08/2009 Data Release Frequency: Varies

Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 02/11/2009 Date Data Arrived at EDR: 04/23/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 18

Source: Community Health Services Telephone: 323-890-7806 Last EDR Contact: 05/11/2009

Next Scheduled EDR Contact: 08/10/2009 Data Release Frequency: Annually

City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 02/09/2009 Date Data Arrived at EDR: 02/17/2009 Date Made Active in Reports: 04/09/2009

Number of Days to Update: 51

Source: City of El Segundo Fire Department

Telephone: 310-524-2236 Last EDR Contact: 05/11/2009

Next Scheduled EDR Contact: 08/10/2009 Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/28/2003 Date Data Arrived at EDR: 10/23/2003 Date Made Active in Reports: 11/26/2003

Number of Days to Update: 34

Source: City of Long Beach Fire Department

Telephone: 562-570-2563 Last EDR Contact: 02/20/2009

Next Scheduled EDR Contact: 05/18/2009 Data Release Frequency: Annually

City of Torrance Underground Storage Tank

Underground storage tank sites located in the city of Torrance.

Date of Government Version: 02/23/2009 Date Data Arrived at EDR: 02/24/2009 Date Made Active in Reports: 04/09/2009

Number of Days to Update: 44

Source: City of Torrance Fire Department

Telephone: 310-618-2973 Last EDR Contact: 05/11/2009

Next Scheduled EDR Contact: 08/10/2009 Data Release Frequency: Semi-Annually

MARIN COUNTY:

Underground Storage Tank Sites

Currently permitted USTs in Marin County.

Date of Government Version: 02/05/2009 Date Data Arrived at EDR: 02/17/2009 Date Made Active in Reports: 04/09/2009

Number of Days to Update: 51

Source: Public Works Department Waste Management

Telephone: 415-499-6647 Last EDR Contact: 04/27/2009

Next Scheduled EDR Contact: 07/27/2009 Data Release Frequency: Semi-Annually

NAPA COUNTY:

Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 07/09/2008 Date Data Arrived at EDR: 07/09/2008 Date Made Active in Reports: 07/31/2008

Number of Days to Update: 22

Source: Napa County Department of Environmental Management

Telephone: 707-253-4269 Last EDR Contact: 03/23/2009

Next Scheduled EDR Contact: 06/22/2009 Data Release Frequency: Semi-Annually

Closed and Operating Underground Storage Tank Sites

Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008 Date Data Arrived at EDR: 01/16/2008 Date Made Active in Reports: 02/08/2008

Number of Days to Update: 23

Source: Napa County Department of Environmental Management

Telephone: 707-253-4269 Last EDR Contact: 03/23/2009

Next Scheduled EDR Contact: 06/22/2009 Data Release Frequency: Annually

ORANGE COUNTY:

List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

Date of Government Version: 03/02/2009 Date Data Arrived at EDR: 03/18/2009 Date Made Active in Reports: 04/08/2009

Number of Days to Update: 21

Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 03/05/2009

Next Scheduled EDR Contact: 06/01/2009 Data Release Frequency: Annually

List of Underground Storage Tank Cleanups

Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 03/02/2009 Date Data Arrived at EDR: 03/27/2009 Date Made Active in Reports: 04/08/2009

Number of Days to Update: 12

Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 03/05/2009

Next Scheduled EDR Contact: 06/01/2009 Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities

Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 03/02/2009 Date Data Arrived at EDR: 03/18/2009 Date Made Active in Reports: 04/09/2009

Number of Days to Update: 22

Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 12/02/2009

Next Scheduled EDR Contact: 06/01/2009 Data Release Frequency: Quarterly

#### PLACER COUNTY:

Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 04/27/2009 Date Data Arrived at EDR: 04/28/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 13

Source: Placer County Health and Human Services

Telephone: 530-889-7312 Last EDR Contact: 04/03/2009

Next Scheduled EDR Contact: 06/29/2009 Data Release Frequency: Semi-Annually

## RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 04/14/2009 Date Data Arrived at EDR: 04/15/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 26

Source: Department of Public Health

Telephone: 951-358-5055 Last EDR Contact: 04/13/2009

Next Scheduled EDR Contact: 07/13/2009 Data Release Frequency: Quarterly

Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 05/06/2009 Date Data Arrived at EDR: 05/07/2009 Date Made Active in Reports: 05/14/2009

Number of Days to Update: 7

Source: Health Services Agency Telephone: 951-358-5055 Last EDR Contact: 04/13/2009

Next Scheduled EDR Contact: 07/13/2009 Data Release Frequency: Quarterly

## SACRAMENTO COUNTY:

#### Contaminated Sites

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 02/04/2009 Date Data Arrived at EDR: 04/29/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 12

Source: Sacramento County Environmental Management

Telephone: 916-875-8406 Last EDR Contact: 04/29/2009

Next Scheduled EDR Contact: 07/27/2009 Data Release Frequency: Quarterly

#### ML - Regulatory Compliance Master List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 02/04/2009 Date Data Arrived at EDR: 04/29/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 12

Source: Sacramento County Environmental Management

Telephone: 916-875-8406 Last EDR Contact: 04/29/2009

Next Scheduled EDR Contact: 07/27/2009 Data Release Frequency: Quarterly

## SAN BERNARDINO COUNTY:

#### Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 04/08/2009 Date Data Arrived at EDR: 04/08/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 33

Source: San Bernardino County Fire Department Hazardous Materials Division

Telephone: 909-387-3041 Last EDR Contact: 03/03/2009

Next Scheduled EDR Contact: 06/01/2009 Data Release Frequency: Quarterly

## SAN DIEGO COUNTY:

## Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 07/16/2008 Date Data Arrived at EDR: 10/29/2008 Date Made Active in Reports: 11/26/2008

Number of Days to Update: 28

Source: Hazardous Materials Management Division

Telephone: 619-338-2268 Last EDR Contact: 04/03/2009

Next Scheduled EDR Contact: 06/29/2009 Data Release Frequency: Quarterly

## Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 11/01/2008 Date Data Arrived at EDR: 12/23/2008 Date Made Active in Reports: 01/27/2009

Number of Days to Update: 35

Source: Department of Health Services

Telephone: 619-338-2209 Last EDR Contact: 05/18/2009

Next Scheduled EDR Contact: 08/17/2009

Data Release Frequency: Varies

## **Environmental Case Listing**

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 01/22/2009 Date Data Arrived at EDR: 03/31/2009 Date Made Active in Reports: 04/08/2009

Number of Days to Update: 8

Source: San Diego County Department of Environmental Health

Telephone: 619-338-2371 Last EDR Contact: 03/31/2009

Next Scheduled EDR Contact: 06/29/2009 Data Release Frequency: Varies

#### SAN FRANCISCO COUNTY:

#### Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008 Date Data Arrived at EDR: 09/19/2008 Date Made Active in Reports: 09/29/2008

Number of Days to Update: 10

Source: Department Of Public Health San Francisco County

Telephone: 415-252-3920 Last EDR Contact: 03/30/2009

Next Scheduled EDR Contact: 06/01/2009 Data Release Frequency: Quarterly

#### **Underground Storage Tank Information**

Underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008 Date Data Arrived at EDR: 09/19/2008 Date Made Active in Reports: 10/01/2008

Number of Days to Update: 12

Source: Department of Public Health

Telephone: 415-252-3920 Last EDR Contact: 03/16/2009

Next Scheduled EDR Contact: 06/01/2009 Data Release Frequency: Quarterly

#### SAN JOAQUIN COUNTY:

#### San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 02/10/2009 Date Data Arrived at EDR: 02/25/2009 Date Made Active in Reports: 04/09/2009

Number of Days to Update: 43

Source: Environmental Health Department Telephone: N/A

Last EDR Contact: 04/13/2009

Next Scheduled EDR Contact: 07/13/2009 Data Release Frequency: Semi-Annually

## SAN MATEO COUNTY:

## Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 04/29/2009 Date Data Arrived at EDR: 05/01/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 10

Source: San Mateo County Environmental Health Services Division

Telephone: 650-363-1921 Last EDR Contact: 04/07/2009

Next Scheduled EDR Contact: 07/06/2009 Data Release Frequency: Annually

## Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 04/07/2009 Date Data Arrived at EDR: 04/07/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 34

Source: San Mateo County Environmental Health Services Division

Telephone: 650-363-1921 Last EDR Contact: 04/07/2009

Next Scheduled EDR Contact: 07/06/2009 Data Release Frequency: Semi-Annually

## SANTA CLARA COUNTY:

HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005 Date Data Arrived at EDR: 03/30/2005 Date Made Active in Reports: 04/21/2005

Number of Days to Update: 22

Source: Santa Clara Valley Water District

Telephone: 408-265-2600 Last EDR Contact: 03/23/2009

Next Scheduled EDR Contact: 06/22/2009 Data Release Frequency: No Update Planned

LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 12/29/2008 Date Data Arrived at EDR: 12/29/2008 Date Made Active in Reports: 01/27/2009

Number of Days to Update: 29

Source: Department of Environmental Health

Telephone: 408-918-3417 Last EDR Contact: 05/18/2009

Next Scheduled EDR Contact: 06/22/2009

Data Release Frequency: Varies

Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 03/03/2009 Date Data Arrived at EDR: 03/03/2009 Date Made Active in Reports: 04/08/2009

Number of Days to Update: 36

Source: City of San Jose Fire Department

Telephone: 408-277-4659 Last EDR Contact: 03/03/2009

Next Scheduled EDR Contact: 06/01/2009 Data Release Frequency: Annually

SOLANO COUNTY:

Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 03/23/2009 Date Data Arrived at EDR: 04/07/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 34

Source: Solano County Department of Environmental Management

Telephone: 707-784-6770 Last EDR Contact: 03/23/2009

Next Scheduled EDR Contact: 06/22/2009 Data Release Frequency: Quarterly

Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 03/23/2009 Date Data Arrived at EDR: 04/10/2009 Date Made Active in Reports: 05/14/2009

Number of Days to Update: 34

Source: Solano County Department of Environmental Management

Telephone: 707-784-6770 Last EDR Contact: 03/23/2009

Next Scheduled EDR Contact: 06/22/2009 Data Release Frequency: Quarterly

SONOMA COUNTY:

Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 04/20/2009 Date Data Arrived at EDR: 04/21/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 20

Source: Department of Health Services

Telephone: 707-565-6565 Last EDR Contact: 04/20/2009

Next Scheduled EDR Contact: 07/20/2009 Data Release Frequency: Quarterly

SUTTER COUNTY:

**Underground Storage Tanks** 

Underground storage tank sites located in Sutter county.

Date of Government Version: 04/01/2009 Date Data Arrived at EDR: 04/02/2009 Date Made Active in Reports: 04/09/2009

Number of Days to Update: 7

Source: Sutter County Department of Agriculture

Telephone: 530-822-7500 Last EDR Contact: 03/30/2009

Next Scheduled EDR Contact: 06/29/2009 Data Release Frequency: Semi-Annually

#### **VENTURA COUNTY:**

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 02/26/2009 Date Data Arrived at EDR: 03/31/2009 Date Made Active in Reports: 04/08/2009

Number of Days to Update: 8

Source: Ventura County Environmental Health Division

Telephone: 805-654-2813 Last EDR Contact: 03/10/2009

Next Scheduled EDR Contact: 06/08/2009 Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 08/01/2008 Date Data Arrived at EDR: 09/04/2008 Date Made Active in Reports: 09/18/2008

Number of Days to Update: 14

Source: Environmental Health Division

Telephone: 805-654-2813 Last EDR Contact: 05/17/2009

Next Scheduled EDR Contact: 08/17/2009 Data Release Frequency: Annually

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: 805-654-2813 Last EDR Contact: 06/09/2009

Next Scheduled EDR Contact: 06/08/2009 Data Release Frequency: Quarterly

Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 03/31/2009 Date Data Arrived at EDR: 04/08/2009 Date Made Active in Reports: 05/14/2009

Number of Days to Update: 36

Source: Environmental Health Division

Telephone: 805-654-2813 Last EDR Contact: 04/08/2009

Next Scheduled EDR Contact: 07/06/2009 Data Release Frequency: Quarterly

## YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 04/21/2009 Date Data Arrived at EDR: 05/06/2009 Date Made Active in Reports: 05/14/2009

Number of Days to Update: 8

Source: Yolo County Department of Health

Telephone: 530-666-8646 Last EDR Contact: 04/13/2009

Next Scheduled EDR Contact: 07/13/2009 Data Release Frequency: Annually

#### OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 12/31/2006 Date Data Arrived at EDR: 12/11/2008 Date Made Active in Reports: 03/19/2009

Number of Days to Update: 98

Source: Department of Environmental Protection

Telephone: 860-424-3375 Last EDR Contact: 03/13/2009

Next Scheduled EDR Contact: 06/08/2009 Data Release Frequency: Annually

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 09/30/2007 Date Data Arrived at EDR: 12/04/2007 Date Made Active in Reports: 12/31/2007

Number of Days to Update: 27

Source: Department of Environmental Protection

Telephone: N/A

Last EDR Contact: 05/05/2009

Next Scheduled EDR Contact: 08/03/2009 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: 01/27/2009 Date Data Arrived at EDR: 02/25/2009 Date Made Active in Reports: 03/12/2009

Number of Days to Update: 15

Source: Department of Environmental Conservation

Telephone: 518-402-8651 Last EDR Contact: 02/25/2009

Next Scheduled EDR Contact: 05/25/2009 Data Release Frequency: Annually

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2007 Date Data Arrived at EDR: 09/11/2008 Date Made Active in Reports: 10/02/2008

Number of Days to Update: 21

Source: Department of Environmental Protection

Telephone: N/A

Last EDR Contact: 03/09/2009

Next Scheduled EDR Contact: 06/08/2009 Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2008 Date Data Arrived at EDR: 02/12/2009 Date Made Active in Reports: 03/11/2009

Number of Days to Update: 27

Source: Department of Environmental Management

Telephone: 401-222-2797 Last EDR Contact: 03/16/2009

Next Scheduled EDR Contact: 06/15/2009 Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2007 Date Data Arrived at EDR: 08/22/2008 Date Made Active in Reports: 09/08/2008

Number of Days to Update: 17

Source: Department of Natural Resources

Telephone: N/A

Last EDR Contact: 04/07/2009

Next Scheduled EDR Contact: 07/06/2009 Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data Source: PennWell Corporation

Telephone: (800) 823-6277

This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

#### AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services,

a federal agency within the U.S. Department of Health and Human Services.

#### **Nursing Homes**

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

#### **Public Schools**

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary

and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities Source: Department of Social Services

Telephone: 916-657-4041

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

Scanned Digital USGS 7.5' Topographic Map (DRG)

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

# STREET AND ADDRESS INFORMATION

© 2009 Tele Atlas North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

# **GEOCHECK®-PHYSICAL SETTING SOURCE ADDENDUM**

#### **TARGET PROPERTY ADDRESS**

GNOSS AIRPORT 451 AIRPORT ROAD NOVATO, CA 94945

# **TARGET PROPERTY COORDINATES**

Latitude (North): 38.14090 - 38° 8' 27.2" Longitude (West): 122.56 - 122° 33' 36.0"

Universal Tranverse Mercator: Zone 10 UTM X (Meters): 538557.9 UTM Y (Meters): 4221334.0

Elevation: 4 ft. above sea level

## **USGS TOPOGRAPHIC MAP**

Target Property Map: 38122-B5 PETALUMA RIVER, CA

Most Recent Revision: 1980

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.

# **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).

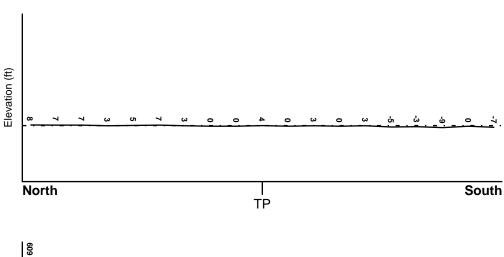
## **TOPOGRAPHIC INFORMATION**

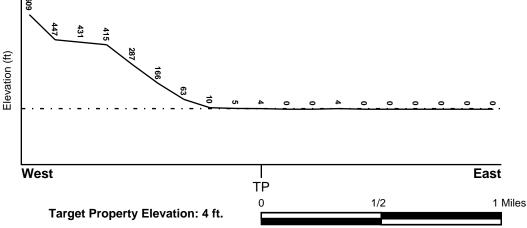
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient 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.

#### **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** 

FEMA Flood

Target Property County

Electronic Data

MARIN, CA

YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property:

0601730145A

Additional Panels in search area:

0601730140A 0601780003C

0601780002C

NATIONAL WETLAND INVENTORY

**NWI Electronic** 

**NWI Quad at Target Property** 

Data Coverage

PETALUMA RIVER

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 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

For additional site information, refer to Physical Setting Source Map Findings.

<sup>\*@1996</sup> Site-specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

# **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**

#### **GEOLOGIC AGE IDENTIFICATION**

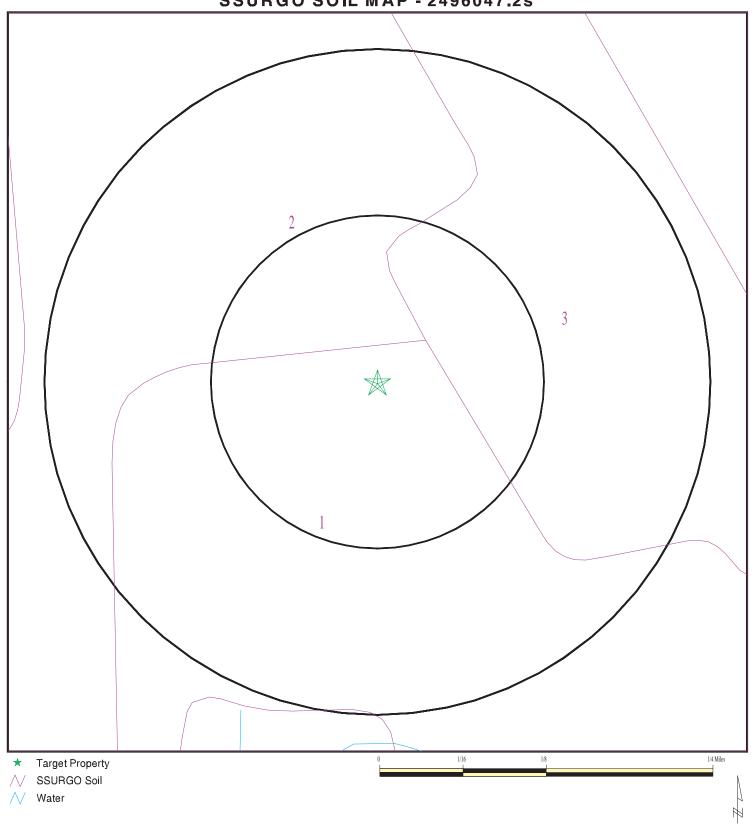
Era: Mesozoic Category: Stratified Sequence

System: Cretaceous Series: Lower Cretaceous

Code: IK (decoded above as Era, System & Series)

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

# SSURGO SOIL MAP - 2496047.2s



SITE NAME: Gnoss Airport
ADDRESS: 451 Airport Road
Novato CA 94945
LAT/LONG: 38.1409 / 122.5600

CLIENT: Kleinfelder, Inc.
CONTACT: Michael Burns
INQUIRY#: 2496047.2s
DATE: May 18, 2009 12:58 pm

# 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: REYES

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high

water table, or are shallow to an impervious layer.

Soil Drainage Class: Somewhat poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	Oon Nouvelon
1	0 inches	14 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 1.4 Min: 0.42	Max: 6 Min: 3.6
2	14 inches	62 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 1.4 Min: 0.42	Max: 6 Min: 3.6

# Soil Map ID: 2

Soil Component Name: XERORTHENTS

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high

water table, or are shallow to an impervious layer.

Soil Drainage Class:

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

Soil Map ID: 3

Soil Component Name: URBAN LAND

Soil Surface Texture: clay

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high

water table, or are shallow to an impervious layer.

Soil Drainage Class:

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

# **LOCAL / REGIONAL WATER AGENCY RECORDS**

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

# WELL SEARCH DISTANCE INFORMATION

DATABASE SEARCH DISTANCE (miles)

Federal USGS 1.000

Federal FRDS PWS Nearest PWS within 1 mile

State Database 1.000

#### FEDERAL USGS WELL INFORMATION

MAP ID WELL ID LOCATION FROM TP

# FEDERAL USGS WELL INFORMATION

MAP ID WELL ID LOCATION FROM TP

No Wells Found

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID WELL ID LOCATION FROM TP

No PWS System Found

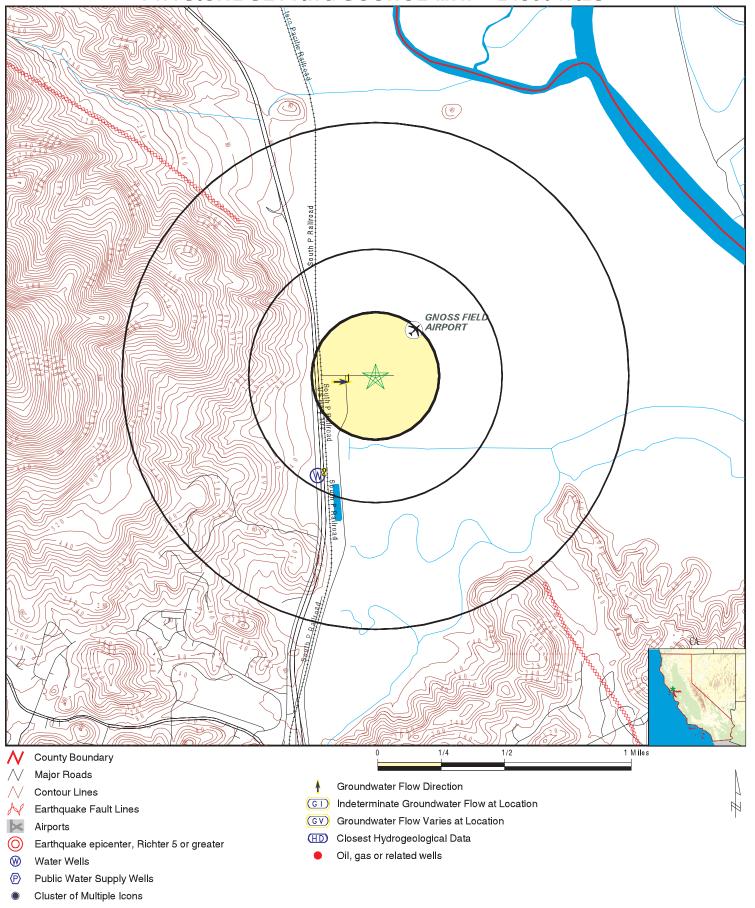
Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

LOCATION MAP ID WELL ID FROM TP

2 22362 1/4 - 1/2 Mile SSW

# PHYSICAL SETTING SOURCE MAP - 2496047.2s



SITE NAME: Gnoss Airport
ADDRESS: 451 Airport Road
Novato CA 94945
LAT/LONG: 38.1409 / 122.5600

CLIENT: Kleinfelder, Inc.
CONTACT: Michael Burns
INQUIRY#: 2496047.2s
DATE: May 18, 2009 12:57 pm

Map ID Direction Distance

EDR ID Number Elevation Database

West 1/8 - 1/4 Mile Higher

21-0298 Site ID: Groundwater Flow: Е Shallow Water Depth: 4.5

Deep Water Depth: Not Reported Average Water Depth: 10/31/1995 Date:

**CA WELLS** SSW 22362

1/4 - 1/2 Mile Higher

Water System Information:

Prime Station Code: D21/003-MA.AQDT User ID: **ENG** 2110003001 FRDS Number: Marin County:

District Number: 04 Station Type: STREAM/AMBNT/MUN/INTAKE

Water Type: Surface Water Well Status: Active Treated

Source Lat/Long: 380807.5 1223347.5 Precision: 1,000 Feet (10 Seconds)

MARIN AQUEDUCT-PURCHASED-SONOMA CO-TRTD Source Name:

System Number: 2110003

System Name: North Marin Water District

Organization That Operates System:

P O BOX 146 **NOVATO, CA 94948** 

Pop Served: 55000 Connections: 17195 Area Served: **NOVATO-VIC** 

Sample Collected: 10/10/2007 00:00:00 Findings: 5.53 UG/L

DIBROMOCHLOROMETHANE (THM) Chemical:

Sample Collected: 10/10/2007 00:00:00 3.32 UG/L Findings:

Chemical: CHLOROFORM (THM)

Sample Collected: 10/10/2007 00:00:00 Findings: 1.6 UG/L

Chemical: DICHLOROACETIC ACID (DCAA)

Sample Collected: 10/10/2007 00:00:00 Findings: 15.32 UG/L Chemical: TOTAL TRIHALOMETHANES

1.1 UG/L

Sample Collected: 10/10/2007 00:00:00 Findings: Chemical: TRICHLOROACETIC ACID (TCAA)

Sample Collected: 10/10/2007 00:00:00 Findings: 5.8 UG/L

Chemical: HALOACETIC ACIDS (5) (HAA5)

Sample Collected: 10/10/2007 00:00:00 Findings: 1.6 UG/L Chemical:

**BROMOFORM (THM)** 

Sample Collected: 10/10/2007 00:00:00 Findings: 4.87 UG/L Chemical: **BROMODICHLORMETHANE (THM)** 

Sample Collected: 10/10/2007 00:00:00 Findings: 3 UG/L

Chemical: DIBROMOACETIC ACID (DBAA)

Sample Collected: 08/13/2007 00:00:00 .17 NTU Findings: Chemical: TURBIDITY, LABORATORY

Sample Collected: 08/13/2007 00:00:00 Findings: .16 MG/L

FLUORIDE (F) (NATURAL-SOURCE) Chemical:

Sample Collected: 08/13/2007 00:00:00 Findings: 7.9 MG/L

Chemical: **CHLORIDE**  **AQUIFLOW** 

39238

08/13/2007 00:00:00 SODIUM	Findings:	21 MG/L
08/13/2007 00:00:00 MAGNESIUM	Findings:	10 MG/L
08/13/2007 00:00:00 CALCIUM	Findings:	25 MG/L
08/13/2007 00:00:00 HARDNESS (TOTAL) AS CACO3	Findings:	97 MG/L
08/13/2007 00:00:00 ALKALINITY (TOTAL) AS CACO3	Findings:	116 MG/L
08/13/2007 00:00:00 PH, LABORATORY	Findings:	8.14
08/13/2007 00:00:00 SPECIFIC CONDUCTANCE	Findings:	268 US
08/13/2007 00:00:00 SOURCE TEMPERATURE C	Findings:	22.1 C
08/13/2007 00:00:00 TOTAL DISSOLVED SOLIDS	Findings:	180 MG/L
08/08/2007 00:00:00 TOTAL TRIHALOMETHANES	Findings:	20.03 UG/L
08/08/2007 00:00:00 CHLOROFORM (THM)	Findings:	3.69 UG/L
08/08/2007 00:00:00 DIBROMOCHLOROMETHANE (THM)	Findings:	7.65 UG/L
08/08/2007 00:00:00 BROMOFORM (THM)	Findings:	2.52 UG/L
08/08/2007 00:00:00 BROMODICHLORMETHANE (THM)	Findings:	6.17 UG/L
05/08/2007 00:00:00 HALOACETIC ACIDS (5) (HAA5)	Findings:	2.7 UG/L
05/08/2007 00:00:00 BROMODICHLORMETHANE (THM)	Findings:	4.7 UG/L
05/08/2007 00:00:00 BROMOFORM (THM)	Findings:	1.7 UG/L
05/08/2007 00:00:00 DIBROMOCHLOROMETHANE (THM)	Findings:	5.5 UG/L
05/08/2007 00:00:00 CHLOROFORM (THM)	Findings:	3.3 UG/L
05/08/2007 00:00:00 DICHLOROACETIC ACID (DCAA)	Findings:	1.3 UG/L
05/08/2007 00:00:00 TOTAL TRIHALOMETHANES	Findings:	15 UG/L
05/08/2007 00:00:00 DIBROMOACETIC ACID (DBAA)	Findings:	1.4 UG/L
03/13/2007 00:00:00 TRICHLOROACETIC ACID (TCAA)	Findings:	1.3 UG/L
03/13/2007 00:00:00 TOTAL TRIHALOMETHANES	Findings:	15 UG/L
03/13/2007 00:00:00 DICHLOROACETIC ACID (DCAA)	Findings:	2.3 UG/L
	SODIUM  08/13/2007 00:00:00  MAGNESIUM  08/13/2007 00:00:00  CALCIUM  08/13/2007 00:00:00  HARDNESS (TOTAL) AS CACO3  08/13/2007 00:00:00  ALKALINITY (TOTAL) AS CACO3  08/13/2007 00:00:00  PH, LABORATORY  08/13/2007 00:00:00  SPECIFIC CONDUCTANCE  08/13/2007 00:00:00  SOURCE TEMPERATURE C  08/13/2007 00:00:00  TOTAL DISSOLVED SOLIDS  08/08/2007 00:00:00  TOTAL TRIHALOMETHANES  08/08/2007 00:00:00  CHLOROFORM (THM)  08/08/2007 00:00:00  BROMOFORM (THM)  08/08/2007 00:00:00  BROMOFORM (THM)  05/08/2007 00:00:00  BROMODICHLORMETHANE (THM)  05/08/2007 00:00:00  BROMODICHLORMETHANE (THM)  05/08/2007 00:00:00  BROMODICHLORMETHANE (THM)  05/08/2007 00:00:00  BROMODICHLORMETHANE (THM)  05/08/2007 00:00:00  BROMOFORM (THM)  05/08/2007 00:00:00  BROMOFORM (THM)  05/08/2007 00:00:00  DIBROMOCHLOROMETHANE (THM)  05/08/2007 00:00:00  TOTAL TRIHALOMETHANES  05/08/2007 00:00:00  TOTAL TRIHALOMETHANES  05/08/2007 00:00:00  TOTAL TRIHALOMETHANES  03/13/2007 00:00:00  TOTAL TRIHALOMETHANES  03/13/2007 00:00:00  TOTAL TRIHALOMETHANES	SODIUM         Findings:           08/13/2007 00:00:00         Findings:           08/13/2007 00:00:00         Findings:           08/13/2007 00:00:00         Findings:           08/13/2007 00:00:00         Findings:           HARDNESS (TOTAL) AS CACO3         Pindings:           08/13/2007 00:00:00         Findings:           08/13/2007 00:00:00         F

Sample Collected: Chemical:	03/13/2007 00:00:00 CHLOROFORM (THM)	Findings:	6.9 UG/L
Sample Collected: Chemical:	03/13/2007 00:00:00 DIBROMOCHLOROMETHANE (THM)	Findings:	2.6 UG/L
Sample Collected: Chemical:	03/13/2007 00:00:00 HALOACETIC ACIDS (5) (HAA5)	Findings:	3.6 UG/L
Sample Collected: Chemical:	03/13/2007 00:00:00 BROMODICHLORMETHANE (THM)	Findings:	4.8 UG/L
Sample Collected: Chemical:	10/10/2006 00:00:00 DIBROMOCHLOROMETHANE (THM)	Findings:	5.1 UG/L
Sample Collected: Chemical:	10/10/2006 00:00:00 HALOACETIC ACIDS (5) (HAA5)	Findings:	1.6 UG/L
Sample Collected: Chemical:	10/10/2006 00:00:00 DIBROMOACETIC ACID (DBAA)	Findings:	1.6 UG/L
Sample Collected: Chemical:	10/10/2006 00:00:00 BROMODICHLORMETHANE (THM)	Findings:	4 UG/L
Sample Collected: Chemical:	10/10/2006 00:00:00 BROMOFORM (THM)	Findings:	2 UG/L
Sample Collected: Chemical:	10/10/2006 00:00:00 CHLOROFORM (THM)	Findings:	2.4 UG/L
Sample Collected: Chemical:	10/10/2006 00:00:00 TOTAL TRIHALOMETHANES	Findings:	14 UG/L
Sample Collected: Chemical:	09/12/2006 00:00:00 TURBIDITY, LABORATORY	Findings:	.19 NTU
Sample Collected: Chemical:	09/12/2006 00:00:00 SOURCE TEMPERATURE C	Findings:	21.5 C
Sample Collected: Chemical:	09/12/2006 00:00:00 TOTAL DISSOLVED SOLIDS	Findings:	160 MG/L
Sample Collected: Chemical:	09/12/2006 00:00:00 FLUORIDE (F) (NATURAL-SOURCE)	Findings:	.17 MG/L
Sample Collected: Chemical:	09/12/2006 00:00:00 CHLORIDE	Findings:	4.8 MG/L
Sample Collected: Chemical:	09/12/2006 00:00:00 SODIUM	Findings:	19 MG/L
Sample Collected: Chemical:	09/12/2006 00:00:00 MAGNESIUM	Findings:	12 MG/L
Sample Collected: Chemical:	09/12/2006 00:00:00 CALCIUM	Findings:	21.2 MG/L
Sample Collected: Chemical:	09/12/2006 00:00:00 HARDNESS (TOTAL) AS CACO3	Findings:	101 MG/L
Sample Collected: Chemical:	09/12/2006 00:00:00 ALKALINITY (TOTAL) AS CACO3	Findings:	119 MG/L
Sample Collected: Chemical:	09/12/2006 00:00:00 PH, LABORATORY	Findings:	8.44
Sample Collected: Chemical:	09/12/2006 00:00:00 SPECIFIC CONDUCTANCE	Findings:	270 US
Sample Collected: Chemical:	09/12/2006 00:00:00 COLOR	Findings:	2.5 UNITS
Sample Collected: Chemical:	08/08/2006 00:00:00 BROMODICHLORMETHANE (THM)	Findings:	4.3 UG/L

00/00/0000 00 00 00	Findings	0.0.110//
08/08/2006 00:00:00 BROMOFORM (THM)	Findings:	2.3 UG/L
08/08/2006 00:00:00 DIBROMOCHLOROMETHANE (THM)	Findings:	5.8 UG/L
08/08/2006 00:00:00 CHLOROFORM (THM)	Findings:	2.6 UG/L
08/08/2006 00:00:00 TOTAL TRIHALOMETHANES	Findings:	15 UG/L
08/08/2006 00:00:00 DIBROMOACETIC ACID (DBAA)	Findings:	1.9 UG/L
08/08/2006 00:00:00 HALOACETIC ACIDS (5) (HAA5)	Findings:	1.9 UG/L
05/09/2006 00:00:00 DIBROMOACETIC ACID (DBAA)	Findings:	1.6 UG/L
05/09/2006 00:00:00 TOTAL TRIHALOMETHANES	Findings:	14 UG/L
05/09/2006 00:00:00 HALOACETIC ACIDS (5) (HAA5)	Findings:	2.7 UG/L
05/09/2006 00:00:00 CHLOROFORM (THM)	Findings:	3.8 UG/L
05/09/2006 00:00:00 DIBROMOCHLOROMETHANE (THM)	Findings:	4.8 UG/L
05/09/2006 00:00:00 BROMODICHLORMETHANE (THM)	Findings:	5 UG/L
05/09/2006 00:00:00 DICHLOROACETIC ACID (DCAA)	Findings:	1.1 UG/L
03/07/2006 00:00:00 HALOACETIC ACIDS (5) (HAA5)	Findings:	5.5 UG/L
03/07/2006 00:00:00 TRICHLOROACETIC ACID (TCAA)	Findings:	1.6 UG/L
03/07/2006 00:00:00 DIBROMOACETIC ACID (DBAA)	Findings:	1.4 UG/L
03/07/2006 00:00:00 TOTAL TRIHALOMETHANES	Findings:	18 UG/L
03/07/2006 00:00:00 DICHLOROACETIC ACID (DCAA)	Findings:	2.5 UG/L
03/07/2006 00:00:00 CHLOROFORM (THM)	Findings:	7.4 UG/L
03/07/2006 00:00:00 DIBROMOCHLOROMETHANE (THM)	Findings:	4.2 UG/L
03/07/2006 00:00:00 BROMODICHLORMETHANE (THM)	Findings:	6.1 UG/L
11/07/2005 00:00:00 HALOACETIC ACIDS (5) (HAA5)	Findings:	1.4 UG/L
11/07/2005 00:00:00 BROMODICHLORMETHANE (THM)	Findings:	6.2 UG/L
11/07/2005 00:00:00	Findings:	2.1 UG/L
BROMOFORM (THM)		
	08/08/2006 00:00:00 DIBROMOCHLOROMETHANE (THM) 08/08/2006 00:00:00 CHLOROFORM (THM) 08/08/2006 00:00:00 TOTAL TRIHALOMETHANES 08/08/2006 00:00:00 DIBROMOACETIC ACID (DBAA) 08/08/2006 00:00:00 HALOACETIC ACIDS (5) (HAA5) 05/09/2006 00:00:00 DIBROMOACETIC ACID (DBAA) 05/09/2006 00:00:00 TOTAL TRIHALOMETHANES 05/09/2006 00:00:00 TOTAL TRIHALOMETHANES 05/09/2006 00:00:00 HALOACETIC ACIDS (5) (HAA5) 05/09/2006 00:00:00 CHLOROFORM (THM) 05/09/2006 00:00:00 DIBROMOCHLOROMETHANE (THM) 05/09/2006 00:00:00 BROMODICHLORMETHANE (THM) 05/09/2006 00:00:00 DICHLOROACETIC ACID (DCAA) 03/07/2006 00:00:00 HALOACETIC ACIDS (5) (HAA5) 03/07/2006 00:00:00 TRICHLOROACETIC ACID (TCAA) 03/07/2006 00:00:00 TRICHLOROACETIC ACID (DBAA) 03/07/2006 00:00:00 DIBROMOACETIC ACID (DBAA) 03/07/2006 00:00:00 TOTAL TRIHALOMETHANES 03/07/2006 00:00:00 DICHLOROACETIC ACID (DCAA) 03/07/2006 00:00:00 TOTAL TRIHALOMETHANES 03/07/2006 00:00:00 DICHLOROACETIC ACID (DCAA)	BROMOFORM (THM)  08/08/2006 00:00:00 DIBROMOCHLOROMETHANE (THM)  08/08/2006 00:00:00 CHLOROFORM (THM)  08/08/2006 00:00:00 TOTAL TRIHALOMETHANES  08/08/2006 00:00:00 DIBROMOACETIC ACID (DBAA)  08/08/2006 00:00:00 Findings: DIBROMOACETIC ACID (DBAA)  05/09/2006 00:00:00 TOTAL TRIHALOMETHANES  05/09/2006 00:00:00 Findings: DIBROMOACETIC ACIDS (5) (HAA5)  05/09/2006 00:00:00 Findings: DIBROMOCHLOROMETHANE (THM)  05/09/2006 00:00:00 BROMODICHLORMETHANE (THM)  05/09/2006 00:00:00 BROMODICHLORMETHANE (THM)  05/09/2006 00:00:00 TOTAL TRIHALOMETHANE (THM)  05/09/2006 00:00:00 BROMODICHLOROMETHANE (THM)  05/09/2006 00:00:00 TOTAL TRIHALOMETHANE (THM)  50/09/2006 00:00:00 TOTAL TRIHALOMETHANE (THM)  50/09/2006 00:00:00 TOTAL TRIHALOMETHANE (THM)  50/09/2006 00:00:00 TRICHLOROACETIC ACID (DCAA)  03/07/2006 00:00:00 TRICHLOROACETIC ACID (DBAA)  03/07/2006 00:00:00 TOTAL TRIHALOMETHANES  03/07/2006 00:00:00 TOTAL TRIHALOMETHANES  03/07/2006 00:00:00 CHLOROACETIC ACID (DCAA)  03/07/2006 00:00:00 TOTAL TRIHALOMETHANES  03/07/2006 00:00:00 TOTAL TRIHALOMETHANES  03/07/2006 00:00:00 TOTAL TRIHALOMETHANE (THM)  11/07/2005 00:00:00 BROMODICHLORMETHANE (THM)  11/07/2005 00:00:00 TOTAL TRIHALOMETHANE (THM)

On south Calle of ad	44/07/0005 00 00 00	The diamen	40 110/
Sample Collected: Chemical:	11/07/2005 00:00:00 TOTAL TRIHALOMETHANES	Findings:	19 UG/L
Sample Collected: Chemical:	11/07/2005 00:00:00 DIBROMOACETIC ACID (DBAA)	Findings:	1.4 UG/L
Sample Collected: Chemical:	11/07/2005 00:00:00 DIBROMOCHLOROMETHANE (THM)	Findings:	6.5 UG/L
Sample Collected: Chemical:	08/09/2005 00:00:00 HALOACETIC ACIDS (5) (HAA5)	Findings:	3.6 UG/L
Sample Collected: Chemical:	08/09/2005 00:00:00 DIBROMOACETIC ACID (DBAA)	Findings:	2.4 UG/L
Sample Collected: Chemical:	08/09/2005 00:00:00 TOTAL TRIHALOMETHANES	Findings:	18 UG/L
Sample Collected: Chemical:	08/09/2005 00:00:00 DICHLOROACETIC ACID (DCAA)	Findings:	1.2 UG/L
Sample Collected: Chemical:	08/09/2005 00:00:00 CHLOROFORM (THM)	Findings:	3.8 UG/L
Sample Collected: Chemical:	08/09/2005 00:00:00 DIBROMOCHLOROMETHANE (THM)	Findings:	6.3 UG/L
Sample Collected: Chemical:	08/09/2005 00:00:00 BROMOFORM (THM)	Findings:	1.5 UG/L
Sample Collected: Chemical:	08/09/2005 00:00:00 BROMODICHLORMETHANE (THM)	Findings:	6 UG/L
Sample Collected: Chemical:	05/11/2005 00:00:00 DICHLOROACETIC ACID (DCAA)	Findings:	1.4 UG/L
Sample Collected: Chemical:	05/11/2005 00:00:00 TOTAL TRIHALOMETHANES	Findings:	21 UG/L
Sample Collected: Chemical:	05/11/2005 00:00:00 DIBROMOACETIC ACID (DBAA)	Findings:	2 UG/L
Sample Collected: Chemical:	05/11/2005 00:00:00 HALOACETIC ACIDS (5) (HAA5)	Findings:	3.4 UG/L
Sample Collected: Chemical:	05/11/2005 00:00:00 BROMODICHLORMETHANE (THM)	Findings:	7 UG/L
Sample Collected: Chemical:	05/11/2005 00:00:00 BROMOFORM (THM)	Findings:	1.5 UG/L
Sample Collected: Chemical:	05/11/2005 00:00:00 DIBROMOCHLOROMETHANE (THM)	Findings:	6.4 UG/L
Sample Collected: Chemical:	05/11/2005 00:00:00 CHLOROFORM (THM)	Findings:	6.3 UG/L
Sample Collected: Chemical:	11/03/2004 00:00:00 DIBROMOACETIC ACID (DBAA)	Findings:	1.8 UG/L
Sample Collected: Chemical:	11/03/2004 00:00:00 TOTAL TRIHALOMETHANES	Findings:	13 UG/L
Sample Collected: Chemical:	11/03/2004 00:00:00 HALOACETIC ACIDS (5) (HAA5)	Findings:	1.8 UG/L
Sample Collected: Chemical:	11/03/2004 00:00:00 CHLOROFORM (THM)	Findings:	2.3 UG/L
Sample Collected: Chemical:	11/03/2004 00:00:00 DIBROMOCHLOROMETHANE (THM)	Findings:	5.1 UG/L
Sample Collected: Chemical:	11/03/2004 00:00:00 BROMOFORM (THM)	Findings:	1.9 UG/L

11/03/2004 00:00:00 BROMODICHLORMETHANE (THM)	Findings:	3.9 UG/L
08/24/2004 00:00:00 FLUORIDE (F) (NATURAL-SOURCE)	Findings:	.11 MG/L
08/24/2004 00:00:00 TOTAL DISSOLVED SOLIDS	Findings:	150 MG/L
08/24/2004 00:00:00 TURBIDITY, LABORATORY	Findings:	.17 NTU
08/24/2004 00:00:00 CHLORIDE	Findings:	5.8 MG/L
08/24/2004 00:00:00 SODIUM	Findings:	19 MG/L
08/24/2004 00:00:00 MAGNESIUM	Findings:	11.4 MG/L
08/24/2004 00:00:00 CALCIUM	Findings:	21 MG/L
08/24/2004 00:00:00 HARDNESS (TOTAL) AS CACO3	Findings:	101 MG/L
08/24/2004 00:00:00 ALKALINITY (TOTAL) AS CACO3	Findings:	115 MG/L
08/24/2004 00:00:00 PH, LABORATORY	Findings:	8.41
08/24/2004 00:00:00 SPECIFIC CONDUCTANCE	Findings:	300 US
08/24/2004 00:00:00 SOURCE TEMPERATURE C	Findings:	23 C
08/24/2004 00:00:00 COLOR	Findings:	2.5 UNITS
09/09/2003 00:00:00 COLOR	Findings:	2.5 UNITS
09/09/2003 00:00:00 SODIUM	Findings:	18 MG/L
09/09/2003 00:00:00 MAGNESIUM	Findings:	11.9 MG/L
04/23/2002 00:00:00 COLOR	Findings:	2.5 UNITS
04/23/2002 00:00:00 TURBIDITY, LABORATORY	Findings:	.17 NTU
04/23/2002 00:00:00 SPECIFIC CONDUCTANCE	Findings:	296 US
04/23/2002 00:00:00 PH, LABORATORY	Findings:	8.37
04/23/2002 00:00:00 ALKALINITY (TOTAL) AS CACO3	Findings:	124 MG/L
04/23/2002 00:00:00 BICARBONATE ALKALINITY	Findings:	121 MG/L
04/23/2002 00:00:00 CARBONATE ALKALINITY	Findings:	3 MG/L
04/23/2002 00:00:00 HARDNESS (TOTAL) AS CACO3	Findings:	110 MG/L
	BROMODICHLORMETHANE (THM)  08/24/2004 00:00:00 FLUORIDE (F) (NATURAL-SOURCE)  08/24/2004 00:00:00 TOTAL DISSOLVED SOLIDS  08/24/2004 00:00:00 TURBIDITY, LABORATORY  08/24/2004 00:00:00 CHLORIDE  08/24/2004 00:00:00 SODIUM  08/24/2004 00:00:00 MAGNESIUM  08/24/2004 00:00:00 CALCIUM  08/24/2004 00:00:00 HARDNESS (TOTAL) AS CACO3  08/24/2004 00:00:00 PH, LABORATORY  08/24/2004 00:00:00 PH, LABORATORY  08/24/2004 00:00:00 SPECIFIC CONDUCTANCE  08/24/2004 00:00:00 SOURCE TEMPERATURE C  08/24/2004 00:00:00 SOURCE TEMPERATURE C  08/24/2004 00:00:00 COLOR  09/09/2003 00:00:00 COLOR  09/09/2003 00:00:00 COLOR  09/09/2003 00:00:00 SODIUM  09/09/2003 00:00:00 TURBIDITY, LABORATORY  04/23/2002 00:00:00 TURBIDITY, LABORATORY  04/23/2002 00:00:00 PH, LABORATORY  04/23/2002 00:00:00 SPECIFIC CONDUCTANCE  04/23/2002 00:00:00 COLOR  04/23/2002 00:00:00 TURBIDITY, LABORATORY  04/23/2002 00:00:00 PH, LABORATORY  04/23/2002 00:00:00 SPECIFIC CONDUCTANCE  04/23/2002 00:00:00 ALKALINITY (TOTAL) AS CACO3  04/23/2002 00:00:00 BICARBONATE ALKALINITY  04/23/2002 00:00:00 CARBONATE ALKALINITY	BROMODICHLORMETHANE (THM)         68/24/2004 00:00:00         Findings:           FLUORIDE (F) (NATURAL-SOURCE)         Findings:           08/24/2004 00:00:00         Findings:           TOTAL DISSOLVED SOLIDS         Findings:           08/24/2004 00:00:00         Findings:           CHLORIDE         Findings:           08/24/2004 00:00:00         Findings:           CHLORIDE         Bindings:           08/24/2004 00:00:00         Findings:           SODIUM         Findings:           08/24/2004 00:00:00         Findings:           ALCIUM         Bindings:           08/24/2004 00:00:00         Findings:           HARDNESS (TOTAL) AS CACO3         Findings:           08/24/2004 00:00:00         Findings:           ALKALINITY (TOTAL) AS CACO3         Findings:           08/24/2004 00:00:00         Findings:           08/24/2004 00:00:00         Findings:           08/24/2004 00:00:00         Findings:           08/24/2004 00:00:00         Findings:           09/09/2003 00:00:00         Findings:           09/09/2003 00:00:00         Findings:           09/09/2003 00:00:00         Findings:           09/09/2003 00:00:00         Findings:           04/23/200

Sample Collected: 04/23/2002 00:00:00 Findings: 23.8 MG/L Chemical: CALCIUM Sample Collected: 04/23/2002 00:00:00 Findings: 13.8 MG/L MAGNESIUM Chemical: Sample Collected: 04/23/2002 00:00:00 Findings: 18.8 MG/L Chemical: SODIUM Sample Collected: 04/23/2002 00:00:00 Findings: 8.4 MG/L CHLORIDE Chemical: Sample Collected: 04/23/2002 00:00:00 Findings: 135 MG/L Chemical: TOTAL DISSOLVED SOLIDS

# **AREA RADON INFORMATION**

State Database: CA Radon

Radon Test Results

 Zip
 Total Sites
 > 4 Pci/L
 Pct. > 4 Pci/L

 —
 —
 —

 94945
 10
 0
 0.00

Federal EPA Radon Zone for MARIN County: 3

Note: Zone 1 indoor average level > 4 pCi/L.

: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.

: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 94945

Number of sites tested: 6

Area Average Activity % <4 pCi/L % 4-20 pCi/L % >20 pCi/L Living Area - 1st Floor -0.083 pCi/L 100% 0% 0% Living Area - 2nd Floor Not Reported Not Reported Not Reported Not Reported Basement Not Reported Not Reported Not Reported Not Reported

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

#### **TOPOGRAPHIC INFORMATION**

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

#### HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

#### HYDROGEOLOGIC INFORMATION

AQUIFLOW<sup>R</sup> Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

# **GEOLOGIC INFORMATION**

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

#### LOCAL / REGIONAL WATER AGENCY RECORDS

#### FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

#### STATE RECORDS

Water Well Database

Source: Department of Water Resources

Telephone: 916-651-9648

California Drinking Water Quality Database Source: Department of Health Services

Telephone: 916-324-2319

The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

# OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations Source: Department of Conservation

Telephone: 916-323-1779

#### **RADON**

State Database: CA Radon

Source: Department of Health Services

Telephone: 916-324-2208 Radon Database for California

Area Radon Information Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency

(USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at

private sources such as universities and research institutions.

EPA Radon Zones Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor

radon levels.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

# OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

## STREET AND ADDRESS INFORMATION

© 2009 Tele Atlas North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

THIS PAGE INTENTIONALLY LEFT BLANK

# Coordination

June 26, 2009 Letter from California Regional Water Quality Control Board Soil and Groundwater Investigation Workplan THIS PAGE INTENTIONALLY LEFT BLANK





June 26, 2009 File No. 21-0298 (JMJ)

Marin County Department of Public Works Attn: Mr. Lawrence Beaton (email <a href="mailto:lbeaton@co.marin.ca.us">lbeaton@co.marin.ca.us</a>)
P. O. Box 4186
San Rafael, CA 94913

SUBJECT: Requirement for a Technical Report - Marin County Airport/Gnoss Field

451 Airport Road, Novato, Marin County

Dear Mr. Beaton:

This letter directs you to submit a technical report for the subject site.

# **Background**

Gnoss Field is a small airport in Novato constructed on filled wetlands and is surrounded by open fields and marshlands. One jet fuel and two aviation gasoline USTs were removed in 1991. The USTs and product lines were pitted and had holes in them. Two grab groundwater samples from the UST pit contained up to 7,900 ppb of TPH-g, 5,900 ppb of TPH-d, and 130 ppb of benzene. Four borings were installed on May 31, 1995, and nine additional borings were installed on July 5, 1995. Grab groundwater samples from the borings contained up to 1,100 ppb of TPH-d, 810 ppb of TPH-g, 4,000 ppb of total petroleum hydrocarbons as bunker C fuel (TPH-b), 30,000 ppb of jet fuel (TPH-jf), and 51 ppb of benzene. Soil samples contained up to 1,300 mg/kg of motor oil (TPH-mo) with low concentrations of TPH-g, TPH-d, TPH-b, and benzene.

In 1999 during excavation work to replace a section of the storm drain sewer line, groundwater with a sheen and solvent-like and petroleum odors were encountered. Sixty three tons of soil and 9,600 gallons of groundwater were subsequently removed from the excavation and transported off-site to proper disposal facilities. Soil samples of the excavated soil contained up to 570 mg/kg of TPH-g, 750 mg/kg of TPH-d, 750 mg/kg of TPH-kerosene, 1,100 mg/kg of TPH-mo, 1,300 mg/kg of TPH-b, and non-detectable concentrations of benzene. Soil confirmation samples from the final limits of the excavation contained much lower concentrations of the aforementioned compounds. A grab groundwater sample from the excavation contained 960 ppb of TPH-g, 890 ppb of TPH-d, 820 ppb of TPH-k, 1,100 ppb of TPH-b, 1.4 ppb of benzene, and non-detectable concentrations of TPH-mo and MTBE.

This subsurface contamination poses a potential threat to human health and water quality and needs to be addressed.

# Requirement for a Technical Report

Marin County shall submit a technical report comprising the following items:

- A work plan to conduct a subsurface investigation to determine the extent of the soil and groundwater pollution.
- Information on the nearby surface water bodies.
- Information on all domestic and municipal wells within 1,000 feet of the subject site.

# Marin County is required to submit a technical report to our office by October 1, 2009, that contains the above listed items.

Marin County is the responsible party for the contamination because they own and operate the site.

This requirement for a report is made pursuant to Water Code Section 13267, which allows the Board to require reports from persons whose activities may have an impact on water quality. An enclosure to this letter provides additional information about Section 13267 requirements. Any extension in the above deadline must be confirmed in writing by Board staff.

You are required to submit all documents in electronic format to the State Water Resources Control Board's Geotracker database. Guidance for electronic information submittal is available at <a href="http://www.waterboards.ca.gov/water\_issues/programs/ust/electronic\_submittal/">http://www.waterboards.ca.gov/water\_issues/programs/ust/electronic\_submittal/</a>. Please note that this requirement includes all analytical data, monitoring well latitudes, longitudes, and elevations, water depths, site maps, boring logs (PDF format), and complete copies of reports and correspondence including the signed transmittal letters and professional certifications (PDF format). All reports submitted should have the Regional Board file number <a href="https://www.userchor.org/">21-0298</a> on the first page of the report.

Copies of all reports and correspondence shall be sent to Mr. Michael Frost of the Marin County Office of Waste Management. You are responsible for obtaining any necessary approvals or permits from all agencies having jurisdiction over any aspect of the proposed work. These agencies may include the local Building Dept., Planning Dept., Public Works, and the Marin County Environmental Health Services department (contact number 415-499-6667).

Please direct all questions and correspondence regarding this matter to John Jang of my staff at (510) 622-2366 (email address <u>jiang@waterboards.ca.gov</u>).

Sincerely,

Bruce H. Wolfe Executive Officer

Enc.: Fact Sheet – Requirements For Submitting Technical Reports Under Section 13267 of the California Water Code (Revised January 2008)

cc:

Shari Knieriem, SWRCB, UST Cleanup Fund Unit (email <a href="mailto:sknieriem@waterboards.ca.gov">sknieriem@waterboards.ca.gov</a>)
Sunil Ramdass, SWRCB, UST Cleanup Fund Unit (email <a href="mailto:sramdass@waterboards.ca.gov">sramdass@waterboards.ca.gov</a>)

Armando Alegria (email <u>aalegria@co.marin.ca.us</u>) Marin County Health Dept. 3501 Civic Center Drive, Room 236 San Rafael, CA 94903

Michael Frost (email <a href="mfrost@co.marin.ca.us">mfrost@co.marin.ca.us</a>)
Marin County Office of Waste Management
P. O. Box 4186
San Rafael, CA 94913-3039

Mr. John Calomiris (email <u>corpmail@ecaenviron.com</u>) Edd Clark & Asso., Inc. P. O. Box 3039 Rohnert Park, CA 94927-3039



1515 Clay Street, Suite 1400, Oakland, California 94612 (510) 622-2300 • Fax (510) 622-2460 http://www.waterboards.ca.gov/sanfranciscobay



# Fact Sheet – Requirements For Submitting Technical Reports Under Section 13267 of the California Water Code

# What does it mean when the Regional Water Board requires a technical report?

Section 13267<sup>1</sup> of the California Water Code provides that "...the regional board may require that any person who has discharged, discharges, or who is suspected of having discharged or discharging, or who proposes to discharge waste...that could affect the quality of waters...shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires."

# This requirement for a technical report seems to mean that I am guilty of something, or at least responsible for cleaning something up. What if that is not so?

The requirement for a technical report is a tool the Regional Water Board uses to investigate water quality issues or problems. The information provided can be used by the Regional Water Board to clarify whether a given party has responsibility.

# Are there limits to what the Regional Water Board can ask for?

Yes. The information required must relate to an actual or suspected or proposed discharge of waste (including discharges of waste where the initial discharge occurred many years ago), and the burden of compliance must bear a reasonable relationship to the need for the report and the benefits obtained. The Regional Water Board is required to explain the reasons for its request.

# What if I can provide the information, but not by the date specified?

A time extension may be given for good cause. Your request should be promptly submitted in writing, giving reasons.

## Are there penalties if I don't comply?

Depending on the situation, the Regional Water Board can impose a fine of up to \$5,000 per day, and a court can impose fines of up to \$25,000 per day as well as criminal penalties. A person who submits false information or fails to comply with a requirement to submit a technical report may be found guilty of a misdemeanor. For some reports, submission of false information may be a felony.

# Do I have to use a consultant or attorney to comply?

There is no legal requirement for this, but as a practical matter, in most cases the specialized nature of the information required makes use of a consultant and/or attorney advisable.

# What if I disagree with the 13267 requirements and the Regional Water Board staff will not change the requirement and/or date to comply?

You may ask that the Regional Water Board reconsider the requirement, and/or submit a petition to the State Water Resources Control Board. See California Water Code sections 13320 and 13321 for details. A request for reconsideration to the Regional Water Board does not affect the 30-day deadline within which to file a petition to the State Water Resources Control Board.

# If I have more questions, whom do I ask?

Requirements for technical reports include the name, telephone number, and email address of the Regional Water Board staff contact.

Revised January 2008

<sup>&</sup>lt;sup>1</sup> All code sections referenced herein can be found by going to www.leginfo.ca.gov.

# DRAFT

September 22, 2009 **Job No.: 0343,001.99** 

Mr. Larry Beaton County of Marin Department of Public Works PO Box 4186 San Rafael, California 94913

Workplan: Soil and Groundwater Investigation Marin County Airport 451-A Airport Road Novato, California SFBRWQCB File No.: 21-0298 (JMJ)

Dear Mr. Beaton:

Please accept the following as Edd Clark and Associates, Inc.'s (ECA's) workplan for a soil and groundwater investigation in the area formerly occupied by underground storage tanks (USTs) at the Marin County Airport (Gnoss Field), 451-A Airport Road (site) in Novato, California (Figure 1). Based the results of previous site investigations, the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) issued a letter dated June 26, 2009, requiring the submittal of a workplan to assess the extent of soil and groundwater impacted by fuel hydrocarbons (FHCs). In addition, the SFBRWQCB required a Sensitive Receptor Survey (SRS) to identify nearby surfacewater bodies and domestic and municipal wells within 1,000 feet (ft) of the site. A copy of this workplan will be submitted to the SFBRWQCB for their review and approval and to the Marin County Office of Waste Management (MCOWM) and Marin County Environmental Health Services (MCEHS) for their files; a SRS report will be submitted under separate cover. Additionally, an electronic copy of this workplan will be uploaded to the State GeoTracker Internet Database (GeoTracker).

# PROPOSED SCOPE OF WORK

Work proposed for this investigation includes the following activities:

- Obtaining a boring permit from the MCEHS;
- Directing the drilling of 10 exploratory soil borings;
- Collecting soil samples from the borings for evaluation of soil conditions and laboratory analyses;
- Preparing a report summarizing the work completed and results of the sample analyses and presenting conclusions and recommendations regarding site conditions.

September 22, 2009 **Job No.: 0343,001.99** 

## BACKGROUND

# Site Description

The site is located just north of city of Novato in Marin County, California. The site is currently occupied by the Marin County Airport (Gnoss Field), a small airport with associated service and maintenance buildings. Highway 101 is 2000 ft west of the site. The Petaluma River is located 7000 ft to the northeast of the site. A drainage ditch that drains to the east and connects with Black John Slough is 800 ft south of the site. According to GPI Environmental Management's October 31, 1995, Site Summary Documentation/Request for Case Closure report prepared for the site, MCEHS files did not indicate active or abandoned domestic water-supply wells within ¼ mile of the area formerly occupied by the USTs. The ground surface in the area formerly occupied by the USTs is paved with asphalt. The ground surface slopes slightly towards the east. Three USTs were formerly located in front of the airport manager's office (Figure 2). Two 10,000-gallon, partially aboveground storage tanks (ASTs) for aviation gasoline are currently located approximately 100 yards north of the area formerly occupied by the USTs.

# **Site History**

- September 1991 UST Removal Petro Tech of Santa Rosa, California, excavated and removed one 10,000-gallon UST for jet fuel and two 10,000-gallon USTs for aviation gasoline from a common excavation. The three USTs were reportedly in good condition at the time of their removal; however, pitting and holes were observed in the jet fuel product lines, and holes were observed in one of the fuel tanks after its protective tar coating was removed. The results of the analyses of soil and groundwater samples from the UST excavation are summarized on Table 1 in Appendix A.
- May and July 1995 Subsurface Investigations Artesian Environmental Consultants (Artesian) advanced nine soil borings to a maximum depth of 8 ft in the area formerly occupied by the USTs. Elevated concentrations of heavier range hydrocarbons (diesel to oil) were reportedly detected within the fill material emplaced during construction of the airport. Additionally, gasoline/jet fuel range and associated aromatic hydrocarbons were detected in samples of near-surface soils and groundwater, primarily to the south and east of the southern-most former UST. The results of the analyses of soil and groundwater samples from the borings are summarized on Tables 2 through 5 in Appendix A.
- GPI Environmental Management's October 31, 1995, Site Summary Documentation/Request for Case Closure report submitted to the SFBRWQCB, recommending that the site be closed as a low risk groundwater site.
- June 1999 Storm Drain Cleanup EC&A personnel conducted an investigation and cleanup at
  the site when a sheen and unusual solvent-like odor were observed in the area of a collapsed
  section of storm drain on the east side of the southern-most hanger. The results of the analysis
  of soil and water samples from the investigation are summarized on EC&A Table 1 in Appendix

September 22, 2009 **Job No.: 0343,001.99** 

A. Complete details of the investigation are in EC&A's September 24, 1999, Report Cleanup of Storm Drain Site.

 Letter dated June 26, 2009, from the SFBRWQCB requiring the submittal of a workplan to assess the the extent of soil and groundwater impacted by FHCs and the performance of an SRS.

# GEOLOGIC/HYDROLOGIC CONDITIONS

# **Site Geologic Conditions**

Based on published geologic maps, the site is underlain by recent intertidal deposits of Bay mud interstratified with silty clay river alluvial deposits. Subsurface stratigraphic data logged by Artesian indicates that the upper 1½ ft to 4 ft consists of artificially emplaced light to dark brown gravel with subordinate sand and silt. The artificial fill material was noted to be unconsolidated and semi-pervious. This material overlies intertidal deposits of recent Bay deposits consisting of mottled dark gray, highly plastic, dense and organic rich silty clay containing reeds and other organic matter to a known dept of 12 ft below ground surface (bgs). The clay contains occasional localized channels (3 to 6 inches wide by several inches in thickness) of highly organic peat (decomposed plant material)/shell fragments and sandy clay.

# **Site Hydrologic Conditions**

The site lies approximately at mean sea level (MSL) next to a topographic high toward the west across from Highway 101. The local topography slopes slightly to the east towards the Petaluma River, 7000 ft to the northeast of the site. Near-surface groundwater flow direction, based on topography, is to the east with a very low gradient. Site groundwater flow direction is problematic due to the proximity to the estuary channel and discontinuous nature of water-bearing subsurface zones. At high tide, the expected groundwater flow direction would be generally west, away from the estuary channel, and generally east toward the estuary during low tide. Due to varying static groundwater levels observed in the previously drilled soil borings, a predominate groundwater flow direction cannot be accurately determined for this site.

Depth to first encountered groundwater during Artesian's previous subsurface investigation was at 8 ft bgs in the area formerly occupied by the USTs and at between 4.5 ft and 6 ft bgs at the active AST complex. Static groundwater levels were measured at between 0.5 ft and 3.74 ft bgs upon completion of soil boring drilling. It is suspected, based on the variable depth to near-surface groundwater, that the occurrence of near-surface groundwater is stratigraphically controlled. Near-surface groundwater movement within an intertidal depositional environment is primarily restricted to relatively semi-permeable organic rich and/or sandy lenticular soil zones/channels at differing elevations. These near-surface groundwater bearing zones/channels have been documented at other sites (with predominately intertidal Bay muds) to be not laterally nor vertically continuous. The variability in groundwater elevations is due to the previous soil borings intersecting different semi-permeable water bearing zones at differing elevations.

September 22, 2009 **Job No.: 0343,001.99** 

Based on boring log data obtained by Artesian, the predicted permeability rate for soils underlying the site and adjacent to the former USTs is on the order of 0.0001 to 0.01 ft/year or 0.003 to 0.3 ft in 30 years since UST installation. This is based on known permeability constants (10<sup>-8</sup> to 10<sup>-10</sup> cm/sec or 0.0001 to 0.01 ft/year) for the Bay muds which behave like fat clays. Thus the ability of hydrocarbons to migrate away from the former UST location is severely restricted. These permeability rates are consistent with the documented lateral extent of hydrocarbon contamination from other former storage tank sites within similar soil lithologies.

## PROPOSED SOIL AND GROUNDWATER INVESTIGATION

The purpose of the proposed soil and groundwater investigation is to assess the lateral and vertical extent of soil and groundwater impacted by FHCs in the area formerly occupied by three USTs. EC&A personnel will advance 10 exploratory borings and collect soil and groundwater samples from the borings for chemical analyses. The exploratory borings will be advanced around the perimeter of the former UST excavation approximately 10 feet beyond the soil borings that were drilled in 1995. Analytical data from the proposed exploratory borings will be used to evaluate whether FHC concentrations have declined since 1995 and the extent to which FHCs have migrated in soil and groundwater. The work will be accomplished by the following tasks.

# Task 1 - Permit Acquisition, Utility Location and Project Management

EC&A will prepare and submit a soil boring permit application to the MCEHS. Prior to drilling activities, underground utilities will be located and marked by either the client or a private locator service. Additionally, the proposed boring locations will be marked in white paint, and Underground Service Alert (USA) will be notified at least 48 hours prior to field work, to clear these locations, as required by law. The SFBRWQCB will also be notified 48 hours prior to field work.

# Task 2 - Soil Borings

EC&A proposes to advance 10 exploratory soil borings (B-14 through B-23) to depths of approximately 8 ft bgs. The locations of the proposed borings are shown on Figure 3. The proposed borings may be advanced deeper for vertical delineation, and/or additional step-out borings may be advanced for further lateral delineation, based on field observations, and field screening of the soil and observation of groundwater conditions encountered. The exploratory soil borings will be advanced using a truck-mounted drill rig equipped with 4-inch-diameter, solid-stem augers.

Soil boring advancement will be performed under the technical direction of an EC&A field geologist who will classify the soils encountered, maintain a continuous log of the lithology, and assist in collecting samples of soil and groundwater. The field work will be performed under the supervision of a California-registered geologist. EC&A personnel will field screen the breathing zone and soil samples for organic vapors with a photo-ionization detector (PID).

September 22, 2009 **Job No.: 0343,001.99** 

# Soil Sample Collection Procedures

Soil samples will be collected from the exploratory soil borings at approximate depths of 4 ft bgs and 8 ft bgs, and/or based on field indications (odor, staining, etc.), PID readings and the results of past site investigations. The soil samples will be collected using a split-spoon sampling apparatus containing 2-inch-diameter by 6-inch-long brass or stainless steel liners. When a boring is advanced to the selected sampling depth, the sampler will be lowered into the bottom of the hole and driven approximately 18 inches into soil ahead of the auger with a 140-pound, drill-rig-operated hammer. Foil or Teflon® squares will be placed over each end of the tube and the ends will be sealed with plastic end caps. The soil samples will be labeled, placed on ice, and transported under chain of custody control to a State-licensed laboratory for the required analyses. EC&A anticipates that two soil samples per exploratory soil boring will be submitted for laboratory analyses.

# **Grab-groundwater Sample Collection Procedures**

A groundwater sample will be collected from each soil boring in clean, new disposable bailers lowered directly into the borings. If groundwater is slow to enter a boring, or if the stability of a boring is questionable, temporary well screen maybe placed in the boring without sandpack to facilitate sample collection. The groundwater will be transferred from the bailers to properly labeled, laboratory-supplied, sterile sample containers. The samples will be labeled, placed on ice and transported under chain of custody control to a State-licensed laboratory for the required analyses.

# **Equipment Cleaning Procedures**

In order to minimize the possibility of cross contamination, the down-hole drilling and sampling equipment will be cleaned prior to use. Soil- and water-sampling equipment will be washed in a low-phosphorous, soap-and-water solution and double rinsed with tap water before samples are collected.

### Waste Storage

Soil from the borings and water from equipment decontamination will be placed in properly labeled DOT 17H 55-gallon drums that will be sealed and temporarily stored onsite. Waste disposal will be based on the results of analyses of samples from the borings. Disposal documentation will be provided to the SFBRWQCB.

### Task 3 - Sample Analyses

Soil and groundwater samples will be analyzed for total petroleum hydrocarbons (TPH) as gasoline (g), TPH as diesel (d), TPH as kerosene (k), TPH as motor oil (mo), TPH as bunker oil (bo), TPH as jet fuel (jf), TPH as aviation gas (av gas) and benzene, toluene, ethylbenzene and xylenes (BTEX) by Analytical Methods SW8015Bm/8015B/8021B. Soil samples will also be analyzed for methyl tert-butyl ether (MTBE) by Method 8021B, and grab-groundwater samples will also be analyzed for MTBE and other fuel oxygenates and lead scavengers 1,2-dichloroethane (1,2-DCA) and 1,2-dibromoethane (EDB) by Method SW8260B.

September 22, 2009 **Job No.: 0343,001.99** 

# Task 4 - Report Preparation

Following completion of the boring advancement, receipt of the soil and groundwater analytical results, and conclusion of the SRS, EC&A will prepare a written report presenting boring logs, the results of the soil and groundwater sample analyses, the results of the SRS, and conclusions regarding site conditions. The report will include isoconcentration maps for petroleum hydrocarbons of concern. An updated site map, boring logs, the results of the sample analyses, and a GeoReport will be electronically submitted to GeoTracker.

### SITE SAFETY PLAN

All field activities will be conducted in accordance with the Site Safety Plan in Appendix C. The SSP identifies the chemicals that may be encountered during the investigations, describes precautionary measures to be taken when in the presence of these chemicals, and contains a map to the nearest medical facility.

Thank you for allowing EC&A to provide environmental services for you. Please contact John Calomiris, Project Manager, if you have any questions or concerns.

Sincerely,

John Calomiris Technical Operations Manager Richard Ely, PG #4137 Senior Geologist

# Attachments:

Figure 1 - Site Location Map

Figure 2 - Site Map

Figure 3 - Soil Boring Location Map with Proposed Soil Borings

Figure 4 - TPH Concentrations in Groundwater

Figure 5 - Isoconcentration Contour Map of Benzene in Groundwater

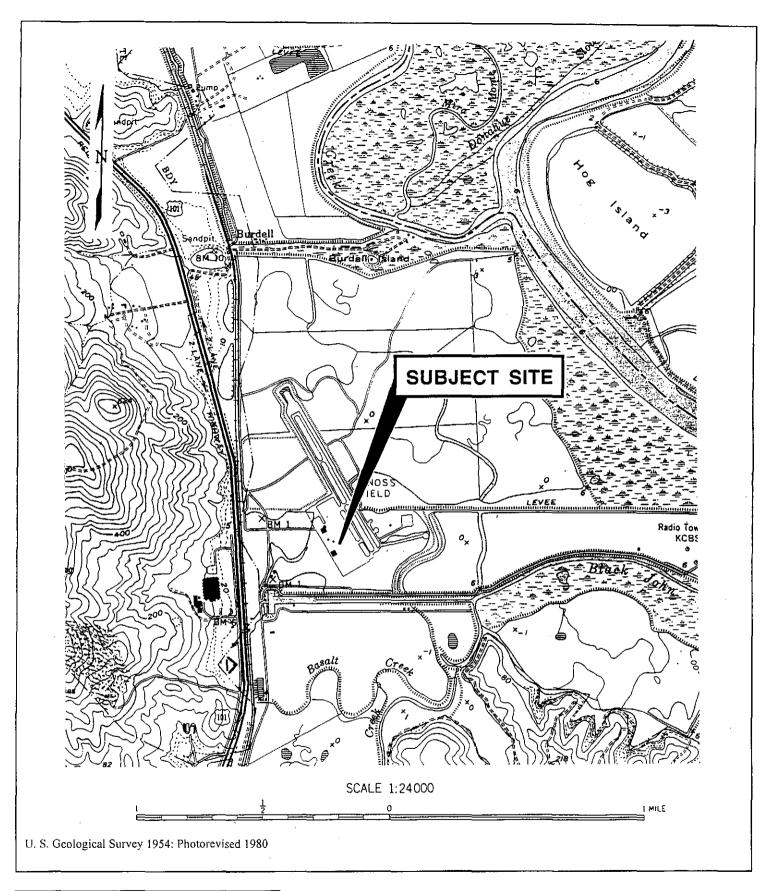
Appendix A - Analytical Results from Previous Site Investigations

Appendix B - Soil Boring Logs

Appendix C - Site Safety Plan

cc: Michael Frost, Marin County Office of Waste Management Armando Alegria, Marin County Environmental Health Services John Jang, San Francisco Bay Regional Water Quality Control Board

0343\2009 S&GW WP/SSP



EDD CLARK & ASSOCIATES, INC.

ENVIRONMENTAL CONSULTANTS

Site Location Map
Marin County Airport/Gnoss Field
451 Airport Road
Novato, CA. 94948

**PLATE** 

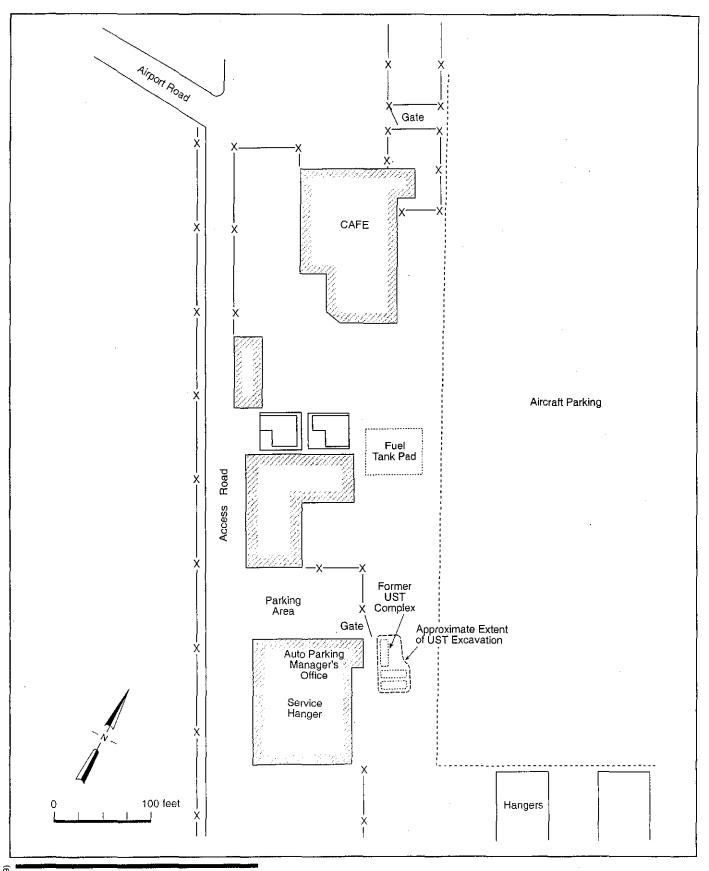
1

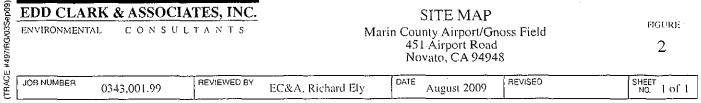
JOB NUMBER 0343,001.99

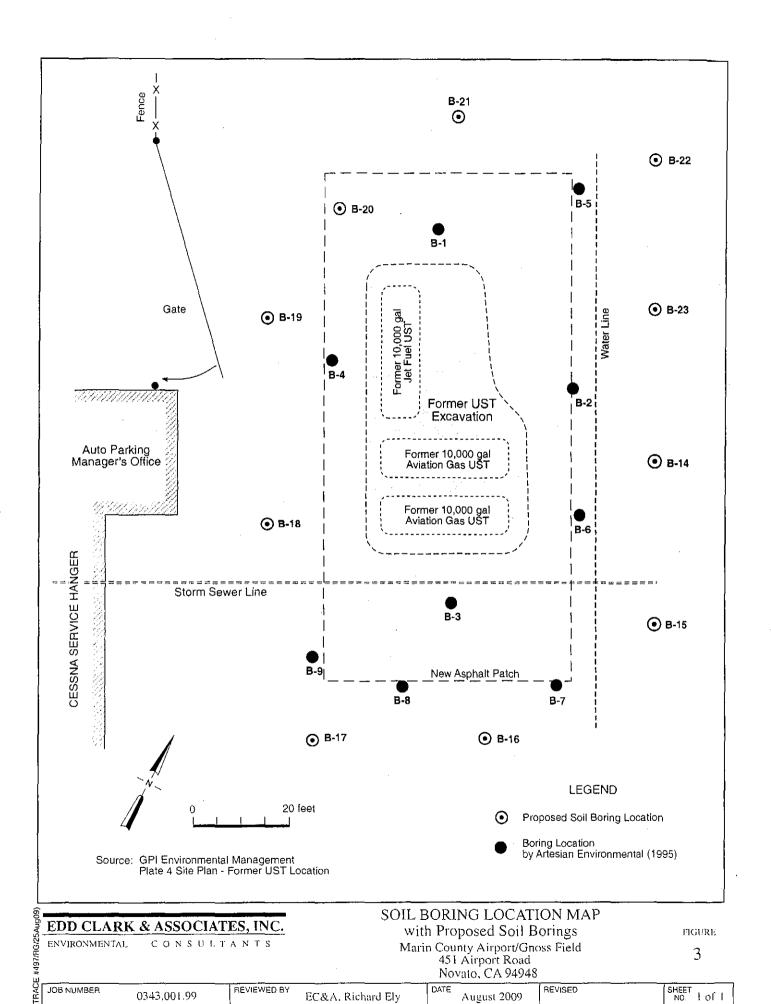
REVIEWED BY

DATE 09/99 REVISED DATE

REVISED DATE



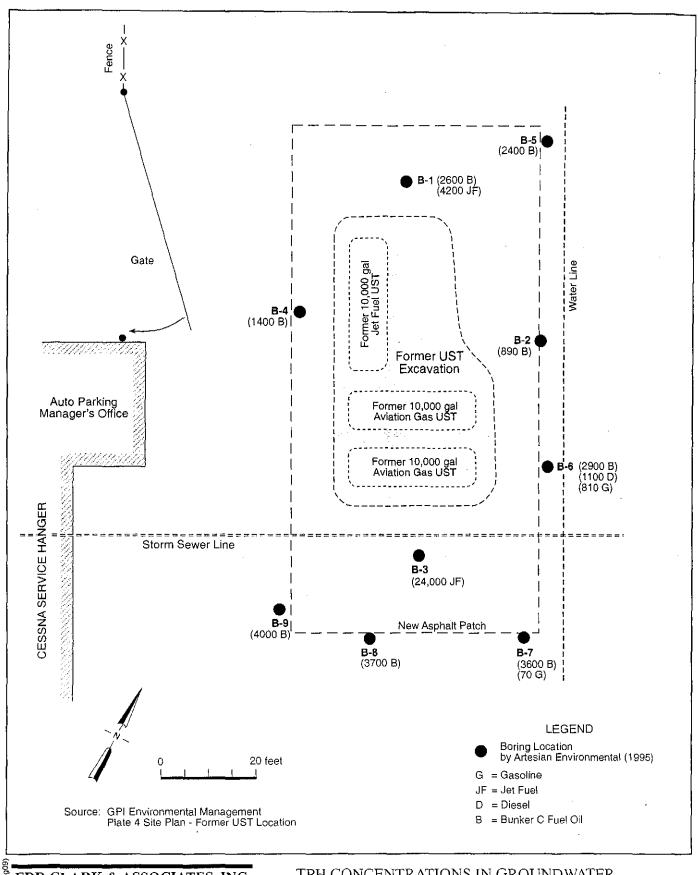




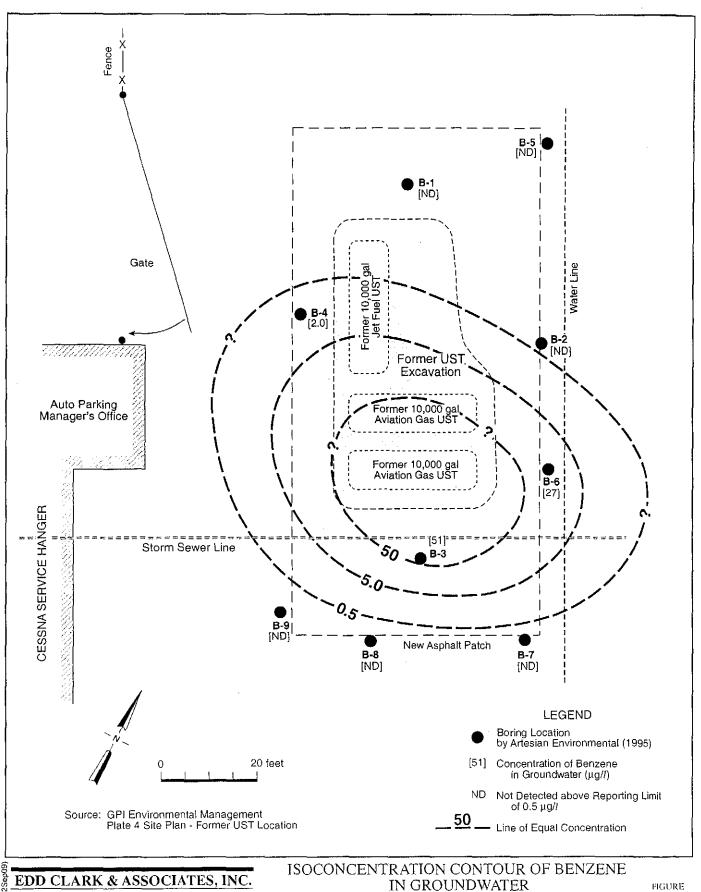
EC&A, Richard Ely

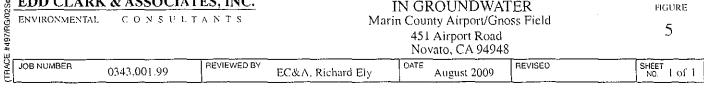
August 2009

0343,001.99



TPH CONCENTRATIONS IN GROUNDWATER EDD CLARK & ASSOCIATES, INC. FIGURE Marin County Airport/Gnoss Field ENVIRONMENTAL CONSULTANTS 4 451 Airport Road Novato, CA 94948 REVISED JOB NUMBER SHEET NO. 1 of L REVIEWED BY 0343,001.99 August 2009 EC&A, Richard Ely





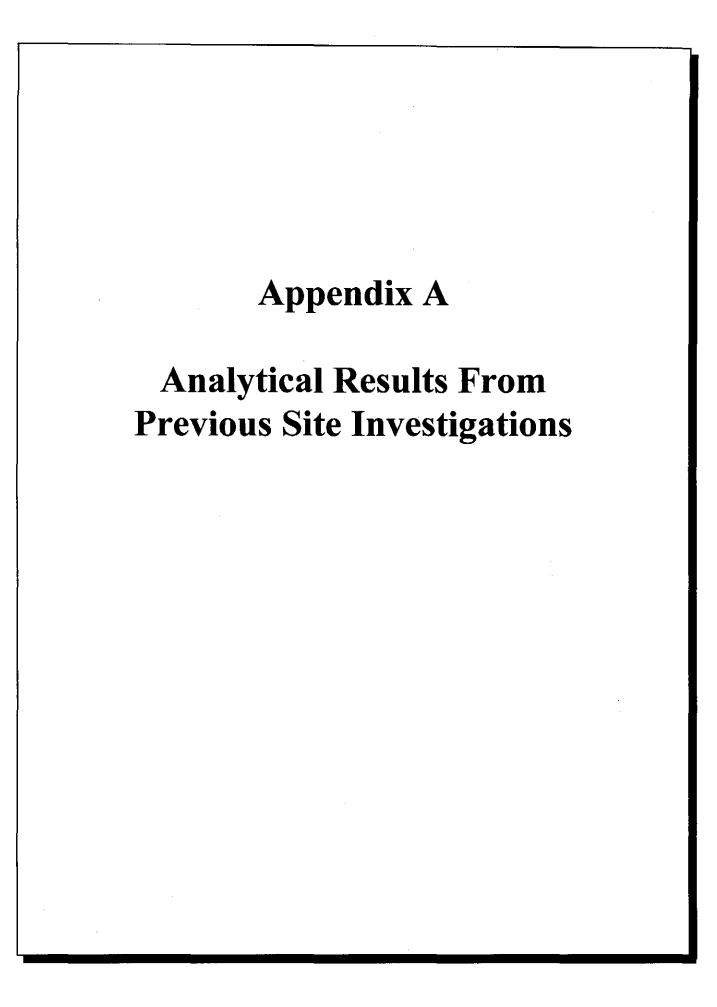


Table 1

	<u> </u>	s				aboratory Re			<u>-                                    </u>		
Sample						d, Novato, Ca				Ethyl	
Nümber	ft. (BGS	) TPH (G)	TPH (JF)	TPH(D)	TPH (K)	TPH (B)	TPH (M)	Benzene	Toluene	Benzene	Xylene
				5	Soil Sample	Results					
3	5.0'	1.B		<del></del>	_			57	25	11	36
4	6.0"	1.8						160	16	51	97
5	7.0'	ND	-	15 (DH)				8.5	ND	ND	ND
6	7.0'	ND	****		<del></del>		****	17	16	ND	ND
7	7.0'	ND		34 (DH)				ND	ND	ND	ND
•											145
-000 15-color	and the second s	and the second	odeniczne School Strockerowskie				na mara <u>a p</u> ersona antaria.				
MDL		1 ppm	10 ppm	1 ppm		10-ррт		2.5.ppb	2.5 ppb	2:5 ppb	2.5 ppb
				Near-Surfac	e Groundwa	ater Sample R	lesuits				
1W		7.9	****	,		· · ·		130	150	ND	110
2W				5.9 (D+)	<del></del>	_				_	
								•			
								•			
	•			,							
											•
											•
										ı	•
MDL	ND = NOT DET		0.05 ppm	0.05 ppm	0.05 ppm = NOT PER	0.5 ppm FORMED	0.5 ppm	0;5 ppb	0,5 pph	0.5 ppb	0.5 ppb
þ	ppm = parts per	million			ppb = parts per						
M	IDL ≈ Aπalytica	Method Detection	on Limit						ograpg Indicates ( ydrocarbon.	ilesel range and	
	• •	asoline (EPA Mei et Fuel (EPA Mod	thod 8015) lified Method 8015	3				DH ≈ Chromate	ograph indicates (	nydrocarbon besi	<i>r</i> ier
TPH	(D) = TPH as Di	iesel (EPA Modifi	ied Method 8015)	•				than dies		iyai ooniban 1160	
		•	odified Method 801 A Modified Metho							•	
		-	odified Method 801	-							

Table 1. Analytical Laboratory Results for Groundwater Samples

Project No. 1649, Marin Co. Airport/Gnoss Field, Novato, California

Sample Number	Sample Date	TPH as Bunker C Fuel mg/L	TPH as Diesel mg/L	TPH as Kerosene mg/L	TPH as Motor Oil mg/L	TPH as Gasoline mg/L	TPH as Jet Fuel mg/L	Benzene μg/L	Toluene μg/L	Ethylbenzene μg/L	Total Xylenes μg/L
B-1 AQ	6/1/95	2.6(0.5)	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.05)	4.2(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
B-2 AQ	6/1/95	0.89 (0.5)	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
B-3 AQ	6/1/95	NA	ND(0.5)	ND(0.5)	NĐ(5.0)	ND(2.5)	24(2.5) 30(0.5)*	51(25.0)	48(25.0)	ND(25.0)	ND(25.0)
B-4 AQ	6/1/95	1.4(0.5)	ND(0.05)	ND(1.0)	ND(0.5)	ND(0.05)	ND(0.05)	2(0.5)	ND(0.5)	ND(0.5)	ND(0.5)

### NOTES

(1.0) = laboratory reporting limit

TPH = Total Petroleum Hydrocarbons

mg/L = milligrams per liter; equivalent to parts per million (ppm)

μg/L = micrograms per liter; equivalent to parts per billion (ppb)

ND = Not detected at indicated laboratory reporting limits

NA = Not analyzed

\*Soil sample B-3 3-4' was analyzed for TPH as Jet Fuel by both EPA Methods 5030/M8015 and M8015.

See laboratory reports for analytical methods.

Table 1. Analytical Laboratory Results for Groundwater Samples

Project No. 1663, Marin Co. Airport/Gnoss Field, Novato, California

Sample Number	Sample Date	TPH as Bunker C Fuel mg/L	TPH as Diesel mg/L	TPH as Kerosene mg/L	TPH as Motor Oll mg/L	TPH as Gasoline mg/L	TPH as Jet Fuel mg/L	Benzene μg/L	Toluene μg/L	Ethylbenzene μg/L	Total Xylenes μg/L
B-5 AQ	7/6/95	2.4	<0.05	<0.05	<0.5	<0.05	<0.05	<0.5	<0.5	<0.5	<0.5
B-6 AQ	7/6/95	2.9	1.1 (DL)	<0.05	<0.5	0.81 (GL)	<0.05	27	49	2.4	5.7
B-7 AQ	7/6/95	3.6	<0.05	<0.05	<0.5	0.07 (GL)	<0.05/2.4*	<0.5	1.8	<0.5	<0.5
B-8 AQ	7/6/95	3.7	<0.05	<0.05	<0.5	<0.05	<0.05	<0.5	<0.5	<0.5	<0.5
B-9 AQ	7/6/95	4.0	<0.05	<0.05	<0.5	<0.05	<0.05	<0.5	<0.5	<0.5	<0.5
B-10 AQ	7/6/95	1.5	<0.05	<0.05	<0.5	0.15 (GL)	<0.05	<0.5	12	<0.5	<0.5
B-11 AQ	7/6/95	2.0	<0.05	<0.05	<0.5	0.11 (GL)	<0.05	3	<0.5	<0.5	<0.5
3-12 AQ	7/6/95	1.3	0.67 (DL)	<0.05	<0.5	0.42 (GL)	<0.05	<0.5	<0.5	<0.5	11
3-13 AQ	7/6/95	1.3	0.21 (DL)	<0.05	<0.5	0.09 (GL)	<0.05	<0.5	<0.5	<0.5	<0.5

### NOTES

TPH = Total Petroleum Hydrocarbons

mg/L = milligrams per liter; equivalent to parts per million (ppm)

 $\mu$ g/L = micrograms per liter; equivalent to parts per billion (ppb)

< 0.05 - Analyte concentration below indicated laboratory reporting limit.

DL = Positive result appears to be lighter hydrocarbon than diesel.

GL = Positive result appears to be lighter hydrocarbon than gasoline.

\*Soil sample B-7 AQ was analyzed for TPH as Jet Fuel by both EPA Methods 5030 and M8015.

See laboratory reports for analytical methods.

Table 2. Analytical Laboratory Results for Soil Samples

Project No. 1649, Marin Co. Airport/Gnoss Field, Novato, California

Sample Number	Sample Date	TPH as Bunker C Fuel mg/kg	TPH as Diesel mg/kg	TPH as Kerosene mg/kg	TPH as Motor Oll mg/kg	TPH as Gasoline mg/kg	TPH as Jet Fuel mg/kg	Benzene μg/kg	Toluene µg/kg	Ethylbenzena µg/kg	Total Xylenes µg/kg
						;					
B-1 3-4'	5/31/95	ND(10.0)	13(1.0)	ND(1.0)	ND(10.0)	ND(1.0)	ND(10.0)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)
B-2 3-4'	5/31/95	51(10.0)	ND(1.0)	ND(1.0)	ND(10.0)	ND(1.0)	ND(10.0)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)
B-3 3-4'	5/31/95	39(10.0)	ND(1.0)	ND(1.0)	ND(10.0)	ND(1.0)	10/12(10.0)*	ND(2.5)	8.6(2.5)	3.9(2.5)	25(2.5)
B-4 3-4 <sup>4</sup>	5/31/95	ND(10.0)	22(1,0)	ND(1.0)	ND(10.0)	ND(1.0)	ND(10.0)	ND(2.5)	ND(2.5)	ND(2.5)	ND(2.5)

### NOTES

(1.0) = laboratory reporting limit

TPH = Total Petroleum Hydrocarbons

mg/kg = milligrams per kilogram; equivalent to parts per million (ppm)

μg/kg = micrograms per liter; equivalent to parts per billion (ppb)

ND = Not detected at indicated laboratory reporting limits

NA = Not analyzed

See laboratory reports for analytical methods.

<sup>\*</sup> Soil sample B-3 3-4' was analyzed for TPH as Jet Fuel by both EPA Methods 5030/M8015 and M8015.

Table 2. Analytical Laboratory Results for Soil Samples
Project No. 1649, Marin Co. Airport/Gnoss Field, Novato, California

Sample Number	Sample Date	TPH as Bunker C Fuel mg/kg	TPH as Diesel mg/kg	TPH as Kerosene mg/kg	TPH as Motor Oli mg/kg	TPH as Gasoline mg/kg	TPH as Jet Fuel mg/kg	Benzene µg/kg	Toluene µg/kg	Ethylbenzene µg/kg	Total Xylenes μg/kg
B-5 2'	7/5/95	<10.0	<1.0	<1.0	53	<1.0	<10.0	<2.5	<2.5	<2.5	<2.5
8-5 4"	7/5/95	< 10.0	<1.0	<1.0	35	<1.0	<10.0	<2.5	<2.5	<2.5	<2.5
8-5 6'	7/5/95	<10.0	<1.0	<1.0	<10.0	<1.0	<10.0	<2.5	<2.5	<2.5	<2.5
8-6 3'	7/5/95	<10.0	<1.0	<1.0	<10.0	1.3	<10.0	<2.5	20	<2.5	<2.5
B-6 4'	7/5/95	<100.0	91 (DL)	<10.0	<100.0	1.1 (GH)	<10.0	<2.5	<2.5	<2.5	<2.5
B-6 6'	7/5/95	<10.0	<1.0	<1.0	<10.0	<1.0	<10.0	8.5	10	<2.5	<2,5
B-7 2'	7/5/95	<10.0	21 (D-)	<1.0	45	<1.0	<10.0	<2.5	9.3	<2.5	<2.5
B-7 3°	7/5/95	<10.0	4.4 (DH)	<1.0	22	<1.0	<10.0	<2.5	<2.5	<2.5	<2.5
B-7 4'	7/5/95	<10.0	11 (D-)	<1.0	14	<1.0	<10.0	<2.5	72	<2,5	<2.5
B-8 2'	7/5/95	<10.0	<1.0	<1.0	68	<1.0	<10.0	<2.5	<2.5	<2.5	<2.5
B-8 4'	7/5/95	2 4	<1.0	<1.0	<10.0	<1.0	<10.0	<2.5	<2.5	<2.5	<2.5
B-8 6'	7/5/95	5 2	<1.0	<1.0	<10.0	<1.0	<10.0	<2.5	<2.5	<2.5	<2.5
B-9 1'	7/5/95	<500.0	<50.0	<50.0	1300	<1.0	<10.0	<2.5	<2.5	<2.5	<2.5
8-9 2'	7/5/95	23	<1.0	<1.0	<10.0	<1.0	<10.0	<2.5	<2.5	<2.5	<2.5
B-9 5°	7/5/95	<10.0	<1.0	<1.0	<10.0	<1.0	<10.0	<2.5	<2.5	<2.5	<2.5
B-10 4'	7/5/95	<10.0	2.2	<1.0	<10.0	<1.0	<10.0	<2.5	<2.5	<2.5	<2.5
B-11 4'	7/5/95	<10.0	<1.0	<1.0	<10.0	<1.0	<10.0	<2.5	<2.5	<2.5	<2,5
B-12 4	7/5/95	< 10.0	2.5	<1.0	<10.0	<1.0	<10.0	<2.5	<2.5	<2.5	<2.5
B-13 4'	7/5/95	<10.0	1.6	<1.0	<10.0	<1.0	<10.0	<2.5	<2.5	<2.5	<2.5

<sup>&</sup>lt;10.0 - Analyte concentration below indicated laboratory reporting limit. TPH = Total Petroleum Hydrocarbons

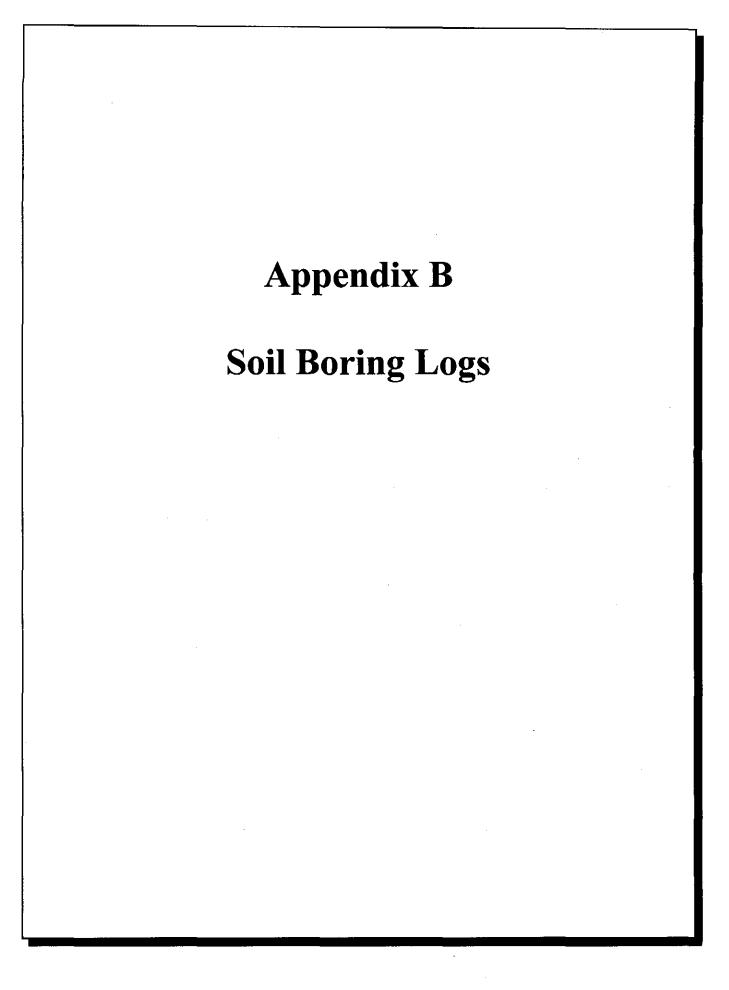
mg/kg = milligrams per kilogram, equivalent to parts per million (ppm)  $\mu$ g/kg = micrograms per kilogram; equivalent to parts per billion (ppb) See laboratory reports for analytical methods.

DL = Result appears to be lighter hydrocarbon than diesel.

GH = Result appears to be heavier hydrocarbon than gasoline.

D- = Result displays atypical pattern for diesel. -

DH = Result appears to be heavier hydrocarbon than diesel.



SITE LOCATION STATE:	ON: 351 Airport Novato, Cali		E NAME: Gnoss Fi IENT: Marin Co	****	RTESIAN JOB ROJECT MAN	NO.: 1649 AGER: J. Fren	ch
DATES DRILLED: DATE COMPLETED: ,OGGED BY: DRILLING CO.:	05-31-95 06-1-95 J. French Artesian	RIG TYPE: DRILL TOOLS: SAMPLING ME HAMMER WT.:	Direct Push Geoprobe TH.: Probe Drive NA	BORING DIA (in CASING TYPE / SLOT INTER.: SAND TYPE:		TOTAL BAGS S. SAND II BAGS B	AND: NA
DRILLER: INSPECTOR: MW KEY / CVR ACC:	J. Taylor Tim Underwood, Ma	DROF (in.):  WELL DEV.:  WELL COVER:	NA NA NA	FIRST WATER: STATIC WATER GROUT PLACE	R: 2.2 fL bgs	BENT. II BAGS G GROUT	
DEPTH SOII	EXPLANATION OF SY  SYMBOLS/ D TEST DATA		CRIPTION	SAMP. #	3100 KERNER	R BLVD., SUITE C • S (0) 959-4801; FAX (4)	DRAW DATE 06-1-95
	<b>V</b>	CH: (Bay Mud) Da containing reeds armaterial. Moisture First water encoun	of Gravel with light and silt. Slightly dame ark gray silty clay and other organic increasing with depetered at 8 feet bgs or measured at 2.2 feet	th. B-1 3-4	0.4		Backfilled 0 to 8 feet bgs: Beatonite (3%) Cement Grout

Boring terminated at 8.0 ft. bgs.

SITE LOCATION: 351 Airpor CITY, STATE: Novato, Ca			RTESIAN JOB N ROJECT MANAC		
DATES DRILLED: (5-31-95 DATE COMPLETED: (K-1-95 DOGGED BY: J. French DRILLING CO.: Arresian DRILLER: J. Taylor NSPECTOR: Tim Underwood, 1 W KEY/CVR ACC: NA	RIG TYPE: Direct Push  DRILL TOOLS: Geoprobe  SAMPLING METH.: Probe Drive  HAMMER WT.: NA  DROP (in.): NA  Marin Co. WELL DEV.: NA  WELL COVER: NA	BORING DIA (ii CASING TYPE) SLOT INTER: SAND TYPE: FIRST WATER: STATIC WATER GROUT PLACE:	NA NA NA 8.0 ft. bgs R: 2.45 ft. bgs	TOTAL DE BAGS SAN SAND INTE BAGS BEN BENT, INTE BAGS GRO GROUT INTE	D: NA ER.: NA TON.: NA ER.: NA UT: 0.25
DEPTH SOIL SYMBOLS	SOIL DESCRIPTION	SAMP. #	3100 KERNER BL TEL (800) 9 DRAWN BY IF	.vd., suite c • san 159-4801; fax (415) 2 D.	RAW DATE 06-2-95
FIELD TEST DATA	ASPHALT  GM: (Fill Material) Gravel with light and dark brown sand and silt. Slightly damp.  CH: (Bay Mud) Dark gray silty clay containing reeds and other organic material. Rotten organic odor. Moisture increasing with depth. First water encountered at 8 feet bgs on 5/31/95. Static water measured at 2.45 feet bgs on 6/1/95.		0.4	DIAGRAM	Backfilled 0 to 8 feet bgs: Bentonice (3%) Cement Grout

	351 Airport Road	SITE NAME: Gnoss Field				NO: 1649	a la
CITY, STATE:	Novato, California	CLIENT: Marin Cour		KOJECI	MANA	AGER: J. Fren	cn
ATES DRILLED:	()5-31-95	RIG TYPE: Direct Push	BORING DIA (i	in.): 2,0	I	TOTAL	DEPTH: 8.0 ft bgs
ATE COMPLETED:	()6-1-95	DRILL TOOLS: Geoprobe	CASING TYPE	/ SIZE: NA		BAGS S	AND; NA
OGGED BY:	J. French	SAMPLING METH.: Probe Drive	SLOT INTER.;	NA.	·	SAND I	NTER.: NA
RILLING CO.:	Artesian	HAMMER WT.: NA	SAND TYPE:	N.A		BAGS B	ENTON.: NA
RILLER:	J. Taylor	DROP (in.): NA	FIRST WATER	: 3.0	ft. bgs	BENT. I	INTER.: NA
SPECTOR:	Tim Underwood, Marin Co.	WELL DEV.: NA	STATIC WATE	R: 1.3	5 ft. bgs	BAGS G	FROUT: 0.25
W KEY / ÇVR ACC:	МА	WELL COVER: NA	GROUT PLACE	MENT: Tre	mie	GROUT	INTER.: 0-8 ft. bgs
DEFIRE	YMBOLS/ TEST DATA	SOIL DESCRIPTION	SAMP.#	BLOWS /6 in.	PID ppm	COMPLETIC DIAGRA!	DESCRIPTION
-5	dark glight feet b bgs or 1.35 f	(Fill Material) Gravel with sand and gray silt to 3.5 feet bgs. Gravel with brown sand and silt from 3.5 to 4.0 gs. First water encountered at 3 feet in 5/31/95. Static water measured at feet bgs on 6/1/95.			0.3		Backfilled () to 8 feet bgs: Bentonite (3%) Cement Grout

Boring terminated at 8.0 feet bgs.

ITE LOCATION	: 351 Airport R	oad SITE N	NAME: Gnoss Field	А	RTESIAN JO	B NO.:	1649	
CITY, STATE:	Novato, Califo	ornia CLIEN	TT: Marin Count	y P	ROJECT MA	NAGER:	J. French	
ATES DRILLED:	05-31-95	RIG TYPE:	Direct Push	BORING DIA (i	n.): 2.0		TOTAL DEF	PTH: 8.0 ft, bgs
ATE COMPLETED:	06-1-95	DRILL TOOLS:	Geoprobe	CASING TYPE	SIZE: NA	İ	BAGS SANI	D: NA
OGGED BY:	J. French	SAMPLING METH.:	Probe Drive	SLOT INTER.:	NA		SAND INTE	R.: NA
RILLING CO.:	Artesian	HAMMER WT.:	NA	SAND TYPE:	NA		BAGS BENT	TON.: NA
RILLER:	J. Taylor	DROP (in.):	NA	FIRST WATER:	8.0 ft. bgs		BENT, INTE	R.: NA
NSPECTOR:	Tim Underwood, Mari	n Co. WELL DEV.:	NA	STATIC WATE	R: 2.3 ft. bgs		BAGS GRO	UT: 0.25
W KEY / CVR ACC:	NA	WELL COVER:	NA	GROUT PLACE	MENT: Gravity		GROUT INT	TER.: 0-8 ft bgs
					DRAWN BY	800) 959-4801 / JF		257-4805 RAW DATE ()6-1-95
					<u> </u>	<del></del>		··-
DEPUH	YMBOLS/ TEST DATA	SOIL DESCRI	IPTION	SAMP.#	BLOWS PID /6 in. ppn	l	PLETION	DESCRIPTIO
DEPTH FIELD	TEST DATA	SOIL DESCRI ASPHALT GM: (Fill Material) G brown sand and silt. L and silt from 3 to 4 fee	ravel with dark	SAMP. #		l	–	DESCRIPTION 10 8 feet bgs: Bentonite (3%) Cement Grout

SITE LOC	ETAILS: BO CATION: 351 Airport		NAME: Gnoss Fig	OJECT:	ARTESIA			63	
CITY, ST					PROJECT				
ATES DRILL	LED: 07-05-95	RIG TYPE:	Direct Push	BORING DIA (	(in.): 2,f)		т	OTAL DEP	TH: 8.0 ft. bgs
ATE COMPL	LETED: 07-06-95	DRILL TOOLS:	Geoprobe	CASING TYPE	:/SIZE: NA		: B	AGS SAND	: NA
OGGED BY:	J. French	SAMPLING MET	i.: Probe Drive	SLOT INTER.:	NA		. s.	AND INTER	R.; NA
RILLING CO	D.: Artesian	HAMMER WT.;	NA	SAND TYPE:	NA		В	AGS BENT	ON.: NA
RILLER:	J. Taylor	DROP (in.):	NA	FIRST WATER	t. 8,0 :	fL bgs	В	ENT, INTE	R.: NA
SPECTOR:	Tim Underwood, N	Marin Co. WELL DEV.:	NA	STATIC WATE	ER: (.5	fi. bgs		AGS GROU	FT: 0.25
W KEY/CV	/R ACC: NA	WELL COVER:	NA	GROUT PLACE	EMENT: Gra	vity	G	ROUT INT	ER.: 0-8 ft, bgs
OTES: SE U.S.C.S. I	KEY FOR EXPLANATION OF	SYMBOLS.			1	KERNER		E C • SAN	NMENTAL RAFAEL, CA 94901 57-4805
					DRA	WN BY	ır	DR	AW DATE 08-01-95
DEPTH	SOIL SYMBOLS/ FIELD TEST DATA	SOIL DESC	RIPTION	SAMP.#	BLOWS /6 in.	PID ppm	COMPL	ETION RAM	DESCRIPTIO
_ 0		ASPHALT							TUC
	'o'o'o'o'o	GM: (Fill Material)	Gravel with light a	nd					GRC
-	0000	dark brown sand and	silt. Slightly dam	p.					ž
	<b>V</b>	i							3GS: BENTONITE (3%) CEMENT GROUT
-	00000			B-5 2'-		2.0			<u>C</u>
				D-5 2		2.0			(3%
	00000							1	E
-	00000			B-5 3'					NO
	'e'e'o'o'o							) \	Ä
-	000000			B-5 4'					: BE
					].				BGS
5		CH: (Bay Mud) Dar containing reeds and	k gray silty clay						ETI
		material. Moisture i	ncreasing with dep	h. B-5 5'					臣
		First water encounte 05/95. Static water	red at 8 feet bgs on measured at 1.5 fee	7/			[		<u>.</u>
-		bgs on 7/6/95.		B-5 6'		1.2			BACKFILLED 0 TO 8 FEET
									LEI
							[ ][]		
Ţ			4		, ; , , , , , , , , , , , , , , , , , ,				CK
İ				(					Β̈́

lovato, California	CLIEN	∛T: Marin Cour	nru PR			
				OJECT MANAGER	: J. Prench	
)5-95	RIG TYPE:	Direct Push	BORING DIA (in.)	): 2.0	TOTAL DEPTH:	8.0 ft. bgs
06-95	DRILL TOOLS:	Geoprobe	CASING TYPE / S	SIZE: NA	BAGS SAND:	NA
rench	SAMPLING METH.;	Probe Drive	SLOT INTER.:	NA	SAND INTER.:	NA
esian	HAMMER WT.:	NA	SAND TYPE:	NA	BAGS BENTON.:	NA
aylor	DROP (in.):	NA	FIRST WATER:	8.0 ft. bgs	BENT. INTER.:	NA
Underwood, Marin Co.	WELL DEV.:	NA	STATIC WATER:	3,55 ft. bgs	BAGS GROUT:	0.25
	WELL COVER:	NA	GROUT PLACEM	IENT: Gravity	GROUT INTER.:	0-8 ft. bgs
ANATION OF SYMBOLS				3100 KERNER BLVD.,	SUITE C • SAN RAFAE	L CA 94901
	rench :sian aylor : Underwood, Marin Co.	ssian HAMMER WT.:  DROP (in.):  Underwood, Marin Co.  WELL DEV.:	sian HAMMER WT.: NA  aylor DROP (in.): NA  Underwood, Marin Co. WELL DEV.: NA  WELL COVER: NA	rench SAMPLING METH.; Probe Drive SLOT INTER.:  sian HAMMER WT.: NA SAND TYPE:  aylor DROP (in.): NA FIRST WATER:  Underwood, Marin Co. WELL DEV.: NA STATIC WATER:  WELL COVER: NA GROUT PLACEM	rench SAMPLING METH.: Probe Drive SLOT INTER.: NA sian HAMMER WT.: NA SAND TYPE: NA aylor DROP (in.): NA FIRST WATER: 8.0 ft. bgs Underwood, Marin Co. WELL DEV.: NA STATIC WATER: 3.55 ft. bgs WELL COVER: NA GROUT PLACEMENT: Gravity  ANATION OF SYMBOLS  ARTESIAN F 3100 KERNER BLVD	rench SAMPLING METH.: Probe Drive SLOT INTER.: NA SAND INTER.:  sian HAMMER WT.: NA SAND TYPE: NA BAGS BENTON.:  aylor DROP (in.): NA FIRST WATER: 8.0 ft. bgs BENT. INTER.:  Underwood, Marin Co. WELL DEV.: NA STATIC WATER: 3.55 ft. bgs BAGS GROUT:  WELL COVER: NA GROUT PLACEMENT: Gravity GROUT INTER.:

DEPTH	SOIL SYMBOLS/ FIELD TEST DATA	SOIL DESCRIPTION	SAMP.#	BLOWS /6 in.	PID ppm	COMPLETION DIAGRAM	DESCRIPTION
		ASPHALT					5
-		GM: (Fill Material) Gravel with light and dark brown sand and silt. Slightly damp.	B-6 1'				BACKFILLED 0 TO 8 FEET BGS: BENTONITE (3%) CEMENT GROUT
			B-6 2'				(3%) CEN
-		CH: (Bay Mud) Dark gray silty clay containing reeds and other organic material. Moisture increasing with depth. First water encountered at 8 feet bgs on 7/05/95. Static water measured at 3.55 feet	B-6 3'				NTONITE
		bgs on 7/6/95. Strong hydrogen sulfide odor.	B-6 4		2.3		r BGS: BE
5			B-6 5'				TO 8 FEET
			B-6 6'				TLLED 0
-	7		B-6 7'				4CK!
			B-6 8'		10.4		B/

SITE LOCATION	N: 351 Airport Road Novato, California		NAME: Gnoss Field TT: Marin Coun	•	ESIAN JOB NO.: DJECT MANAGER		
DATES DRILLED: DATE COMPLETED: LOGGED BY: DRILLING CO.: DRILLER: INSPECTOR: MW KEY/CVR ACC:	07-05-95 07-06-95 J. French Artesian J. Taylor Tim Underwood, Marin Co.	RIG TYPE: DRILL TOOLS: SAMPLING METH.: HAMMER WT.: DROP (in.): WELL DEV.: WELL COVER:	Direct Push Geoprobe Probe Drive NA NA NA	BORING DIA (in.):  CASING TYPE / SIZ  SLOT INTER.:  SAND TYPE:  FIRST WATER:  STATIC WATER:  GROUT PLACEMEN	NA NA 8.0 ft. bgs 3 ft. bgs	TOTAL DEPTH: BAGS SAND: SAND INTER.: BAGS BENTON.: BENT. INTER.: BAGS GROUT: GROUT INTER.:	8.0 ft. bgs  NA  NA  NA  NA  O.25  O-8 ft. bgs
NOTES: SEE U.S.C.S. KEY FOR	EXPLANATION OF SYMBOLS	3.			ARTESIAN I 3100 KERNER BLVD., TEL (800) 959-48 DRAWN BY JF		EL, CA 94901 5

DEPIR	SOIL SYMBOLS/ FIELD TEST DATA	SOIL DESCRIPTION	SAMP.#	BLOWS /6 in.	PID ppm	COMPLETION DIAGRAM	DESCRIPTION
		ASPHALT					TO
		GM: (Fill Material) Gravel with light and dark brown sand and silt. Slightly damp.	B-7 1'				ENT GRC
<u>-</u>		CH: (Bay Mud) Dark gray silty clay containing reeds and other organic material. Moisture increasing with depth. First water encountered at 8 feet bgs on 7/	B-7 2'				BACKFILLED 0 TO 8 FEET BGS: BENTONITE (3%) CEMENT GROUT
-		05/95. Static water measured at 3 feet bgs on 7/6/95. Strong hydrogen sulfide odor.	B-7 3'				YTONITE
	7		B-7 4'		7.9 -		BGS: BEN
5			B-7 5'				) 8 FEET
			B-7 6'				LED 0 TC
-			B-7 7				BACKFIL
į			B-7 8'				-

SITE LOC SITY, ST	CATION: 351 Airport ATE: Novato, Cal					NO.: 1663 AGER: J. Frenc	h
ATES DRILI	LED: 07-05-95	RIG TYPE: Direct Push	BORING DIA	in.): 2,0		TOTAL D	EPTH: 8.0 ft. bgs
чте сомрі	LETED: 07-06-95	DRILL TOOLS: Geoprobe	CASING TYPE	/SIZE: NA		BAGS SA	ND: NA
XGGED BY:	I. French	SAMPLING METH.: Probe Drive	SLOT INTER.:	NA	i.	SAND IN	TER.: NA
ILLING CO	O.: Artesian	HAMMER WT.: NA	SAND TYPE:	NA		BAGS BE	NTON.: NA
ILLER:	J. Taylor	DROP (in.): NA	FIRST WATER	:: 8.0	ft. bgs	BENT, IN	TER.; NA
SPECTOR:	Tim Underwood, M	arin Co. WELL DEV.: NA	STATIC WATE	ER: 3.7	4 ft. bgs	BAGS GR	OUT: 0,25
KEY/CV	/R ACC: NA	WELL COVER: NA	GROUT PLACE	EMENT: Gr	avity	GROUT II	VTER.: 0-8 ft. bgs
PTES: E U.S.C.S. I	KEY FOR EXPLANATION OF S	YMBOLS.		3100	KERNER	BLVD., SUITE C - SA 0) 959-4801; FAX (415	ONMENTAL N RAFAEL, CA 94901 257-4805  DRAW DATE 08-01-95
EPTH	SOIL SYMBOLS/ FIELD TEST DATA	SOIL DESCRIPTION	SAMP. #	BLOWS /6 in.	PID ppm	COMPLETION DIAGRAM	DESCRIPTIO
_ 0		ASPHALT					5
-		GM: (Fill Material) Gravel with light and dark brown sand and silt. Slightly damp.					ENT GRO
		CH: (Bay Mud) Dark gray silty clay containing reeds and other organic material. Moisture increasing with depth. First water encountered at 8 feet bgs on 7/	B-8 2'				GS: BENTONITE (3%) CEMENT GROUT
		05/95. Static water measured at 3.74 feet bgs on 7/6/95. Strong hydrogen sulfide odor.	B-8 3'	:			NTONITE
	7		B-8 4'		2.3		
5			B-8 5'				8 FEET
			B-8 6'				BACKFILLED 0 TO 8 FEET B
-			B-8 7'				CKFIL
			B-8 8'	į	10.3		3A(

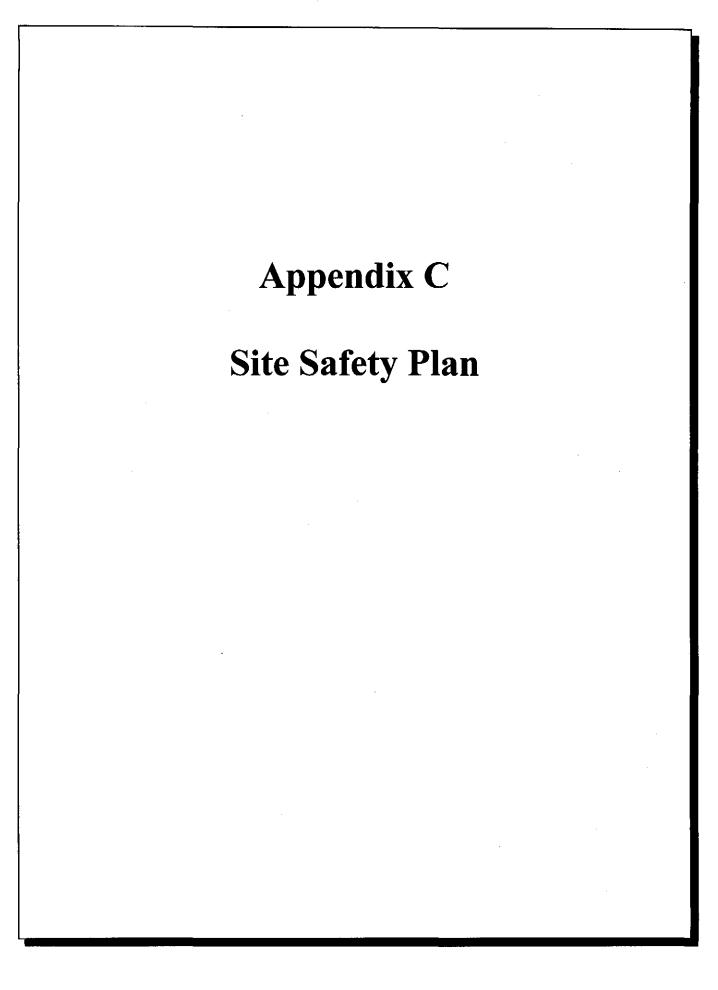
SITE LOCATION: 351 Airport	Road SITE NAME: Gnoss Fiel	d A	RTESIAN JOI	3 NO.: 1663		
CITY, STATE: Novato, Cal	ifornia CLIENT: Marin Cou	nty P	ROJECT MAN	AGER: J. Fren	nch	
DATES DRILLED: 07-05-95	RIG TYPE: Direct Push	BORING DIA (ii	n.): 2.0	TOTAL	DEPTH: 8.0 ft bgs	
ATE COMPLETED: 07-06-95	DRILL TOOLS: Geoprobe	CASING TYPE	/ SIZE: NA	BAGS S	SAND: NA	
OGGED BY: J. French	SAMPLING METH.: Probe Drive	SLOT INTER:	NA	SAND I	INTER.; NA	
RILLING CO.: Artesian	HAMMER WT.: NA	SAND TYPE:	NA	BAGS E	BENTON.: NA	
RILLER: J. Taylor	DROP (in.): NA	FIRST WATER:	8.0 ft. bgs	BENT,	INTER.: NA	
NSPECTOR: Tim Underwood, M	larin Co. WELL DEV,: NA	STATIC WATE	STATIC WATER: 1.5 ft, bgs		BAGS GROUT: 0.25	
IW KEY/CVR ACC: NA	WELL COVER: NA	GROUT PLACE	MENT: Gravity	GROUT	r INTER.; 0-8 ft. bgs	
NOTES: SEE U.S.C.S, KEY FOR EXPLANATION OF S	SYMBOLS.		3100 KERNE		RONMENTAL SAN RAFAEL, CA 94901 15) 257-4805	
			DRAWN BY	л <del>г</del>	DRAW DATE 08-01-95	
DEPTH   SOIL SYMBOLS/ FIELD TEST DATA	SOIL DESCRIPTION	SAMP. #	BLOWS PID /6 in. ppm	COMPLETION DIAGRA	DESCRIPTION	
	ASPHALT				15	
9 9 9 9 9	GM: (Fill Material) Gravel with light an dark brown sand and silt. Slightly damp.	d			JEMENT GROUT	

SITE LOCATION:	S: BORING		NAME: Gnoss Field	)JECT:			NO.: 1663	
	Novato, California			_			AGER: J. Fre	nch
ATES DRILLED: 0	7-05-95	RIG TYPE:	Direct Push	BORING DIA (i	in.): 2.0	)	тота	L DEPTH: 8.0 fc bgs
ATE COMPLETED: 0	7-06-95	DRILL TOOLS:	Geoprobe	CASING TYPE	/ SIZE: NA		BAGS	SAND: NA
OGGED BY: 1.	French	SAMPLING METH.:	Probe Drive	SLOT INTER.:	N/		SAND	INTER.: NA
RILLING CO.: A	rtesi an	HAMMER WT.:	NA	SAND TYPE:	N/		BAGS	BENTON.; NA
RILLER: J.	Taylor	DROP (in.):	NA	FIRST WATER	: 8.0	ft bgs	BENT.	. INTER.: NA
ISPECTOR: T	im Underwood, Marin Co.	WELL DEV.:	NA	STATIC WATE	R: 1.0	ft bgs	BAGS	GROUT: 0.25
W KEY/CVR ACC: N	A	WELL COVER:	NA	GROUT PLACE	EMENT: Gr	avity	GROU	T INTER.: 0-8 fL bgs
OTES: EE U.S.C.S. KEY FOR EXP	LANATION OF SYMBOL	.S.			3100	KERNER TEL (800	BLVD., SUFFE C • 3) 959-4801; FAX (4	
					DRA	WN BY	JF	DRAW DATE 08-01-9
FIELD T	MBOLS/ EST DATA	SOIL DESCR	IPTION	SAMP. #	BLOWS /6 in.	PID ppm	COMPLETI DIAGRA	DESCRIPTI
	ASPI	HALT						5
( o ' o ' o ' o ' o ' o ' o ' o ' o ' o	GM:	(Fill Material) G	ravel with light and	ı				BGS: BENTONITE (3%) CEMENT GROUT
0000	dark	brown sand and s	silt. Slightly damp.					Ė
'								3ME
(* 0 '0 '0 '0 '0 '0 '0 '0 '0 '0 '0 '0 '0 '				B-10 2'		i		
'e 'o 'e 'e 'e 'e 'e 'e 'e 'e 'e 'e 'e 'e 'e					 			(3%
0 0 0 0								1E
	CH:	(Bay Mud) Dark ining reeds and o	gray silty clay	B-10 3'				Į Ž
	mate	rial. Moisture inc	creasing with depth.					E
- //////	05/95	water encountere 5. Static water m	d at 8 feet bgs on 7. easured at 1.0 foot	B-104'		0.3		S: B
	bgs o	n 7/6/95.						
5			•	B-10 5'	: 			198
						!		8 E
						ĺ		J. 7.C
				B-10 6'		ı		
					! !		1 1111	! "
				İ	1			
				B-10 7'				BACKFILLED O TO 8 FEET

OG D	ETAILS: BOI	RING B-11 P	ROJECT:	Gnoss	Field	<u>i                                     </u>	
ITE LOC	CATION: 351 Airport	Road SITE NAME: Gnoss F	ield	ARTESIA	N JOE	NO.: 1663	
ITY, ST.	ATE: Novato, Cal	lifomia CLIENT: Marin C	ounty I	PROJECT	MAN	AGER: J. Frenci	1
TES DRILI	.ED: 07-05-95	RIG TYPE: Direct Push	BORING DIA	(in.); 2.(i		TOTAL D	EPTH: 12.0 ft. bgs
TE COMPL		DRILL TOOLS: Geoprobe	CASING TYPE	E / SIZE: NA		BAGS SAI	ND: NA
GGED BY:		SAMPLING METH.: Probe Drive	SLOT INTER.:			SAND INT	
ILLING CO ILLER:	).: Artesian J. Taylor	HAMMER WT.: NA DROP (in.): NA	SAND TYPE:	NA		BAGS BEI	
PECTOR:	Tim Underwood, M	1	FIRST WATER		t bgs ft. bgs	BENT. IN	
W KEY/CV		WELL COVER: NA	GROUT PLAC		-	GROUT I	
OTES: E U.S.C.S. I	CEY FOR EXPLANATION OF S	SYMBOLS.	<u></u>	3100	KERNER TEL (80	BLVD., SUITE C • SA 0) 959-4801; FAX (415)	
				DRA	WN BY	JF j	DRAW DATE 08-01-95
DEPTH 0	SOIL SYMBOLS/ FIELD TEST DATA	SOIL DESCRIPTION	SAMP.#	BLOWS /6 in.	PID ppm	COMPLETION DIAGRAM	+ DESCRIPTIO
_ 0		ASPHALT					
	[0.0.0.0.0]	GM: (Fill Material) Gravel with light	and				
		dark brown sand and silt. Slightly dan	np.				
		CH: (Bay Mud) Dark gray silty clay					
		containing reeds and other organic material. Moisture increasing with de	oth.				
		First water encountered at 5 feet bgs o 05/95. Static water measured at 1.0 fe	n 7/				100
		bgs on 7/6/95. Strong hydrogen sulfic	le				ENT GROUT
		odoi.	B-11 4'				EM
							CEM
5			B-11 5'				3%)
			B-11.3				 
							ONI
		·					ENT
							S: BI
							BG
							EET
							12 F
							T0
		i 		1			3D 0
		1	#	į			ILLE
10		:		8 6 1			BACKFILLED 0 TO 12 FEET BGS: BENTONITE (3%) CEM
			# # #	1			BA(
				1 1 1 1			
			: 	: {			
	V///////						

SITE LOC	DETAILS: BOE CATION: 351 Airport		OJECT:			NO.: 1663	<del></del>
CITY, ST	ATE: Novato, Cal	ifornia CLIENT: Marin Cou	nty I	PROJECT	MAN	AGER: J. French	
DATES DRILLING COMPILLER: INSPECTOR: INVESTIGATE OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPER	J. Taylor Tim Underwood, M	WELL COVER: NA	BORING DIA  CASING TYPE  SLOT INTER.:  SAND TYPE:  FIRST WATER  STATIC WATER  GROUT PLACE	NA NA NA NA NA NA NA NA NA NA NA NA NA N	ft. bgs ift. bgs avity	TOTAL DEI BAGS SANI SAND INTE BAGS BENT. INTE BAGS GROUT INTE AN ENVIRO	D: NA  R.: NA  FON.: NA  ER.: NA  UT: 0.25  TER.: 0-12 ft. bgs
			•	<b></b>	TEL (80	0) 959-4801; FAX (415) 2	57-4805
				DRA	WN BY	IF D	RAW DATE 08-01-95
DEPTH	SOIL SYMBOLS/ FIELD TEST DATA	SOIL DESCRIPTION	SAMP. #	BLOWS /6 in.	PID ppm	COMPLETION DIAGRAM	DESCRIPTIO
10		CH: (Bay Mud) Dark gray silty clay containing reeds and other organic material. Moisture increasing with depth First water encountered at 6.5 feet bgs on 7/05/95. Static water measured at 0.5 fee bgs on 7/6/95. Strong hydrogen sulfide odor.	B-12 3'		8.1		BACKFILLED 0 TO 12 FEET BGS: BENTONITE (3%) CEMENT GROUT.

LOG DETAILS: BOR			G <mark>noss Field</mark> rtesian job n	IO. 1662
SITE LOCATION: 351 Airport CITY, STATE: Novato, Cali			ROJECT MANA	
DATES DRILLED: 07-05-95  DATE COMPLETED: 07-06-95  LOGGED BY: J. French  DRILLENG CO.: Artesian  DRILLER: J. Taylor  INSPECTOR: Tim Underwood, M:  MW KEY / CVR ACC: NA  NOTES:  SEE U.S.C.S. KEY FOR EXPLANATION OF S	WELL COVER: NA	BORING DIA (in CASING TYPE / SLOT INTER.: SAND TYPE: FIRST WATER: STATIC WATER GROUT PLACER	NA NA 4.0 ft. bgs 1: 1.0 ft. bgs MENT: Gravity  ARTESIA	TOTAL DEPTH: 10.0 ft. bgs  BAGS SAND: NA  SAND INTER.: NA  BAGS BENTON.: NA  BENT. INTER.: NA  BAGS GROUT: 0.25  GROUT INTER.: 0-10 ft. bgs  NENVIRONMENTAL  LVD., SUITE C • SAN RAFAEL, CA 94901
			TEL (800) 9	959-4801; FAX (415) 257-4805
DEPTH   SOIL SYMBOLS/ FIELD TEST DATA	SOIL DESCRIPTION	SAMP. #	BLOWS PID (	COMPLETION DESCRIPTIO
	GM: (Fill Material) Gravel with light and dark brown sand and silt. Slightly damp.  CH: (Bay Mud) Dark gray silty clay containing reeds and other organic material. Moisture increasing with depth. First water encountered at 4 feet bgs on 7/05/95. Static water measured at 1.0 feet bgs on 7/6/95.	B-13 2'	0.3	BACKFILLED O TO 10 FEET BGS: BENTONITE (3%) CEMENT GROUT.



### A. GENERAL INFORMATION

Site Location: Marin County Airport - Gnoss Field, 451-A Airport Rd, Novato, California

Plan Prepared By: \_\_\_\_\_\_ Date: September 22, 2009

Richard Ely, RG #4137

Objective(s): Assess the extent of FHC-impacted soil and groundwater in the area formerly occupied by three USTS by advancing 10 exploratory soil borings for chemical analyses of soil and groundwater samples.

Background Review: Complete: X Preliminary:

Documentation/Summary: Overall Hazard: Serious: Moderate: Low: X

Unknown:

Unusual Features (power lines, terrain, utilities, etc.): Buildings and aircraft and vehicular traffic entering and exiting property.

STATUS: Active: X Inactive: Unknown:

HISTORY: (Agency Action, Complaints, Injuries, etc.) One 10,000-gallon UST for jet fuel and two 10,000-gallon USTs for aviation gasoline were removed from a common excavation in September 1991. Based on the results of samples collected during the UST removal and subsequent subsurface investigations, the SFBRWQCB requested a workplan for the proposed scope of work.

### B. SITE WASTE CHARACTERISTICS

Waste Type(s): Liquid: X(water) Solid: X(soil) Sludge: Gas:

Characteristic(s): Corrosive: Ignitable: Radioactive: Volatile: X

Toxic: X Reactive: Unknown Other (name): Flammable

Facility Description: Airport

Principle Disposal Method (type and location): Rinsate from decontamination procedures and drill cuttings from the soil borings will be contained in 55-gallon drums for later disposal.

# C. HAZARD EVALUATION

Chemical Name	Description	4 (21) (A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(A)(	Limit Values LVs)	Persons Exposed and	Symptoms of Acute	TLV Basis
		8-hr TWA Short-term Routes o		Potential Routes of Exposure	Exposure	
Benzene	Carcinogen, aromatic HC	0.5 ppm	2.5 ppm	Inhalation, dermal Ingestion	Headache, dizziness	Cancer
Toluene	Aromatic HC	50 ppm		Inhalation, dermal, ingestion	Headache, dizziness	Central nervous system (CNS), irritation
Ethylbenzene	Aromatic HC	100 ppm	125 ppm	Inhalation, dermal, ingestion	Headache, dizziness	Irritation, CNS
Xylenes	Aromatic HC	100 ppm	150 ppm	Inhalation, dermal, ingestion	Headache, dizziness	Irritation
Gasoline	Flammable liquid	300 ppm	500 ppm	Inhalation, dermal, ingestion	Headache, dizziness	Irritation, CNS
Diesel Fuel	Flammable liquid	pending	_	Inhalation, dermal, ingestion	Headache, dizziness, eye/skin irritation	. —
МТВЕ	Flammable liquid, Oxygenate	40 ppm		Inhalation, dermal, ingestion	Headache, dizziness, eye/skin irritation, nausea	Mucus membrane irritation, CNS

### D. SITE SAFETY WORKPLAN

Perimeter Establishment: Map/Site Sketch: See Workplan

Site Secured:

Perimeter Identified:

Zone(s) of Contamination Identified:

Personal Protection:

Level of Protection: A:

B: C: D: X

Modifications: Upgrade to level C upon high PID readings (5 ppm)

Surveillance Equipment and Materials: Instrument: PID Action Level: 5 ppm

SITE PROCEDURES: Advance 10 exploratory soil borings, collect soil and groundwater samples, dispose of waste material.

HAZARDS: Potential hazards onsite comprise proximity to drilling equipment, exposure to explosive and flammable petroleum vapors and carcinogens.

LEVEL OF PROTECTION: Equipment to protect the body from contact with chemical hazards has been categorized by the Environmental Protection Agency into levels A, B, C, and D. Level A equipment is used when the highest level of protection is needed; Level D equipment is used when minimum protection is needed. The chemical hazard associated with petroleum hydrocarbons is typically low and Level D protection (see equipment list below) is adequate. In case of high levels of contamination, an upgrade to Level C protection equipment may be advised. Level C and D equipment are listed below.

<u>Level C Equipment</u>: NIOSH/MSHA approved air purifying respirator, chemical resistant clothing, chemical resistant inner and outer gloves, chemical resistant boots with steel toe and shank, safety glasses and hard hat.

<u>Level D Equipment</u>: Coveralls, gloves, chemical resistant boots or shoes with steel toe and shank, safety glasses or chemical splash goggles, and hard hat. Tyvex overalls and Solvex or equivalent gloves are recommended.

EQUIPMENT REQUIRED: Normal work clothing may be worn with the following additions:

Excavations: Wear neoprene boots if walking in the excavation or in or around waste soils. Wear a hard hat when near excavation equipment.

**Drilling:** Wear a hard hat when near the drill rig.

Soil Sampling: Chemical resistant gloves are required when sampling.

Groundwater Sampling: Chemical resistant gloves are required when sampling.

A First Aid Kit and fire extinguisher are also required.

AIR MONITORING: A photo-ionization detector (PID) should be used to monitor the breathing zone during drilling activities. Readings above 5 ppm are cause for concern. Continuous readings of 5 ppm or greater in the breathing zone requires an upgrade to Level C, including use of half-face respirator with organic vapor cartridges. Continuous readings of 50 ppm or greater in the breathing zone requires stopping the work.

### **DECONTAMINATION PROCEDURES:**

<u>Personal</u>: Remove gloves, wash hands; clean boots in decontamination area. <u>Equipment</u>: Steam cleaning of all excavation and drilling equipment in the decontamination area. TSP wash of sampler between samples.

FIRST AID: Consultants vehicle has a first aid kit.

WORK LIMITATIONS (time of day, weather, heat/cold, stress): None

INVESTIGATION-DERIVED MATERIAL DISPOSAL: Soil and groundwater disposal to be determined based on analytical results; store in 55-gallon drums pending disposal

#### E. **EMERGENCY INFORMATION**

LOCAL RESOURCES:

Ambulance: 911

Hospital Emergency Room:

Novato Community Hospital

180 Rowland Way

Novato, California 94945

(415) 209-1300

Poison Control Center: 911

Police: 911

Fire Department: 911 Explosives Unit: 911

Agency Contact: John Jang, SFBRWQCB

(510) 622-2366

SITE RESOURCES:

Water Supply: Onsite

Telephone: Cell Phones onsite

Radio: None

**EMERGENCY CONTACTS:** 

Name: John Calomiris, EC&A

Phone: (707) 792-9500

Name: Larry Beaton, MCDPW

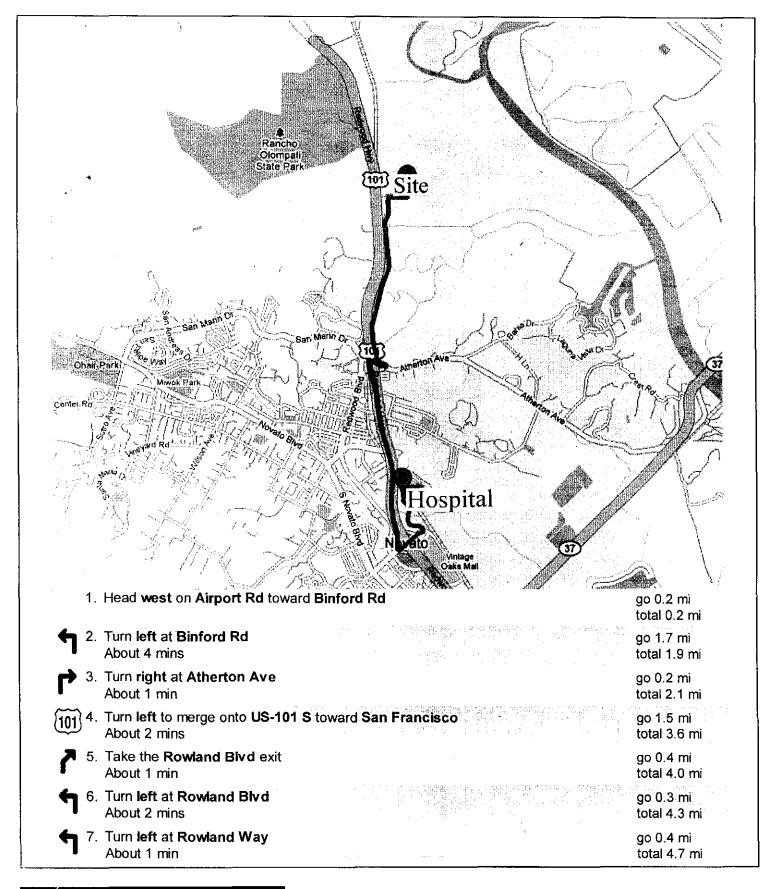
Phone: (415) 499-6412

EMERGENCY ROUTE: See Figure H

SITE SKETCH: (Work zones, command post, etc.): See Workplan

Signature	Date				

0343\2009 SSP



EDD CLARK & ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS

Hospital Map Novato Community Hospital 180 Rowland Way Novato, CA **FIGURE** 

H

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
0343,001.99	JoAnn O'Connor	September 2009	

THIS PAGE INTENTIONALLY LEFT BLANK