

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-10-23	Feet below surface:	52.32
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-09-15	Feet below surface:	51.23
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-08-11	Feet below surface:	49.63
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-07-16	Feet below surface:	48.41
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-06-16	Feet below surface:	47.19
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-05-12	Feet below surface:	45.50
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-04-23	Feet below surface:	44.86
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-04-08	Feet below surface:	44.67
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-03-18	Feet below surface:	44.25
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-03-03	Feet below surface:	43.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-02-20	Feet below surface:	44.10
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-02-02	Feet below surface:	43.97
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-01-22	Feet below surface:	43.98
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-12-16	Feet below surface:	43.75
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-11-18	Feet below surface:	43.36
Feet to sea level:	Not Reported	Note:	Not Reported

**AD164**  
**South**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS USGS40000140934**

Organization ID:	USGS-CA	Type:	Well
Organization Name:	USGS California Water Science Center	HUC:	Not Reported
Monitor Location:	001S004W10K003S	Drainage Area Units:	Not Reported
Description:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Drainage Area:	Not Reported		
Contrib Drainage Area:	Not Reported		
Aquifer:	California Coastal Basin aquifers	Aquifer Type:	Not Reported
Formation Type:	Not Reported	Well Depth:	75
Construction Date:	20021031		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Well Depth Units:	ft	Well Hole Depth:	350
Well Hole Depth Units:	ft		
Ground water levels, Number of Measurements:		18	
Feet below surface:	49.97	Level reading date:	2005-01-27
Note:	Not Reported	Feet to sea level:	Not Reported
Level reading date:	2005-01-05	Feet below surface:	49.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-11-22	Feet below surface:	48.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-10-23	Feet below surface:	48.15
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-09-15	Feet below surface:	46.84
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-08-11	Feet below surface:	45.56
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-07-16	Feet below surface:	44.69
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-06-16	Feet below surface:	43.79
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-05-12	Feet below surface:	42.93
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-04-23	Feet below surface:	42.60
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-04-08	Feet below surface:	42.42
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-03-18	Feet below surface:	42.13
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-03-03	Feet below surface:	41.98
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-02-20	Feet below surface:	41.92
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-02-02	Feet below surface:	41.69
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2004-01-22	Feet below surface:	41.59
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-12-16	Feet below surface:	40.90
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2003-11-18	Feet below surface:	40.20
Feet to sea level:	Not Reported	Note:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database EDR ID Number

**AB165**  
**SSE**  
**1/2 - 1 Mile**  
**Lower**

**FED USGS USGS40000140963**

Organization ID:	USGS-CA	Type:	Well
Organization Name:	USGS California Water Science Center	HUC:	18070203
Monitor Location:	001S004W10R003S	Drainage Area Units:	Not Reported
Description:	Not Reported	Contrib Drainage Area Units:	Not Reported
Drainage Area:	Not Reported		
Contrib Drainage Area:	Not Reported		
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19260101	Well Depth:	435
Well Depth Units:	ft	Well Hole Depth:	435
Well Hole Depth Units:	ft		

**AD166**  
**South**  
**1/2 - 1 Mile**  
**Lower**

**CA WELLS CADWR9000006759**

State Well #:	01S04W10K001S	Station ID:	39726
Well Name:	Not Reported	Basin Name:	San Bernardino
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

**AD167**  
**South**  
**1/2 - 1 Mile**  
**Lower**

**CA WELLS CADWR9000006760**

State Well #:	01S04W10K002S	Station ID:	38757
Well Name:	Not Reported	Basin Name:	San Bernardino
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

**AD168**  
**South**  
**1/2 - 1 Mile**  
**Lower**

**CA WELLS CADWR9000006761**

State Well #:	01S04W10K003S	Station ID:	25834
Well Name:	Not Reported	Basin Name:	San Bernardino
Well Use:	Unknown	Well Type:	Unknown
Well Depth:	0	Well Completion Rpt #:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database EDR ID Number

**169**  
**NE**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS USGS40000141404**

Organization ID:	USGS-CA	Type:	Well
Organization Name:	USGS California Water Science Center	HUC:	18070203
Monitor Location:	001S004W02D004S	Drainage Area Units:	Not Reported
Description:	Not Reported	Contrib Drainage Area Units:	Not Reported
Drainage Area:	Not Reported		
Contrib Drainage Area:	Not Reported		
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19330101	Well Depth:	107
Well Depth Units:	ft	Well Hole Depth:	107
Well Hole Depth Units:	ft		

**AE170**  
**ENE**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS USGS40000141364**

Organization ID:	USGS-CA	Type:	Well
Organization Name:	USGS California Water Science Center	HUC:	18070203
Monitor Location:	001S004W02E003S	Drainage Area Units:	Not Reported
Description:	Not Reported	Contrib Drainage Area Units:	Not Reported
Drainage Area:	Not Reported		
Contrib Drainage Area:	Not Reported		
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19330101	Well Depth:	120
Well Depth Units:	ft	Well Hole Depth:	120
Well Hole Depth Units:	ft		

**AE171**  
**ENE**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS USGS40000141365**

Organization ID:	USGS-CA	Type:	Well
Organization Name:	USGS California Water Science Center	HUC:	18070203
Monitor Location:	001S004W02E006S	Drainage Area Units:	Not Reported
Description:	Not Reported	Contrib Drainage Area Units:	Not Reported
Drainage Area:	Not Reported		
Contrib Drainage Area:	Not Reported		
Aquifer:	California Coastal Basin aquifers		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19330101	Well Depth:	116
Well Depth Units:	ft	Well Hole Depth:	116
Well Hole Depth Units:	ft		



# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database EDR ID Number

**172**  
**NW**  
**1/2 - 1 Mile**  
**Higher**

**CA WELLS CADWR0000019408**

Well ID: 01S04W04B003S Well Type: UNK  
Source: Department of Water Resources  
Other Name: 01S04W04B003S GAMA PFAS Testing: Not Reported  
Groundwater Quality Data: [https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp\\_date=&global\\_id=&assigned\\_name=01S04W04B003S&store\\_num=](https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=DWR&samp_date=&global_id=&assigned_name=01S04W04B003S&store_num=)  
GeoTracker Data: Not Reported

**173**  
**NE**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS USGS40000141441**

Organization ID: USGS-CA  
Organization Name: USGS California Water Science Center  
Monitor Location: 001S004W03A002S Type: Well  
Description: Not Reported HUC: 18070203  
Drainage Area: Not Reported Drainage Area Units: Not Reported  
Contrib Drainage Area: Not Reported Contrib Drainage Area Units: Not Reported  
Aquifer: California Coastal Basin aquifers  
Formation Type: Not Reported Aquifer Type: Not Reported  
Construction Date: 19140101 Well Depth: 181  
Well Depth Units: ft Well Hole Depth: 181  
Well Hole Depth Units: ft

**1G**  
**SSE**  
**1/4 - 1/2 Mile**  
**Lower**

Site ID: 083600694T  
Groundwater Flow: S  
Shallow Water Depth: 28 ft  
Deep Water Depth: 31 ft  
Average Water Depth: Not Reported  
Date: 04/17/1997

**AQUIFLOW 50255**

**2G**  
**SW**  
**1/2 - 1 Mile**  
**Lower**

Site ID: 083601340T  
Groundwater Flow: SE  
Shallow Water Depth: 38.65  
Deep Water Depth: 53.68  
Average Water Depth: Not Reported  
Date: 11/10/1998

**AQUIFLOW 34247**

**3G**  
**South**  
**1/2 - 1 Mile**  
**Lower**

Site ID: 083600053T  
Groundwater Flow: SSW  
Shallow Water Depth: 6.5  
Deep Water Depth: 7.5  
Average Water Depth: Not Reported  
Date: 08/11/1987

**AQUIFLOW 50141**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

### AREA RADON INFORMATION

State Database: CA Radon

#### Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
92401	3	0

Federal EPA Radon Zone for SAN BERNARDINO County: 2

Note: Zone 1 indoor average level > 4 pCi/L.  
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.  
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for SAN BERNARDINO COUNTY, CA

Number of sites tested: 18

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.678 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.

### Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

## HYDROLOGIC INFORMATION

**Flood Zone Data:** This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

### State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife

Telephone: 916-445-0411

## HYDROGEOLOGIC INFORMATION

### AQUIFLOW<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 Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

### SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. 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.

## OTHER STATE DATABASE INFORMATION

### Groundwater Ambient Monitoring & Assessment Program

State Water Resources Control Board

Telephone: 916-341-5577

The GAMA Program is California's comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Health Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

### Water Well Database

Source: Department of Water Resources

Telephone: 916-651-9648

### California Drinking Water Quality Database

Source: Department of Public Health

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.

### California Oil and Gas Well Locations

Source: Dept of Conservation, Geologic Energy Management Division

Telephone: 916-323-1779

Oil and Gas well locations in the state.

### California Earthquake Fault Lines

Source: California Division of Mines and Geology

The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United States Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

## RADON

### State Database: CA Radon

Source: Department of Public Health

Telephone: 916-210-8558

Radon Database for California



## PHYSICAL SETTING SOURCE RECORDS SEARCHED

### 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.

### 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

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## **APPENDIX E**

### **CREDENTIALS**



# Laura Hedman, GIT

STAFF GEOLOGIST

## EDUCATION

Pennsylvania State University, Post-graduate coursework in Geographic Information Systems (GIS)

Bachelor of Science, Geology/Earth Science, University of California, Riverside, 2016

Mount San Jacinto College Associate of Science, Geographic Information Systems (GIS) and Science (duel degrees), May 2014

## REGISTRATIONS

Project Manager Geologist in Training (Fundamental of Geology), June 2017

## CERTIFICATIONS

40-Hour HAZWOPER

Asbestos Building Inspector Initial Course, May 2019.

Asbestos Supervision Initial Course, May 2019

eRailSafe, May 2020

BNSF Contractor, May 2020

## WORK HISTORY

Terracon, Colton, California  
Staff Geologist  
March 2020 To Present

Terracon, Colton, California  
Field Geologist  
January 2018 To March 2020

## PROFESSIONAL EXPERIENCE

Ms. Hedman is a staff geologist in Terracon's Colton, CA office, Environmental Department. Ms. Hedman's professional experience includes Environmental Services, Phase I Environmental Site Assessments (ESAs), Limited Environmental Compliance Assessments (LECAs), Limited Site Investigations (LSIs), soil and groundwater sampling, and groundwater monitoring projects. She has conducted site assessments on office facilities, warehouses, manufacturing facilities, automotive dealerships, restaurants, hospitals, medical offices, telecommunication towers, vacant, and agricultural land. She prepares environmental site assessment reports; researching city directories and regulatory agency files; and reviews aerial photographs and topographic maps. In addition, she assists the Senior Project Manager in Phase I Environmental Site Assessments.

## PROJECT EXPERIENCE

### Office Buildings/Medical Office Building – California

Project Manager and Environmental Site Assessments on office properties, which includes multi-story financial, educational, medical office buildings, and a 95,000-square-foot community hospital.

### Warehouse Buildings/Logistical Centers – California

Project Manager and Environmental Site Assessment on warehouses and logistical centers, which includes commercial facilities with 1.2 million-square-foot warehousing space.

### Restaurants/Retail Buildings – California

Project Manager and Environmental Site Assessment on family-style restaurants, and retail lease spaces.

### Auto Dealership/Automotive Service– California

Project Manager and Environmental Site Assessment on automotive dealerships, automotive maintenance facilities, and automotive collision repair centers.

### Undeveloped/Vacant/Agricultural – California

Project Manager and Environmental Site Assessments on undeveloped, vacant, and agricultural land; from less than one-acre- to over 200-acre parcel of land.

# Carl A. Parten, P.G

## CONTRACT MANAGER, SENIOR PRINCIPAL

### PROFESSIONAL EXPERIENCE

Mr. Parten has over 30 years of experience in environmental consulting in multiple regional regulatory districts throughout the United States. His professional experience includes comprehensive site investigations and remediation studies for Industrial and Hazardous Waste sites, municipal solid waste landfill sites and underground storage tank (UST) facilities.

He has successfully managed and obtained regulatory closure of over 30 Voluntary Cleanup Program (VCP) sites and leaking underground storage tank (LUST) facilities, and coordinated UST removal and closure for numerous facilities in multiple states throughout the United States. Mr. Parten continues to serve as a technical lead with Terracon and he possesses extensive experience in the installation of monitor wells, aquifer characterization, sensitive receptor surveys, risk-based assessments, vapor intrusion (VI) evaluations, and soil-gas assessments. Additionally, he has extensive experience in comprehensive soil and groundwater investigations on industrial facilities and municipal solid waste (MSW) landfill facilities, including evaluation of landfill gas/methane impacts. He has prepared and implemented corrective action work plans for remediation of chlorinated hydrocarbons at dry cleaner facilities and petroleum hydrocarbons at LUST facilities, MSW landfill facilities, and managed and implemented groundwater pump and treat, non-aqueous phase liquid (NAPL) recovery, and dual-phase vapor extraction systems for the recovery of petroleum hydrocarbons. Additionally, Mr. Parten developed work plans and implemented the remediation of heavy metals and poly-nuclear aromatic hydrocarbons (PAHs).



### EDUCATION

Bachelor of Science, Geology,  
Sul Ross State University,  
Alpine, Texas, 1994

### REGISTRATIONS

Licensed Professional  
Geoscientist (P.G.), I.D. #  
221, Texas Board of  
Professional Geoscientists  
2003 (current)

40 Hour OSHA Hazardous  
Waste Site & Waste  
Management Training

### PROJECT EXPERIENCE

#### Federal

- Edwards Air Force Base – Mojave, CA

#### Transportation

- Hanford Site – Hanford/Shirley CA, CA
- Stanfield Cutoff Road – Big Bear, CA
- Sabre Building – Victorville, CA
- Mt Vernon Viaduct Design Build – San Bernardino, CA
- Euclid Ave Monument & Tree Installation – Ontario, CA
- ODFL- Sultana Project – Fontana, CA
- FedEx Freight - Central Freight Lines – Perris, CA



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### **Healthcare and Assisted Living**

- Kaiser- San Jose, CA – San Jose, CA
- Culver City Assisted Living – Culver City, CA
- Culver City Assisted Living – Culver City, CA
- Valley Center 4 – Sacramento, CA
- Valley Center 5 – Sacramento, CA
- K0244 Riverside Bed Tower – Riverside, CA
- Project Cobalt – Multiple Locations San Diego County
- Kaiser Palmetto Land – Fontana, CA
- Barstow Community Hospital – Barstow, CA
- Project Blossom – Victorville, CA

### **Mortuary/Cemeteries**

- Lighthouse Memorial - McMillian – Gardena, CA
- Lighthouse Memorial - Rice Center – Torrance, CA
- Lighthouse Memorial - White & Day – Torrance, CA
- Kern Hesperia Mortuary – Hesperia, CA

### **Warehouses and Distributions Centers**

- US Foods Warehouse - Rooftop Installation – La Mirada, CA
- Walmart Warehouse Lease – Riverside, CA
- Warehouse-Distribution Center - San Diego – San Diego, CA
- Proposed Winchester Warehouse – Winchester, CA
- Refrigerated Warehouse - Bloomington – Bloomington, CA
- Redlands Warehouse – Redlands, CA
- Cepheid Lodi B2 Shell – Lodi, CA
- Perris Logistics Center South – Perris, CA
- Apple Valley Insulation – Hesperia, CA
- PanCal Industrial Portfolio – Ontario, CA
- CoreHog – Valencia, CA
- Class Leasing Manufacturing Building – San Jacinto, CA
- Nor Cal Beverage – West Sacramento, CA
- MGRC Western US – Fresno, CA
- UNFI – Riverside, CA
- Walmart Distribution Center #6021 – Porterville, CA
- SAX1 - Irvine, CA – Irvine, CA
- Glendale INDX – Glendale, CA

### **Apartments and Mixed Use**

- Proposed Multi-Family Housing – Sacramento, CA
- Patterson Apts – Oxnard, CA
- Plat at 539 Hobart – Los Angeles, CA

- 
- Temescal Canyon Apartment Development – Corona, CA
  - 7500 & 7550 Sunset Blvd – West Hollywood, CA
  - Prose Moreno Valley – Moreno Valley, CA

#### **Educational**

- M&O Yard Stockpile Sampling – Lodi, CA
- Elk Grove HS Modernization – Elk Grove, CA
- Santa Rosa Jr College – Santa Rosa
- Central Ave – San Bernardino, CA
- Frontier Center – Ontario, CA

#### **Power**

- Chargenet - 12 Sites – Lake Forest, CA
- PG&E Stockton Hydrovac – Stockton, CA
- Mesa & Alta Mesa Wind Farm Projects – Whitewater, CA
- Rosamond South – Rosamond, CA

#### **Commercial and Office Buildings**

- ALDI Store #65 - Jurupa Valley – Jurupa Valley, CA
- Proposed Self-Storage Facility – San Jacinto, CA
- Cabrillo Business Park – Goleta, CA
- Dollar Self Storage – Corona, CA
- Raising Cane's #843 - Ontario, CA – Ontario, CA
- Love's Travel Stop Fresno, CA ENV – Fresno, CA
- In-N-Out – Baldwin Park, CA
- 7-ELEVEN INC - JACK IN THE BOX INC – Fontana, CA
- Raising Canes #850 - Apple Valley, CA – Apple Valley, CA
- ALDI Store - Ramona, CA – Ramona, CA
- Proposed ALDI Store - San Diego – San Diego, CA
- Aldi - Torrance - Phase I ESA – Torrance, CA
- Proposed ALDI Store - Santa Clarita – Santa Clarita, CA
- ALDI Store - Riverside, CA – Riverside, CA
- ALDI Store - Mira Mesa ESA – San Diego, CA
- Commercial Building – Hayward, CA
- Town & Country South – Indio, CA
- Shake Shack 1464 Downey – Downey, CA
- RC #916 Compton – Compton, CA
- RC 828 Los Angeles – Los Angeles, CA
- RC #925 - Westwood – Westwood Village, CA
- CFA #05101 - Phase I ESA – Honolulu, HI
- CFA #05170 - Hwy 1 West & Kamokila Blvd FSU – Kapolei, HI
- CFA #05228 - Phase I ESA – Honolulu, HI
- CFA #05181 - Phase I ESA – Kailua, HI

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- At Home - Vista – Vista, CA
  - Raising Cane's - Riverside, CA (RC0820) – Riverside, CA
  - Vernon Data Center – Vernon, CA
  - Industrial Office Manufacturing Building – San Jose, CA
  - RC#962 - Riverside – Riverside, CA
  - Self-Storage Facility – Los Angeles, CA

#### **Agriculture LSI's**

- Tracy Ridge – Tracy, CA
- Alliance Site – Tracy, CA
- Vina Farm – Vina, CA
- Valle Vista Project – Hemet, CA
- Former Hoover Egg Ranch – Yucaipa, CA
- Tar Farm Stables – San Juan Capistrano, CA

#### **Limited Site Investigations**

- O'Reilly Lockeford (LKE) – Lockeford, CA
- Hunter House – Stockton, CA
- Citrus Center – Redlands, CA
- Needles Truck Center – Needles, CA
- Edwards AFB – Mojave, CA
- Sandhu Property – Mountain House, CA

#### **Waste Management**

- RAMCO Facilities – Escondido, Rialto, & Sun Valley, CA
- Beaumont Facility – Beaumont, CA
- Kearny Nu-Way Live Oak Landfill – Irwindale, CA



# TONY P. MIKACICH

## DEPARTMENT MANAGER I | ENVIRONMENTAL SERVICES

### PROFESSIONAL EXPERIENCE

Mr. Mikacich is a Professional Geologist in California and Environmental Department Manager in the firm with over 24 years experience managing complex environmental investigations and remediation programs for a variety of industrial, utility and energy-related facilities, military bases, petroleum retailers, and landfill sites in California, and Nevada. Mr. Mikacich's areas of specialty include site characterization, remediation, construction and treatment system oversight, delineation of groundwater contaminant plumes, solid waste characterization, hazardous materials decontamination, and the preparation of technical reports.

Mr. Mikacich also has significant experience in site remediation projects including commercial and retail projects of various sizes in different markets. Mr. Mikacich routinely interacts with state, federal and local regulatory agencies on behalf of clients in obtaining regulatory resolutions to environmental issues and compliance matters.

Mr. Mikacich also has experience in completing regulatory compliance permitting and providing environmental permitting assistance for numerous facilities.

### Environmental Compliance Assessments and Monitoring:

Mr. Mikacich has managed numerous compliance assessment and monitoring projects for private, federal, and utility and energy-related clients. The scope of assessments performed includes assessments of such issues as air quality, groundwater, soil, wastewater generation, hazardous waste generation, and aboveground/underground storage tanks. The scope of compliance monitoring projects include groundwater, air quality, surface water quality, and soil. Mr. Mikacich has worked with industries including utility and energy-related facilities, commercial and industrial facilities, chemical manufacturing, petroleum retailers, and commercial real estate construction/development.

#### Education

*Bachelor of Science in Geology,  
California State University, Chico,  
2000*

#### Licenses

*Professional Geologist – California  
#9918*

#### Certifications

*Nevada Certified Environmental  
Manager- #EM1859*

*OSHA HAZWOPER 40-hour  
certified (1999)*

*OSHA HAZWOPER 8-hour (current)*

#### Work History

*Terracon Consultants, Inc. Senior  
Geologist and Department Manager,  
March 2019-Present*

### Gasoline Retailer – Multiple Sites in California and Nevada

Mr. Mikacich managed approximately 10 sites with an annual budget in excess of \$500,000 located in both California and Nevada for a private client with a portfolio of more than 100 retail gasoline stations. Mr. Mikacich's key responsibilities included managing the groundwater monitoring and sampling, assessment, and remediation of site contaminants including BTEX and MTBE. Remedial designs included; dual-phase extraction, vapor extraction, air sparge, and groundwater pump and treat. Additional remedial actions have included Underground Injection Permits for the application of peroxide. Mr. Mikacich's responsibilities also included authoring conceptual site models, work plans, feasibility studies, CAP's, remedial design, treatment system installation, and O&M of remediation systems.

### Former Gasoline Retailer – Isleton California

Mr. Mikacich is currently managing project activities that include the preparation of the scope of work and budget to perform a Limited Site Investigation (LSI) for a former gasoline retailer with a reported release from past operations. Mr. Mikacich was responsible for the preparation and application submittal to the California



Ophan Site Cleanup Fund to request financial support for future site assessment and potential remedial action.

### **Former Gasoline Retailer and Automotive Repair Shop – Stockton California**

Mr. Mikacich is currently managing a project that included the preparation of the scope of work and budget to investigate an offsite LUST case and a former onsite automotive repair shop for TPH, VOCs, and metals contaminants in soil and groundwater. A Limited Site Investigation (LSI) was performed at the site to investigate past site use and future redevelopment for a new convenience store and fuel station.

### **Former Dry Cleaners – Las Vegas, Nevada**

Mr. Mikacich managed a former dry cleaner site which had an unauthorized release of tetrachloroethene (PCE) and trichloroethene (TCE) into the subsurface soil and groundwater. Mr. Mikacich's role included submitting a Corrective Action Plan (CAP) to the Nevada Division of Environmental Protection (NDEP) to address on-site contamination, which included expanding the current Dual-Phase Extraction (DPE) system, and a separate CAP and DPE system to address contaminants which migrated off-site and more than 1,800 feet down-gradient in groundwater. This project which had an annual budget of \$300,000 involved the characterization of PCE and TCE, a feasibility study, pilot testing, design and installation of two remedial systems for the clean-up of on- and off-site contaminants. Mr. Mikacich was the primary point of contact to the client and regulatory agencies and was responsible for the implementation of the two CAPs. Mr. Mikacich's responsibilities included providing technical oversight and management of all on-going remediation and monitoring activities to ensure reporting was completed in accordance with all permits and regulatory requirements.

### **Site Assessment and Hazardous Materials Decontamination Program - Northern California Utility**

Mr. Mikacich managed a program that focused on site assessment and decontamination and management of hazardous materials for the Utility to reduce environmental risk and insure worker safety. I was responsible for managing the assessment of approximately 50 sites which resulted in the hazardous materials decontamination of 20 of those sites from across all lines of business. Mr. Mikacich's key roles and responsibilities included managing; program-level cost proposals, budgets and invoicing, quality and work products, schedules, staffing, program team update meetings, and communications with the prime contractor and client. The program had an annual budget as high as \$650,000.

### **Environmental Site Assessments:**

Mr. Mikacich has managed due diligence investigations on property types ranging from commercial retail to manufacturing facilities. The investigations include identification of a variety of environmental hazards including hazardous substance and petroleum impacted soils and groundwater, chlorinated solvents, asbestos, PCBs, USTs and other regulatory concerns. Mr. Mikacich has performed or managed due diligence activities at sites in conformance with ASTM and USEPA guidelines and standards.

Mr. Mikacich has coordinated remedial investigation activities including work plan preparation, implementation and generation of final reports. He has been involved with the development of conceptual site models and corrective action designs to successfully remediate impacted sites. Managed Phase I & II investigative projects. These projects included a wide variety of compliance issues and required familiarity with state and local hazardous waste management, water wells, fuel storage tanks, and groundwater and soil impact guidelines and regulations.

# NOT FOR BID

## **APPENDIX F**

### **DESCRIPTION OF TERMS AND ACRONYMS**

## Description of Selected General Terms and Acronyms

Term/Acronym	Description
ACM	<p>Asbestos Containing Material. Asbestos is a naturally occurring mineral, three varieties of which (chrysotile, amosite, crocidolite) have been commonly used as fireproofing or binding agents in construction materials. Exposure to asbestos, as well as ACM, has been documented to cause lung diseases including asbestosis (scarring of the lung), lung cancer and mesothelioma (a cancer of the lung lining).</p> <p>Regulatory agencies have generally defined ACM as a material containing greater than one (1) percent asbestos, however some states (e.g., California) define ACM as materials having 0.1% asbestos. In order to define a homogenous material as non-ACM, a minimum number of samples must be collected from the material dependent upon its type and quantity. Homogenous materials defined as non-ACM must either have 1) no asbestos identified in all of its samples or 2) an identified asbestos concentration below the appropriate regulatory threshold. Asbestos concentrations are generally determined using polarized light microscopy or transmission electron microscopy. Point counting is an analytical method to statistically quantify the percentage of asbestos in a sample. The asbestos component of ACM may either be friable or non-friable. Friable materials, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure and have a higher potential for a fiber release than non-friable ACM. Non-friable ACM are materials that are firmly bound in a matrix by plastic, cement, etc. and, if handled carefully, will not become friable.</p> <p>Federal and state regulations require that either all suspect building materials be presumed ACM or that an asbestos survey be performed prior to renovation, dismantling, demolition, or other activities that may disturb potential ACM. Notifications are required prior to demolition and/or renovation activities that may impact the condition of ACM in a building. ACM removal may be required if the ACM is likely to be disturbed or damaged during the demolition or renovation. Abatement of friable or potentially friable ACM must be performed by a licensed abatement contractor in accordance with state rules and NESHAP. Additionally, OSHA regulations for work classification, worker training and worker protection will apply.</p>
AHERA	Asbestos Hazard Emergency Response Act
AST	Aboveground Storage Tanks. ASTs are generally described as storage tanks less than 10% of which are below ground (i.e., buried). Tanks located in a basement, but not buried, are also considered ASTs. Whether, and the extent to which, an AST is regulated, is determined on a case-by-case basis and depends upon tank size, its contents and the jurisdiction of its location.
BGS	Below Ground Surface
Brownfields	State and/or tribal listing of Brownfield properties addressed by Cooperative Agreement Recipients or Targeted Brownfields Assessments.



### Description of Selected General Terms and Acronyms

Term/Acronym	Description
BTEX	Benzene, Toluene, Ethylbenzene, and Xylenes. BTEX are VOC components found in gasoline and commonly used as analytical indicators of a petroleum hydrocarbon release.
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act (a.k.a. Superfund). CERCLA is the federal act that regulates abandoned or uncontrolled hazardous waste sites. Under this Act, joint and several liability may be imposed on potentially responsible parties for cleanup-related costs.
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System. An EPA compilation of sites having suspected or actual releases of hazardous substances to the environment. CERCLIS also contains information on site inspections, preliminary assessments and remediation of hazardous waste sites. These sites are typically reported to EPA by states and municipalities or by third parties pursuant to CERCLA Section 103.
CESQG	Conditionally Exempt Small Quantity Generators
CFR	Code of Federal Regulations
CREC	Controlled Recognized Environmental Condition is defined in ASTM E1527-21 as “a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority) , with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls). A condition considered by the environmental professional to be a controlled recognized environmental condition shall be listed in the findings section of the Phase I Environmental Site Assessment report, and as a recognized environmental condition in the conclusions section of the Phase I Environmental Site Assessment report.”
DOT	U.S. Department of Transportation
EPA	U.S. Environmental Protection Agency
ERNS	Emergency Response Notification System. An EPA-maintained federal database which stores information on notifications of oil discharges and hazardous substance releases in quantities greater than the applicable reportable quantity under CERCLA. ERNS is a cooperative data-sharing effort between EPA, DOT, and the National Response Center.
ESA	Environmental Site Assessment
FRP	Fiberglass Reinforced Plastic



### Description of Selected General Terms and Acronyms

Term/Acronym	Description
Hazardous Substance	As defined under CERCLA, this is (A) any substance designated pursuant to section 1321(b)(2)(A) of Title 33, (B) any element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title; (C) any hazardous waste having characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (with some exclusions); (D) any toxic pollutant listed under section 1317(a) of Title 33; (E) any hazardous air pollutant listed under section 112 of the Clean Air Act; and (F) any imminently hazardous chemical substance or mixture with respect to which the EPA Administrator has taken action under section 2606 of Title 15. This term does not include petroleum, including crude oil or any fraction thereof which is not otherwise listed as a hazardous substance under subparagraphs (A) through (F) above, and the term include natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).
Hazardous Waste	This is defined as having characteristics identified or listed under section 3001 of the Solid Waste Disposal Act (with some exceptions). RCRA, as amended by the Solid Waste Disposal Act of 1980, defines this term as a "solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may (A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; or (B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed."
HREC	Historical Recognized Environmental Condition is defined in ASTM E1527-21 as "a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted residential use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls). Before calling the past release a historical recognized environmental condition, the environmental professional must determine whether the past release is a recognized environmental condition at the time of the Phase I Environmental Site Assessment is conducted (for example, if there has been a change in the regulatory criteria). If the EP considers the past release to be a recognized environmental condition at the time the Phase I ESA is conducted, the condition shall be included in the conclusions section of the report as a recognized environmental condition."
IC/EC	A listing of sites with institutional and/or engineering controls in place. IC 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. EC 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.
ILP	Innocent Landowner/Operator Program

### Description of Selected General Terms and Acronyms

Term/Acronym	Description
LQG	Large Quantity Generators
LUST	Leaking Underground Storage Tank. This is a federal term set forth under RCRA for leaking USTs. Some states also utilize this term.
MCL	Maximum Contaminant Level. This Safe Drinking Water concept (and also used by many states as a ground water cleanup criteria) refers to the limit on drinking water contamination that determines whether a supplier can deliver water from a specific source without treatment.
MSDS	Material Safety Data Sheets. Written/printed forms prepared by chemical manufacturers, importers and employers which identify the physical and chemical traits of hazardous chemicals under OSHA's Hazard Communication Standard.
NESHAP	National Emissions Standard for Hazardous Air Pollutants (Federal Clean Air Act). This part of the Clean Air Act regulates emissions of hazardous air pollutants.
NFRAP	Facilities where there is "No Further Remedial Action Planned," as more particularly described under the Records Review section of this report.
NOV	Notice of Violation. A notice of violation or similar citation issued to an entity, company or individual by a state or federal regulatory body indicating a violation of applicable rule or regulations has been identified.
NPDES	National Pollutant Discharge Elimination System (Clean Water Act). The federal permit system for discharges of polluted water.
NPL	The NPL is the EPA's database of uncontrolled or abandoned hazardous waste facilities that have been listed for priority remedial actions under the Superfund Program.
OSHA	Occupational Safety and Health Administration or Occupational Safety and Health Act
PACM	Presumed Asbestos-Containing Material. A material that is suspected of containing or presumed to contain asbestos but which has not been analyzed to confirm the presence or absence of asbestos.
PCB	Polychlorinated Biphenyl. A halogenated organic compound commonly in the form of a viscous liquid or resin, a flowing yellow oil, or a waxy solid. This compound was historically used as dielectric fluid in electrical equipment (such as electrical transformers and capacitors, electrical ballasts, hydraulic and heat transfer fluids), and for numerous heat and fire sensitive applications. PCB was preferred due to its durability, stability (even at high temperatures), good chemical resistance, low volatility, flammability, and conductivity. PCBs, however, do not break down in the environment and are classified by the EPA as a suspected carcinogen. 1978 regulations, under the Toxic Substances Control Act, prohibit manufacturing of PCB-containing equipment; however, some of this equipment may still be in use today.

### Description of Selected General Terms and Acronyms

Term/Acronym	Description
pCi/L	picoCuries per Liter of Air. Unit of measurement for Radon and similar radioactive materials.
PLM	Polarized Light Microscopy (see ACM section of the report, if included in the scope of services)
PST	Petroleum Storage Tank. An AST or UST that contains a petroleum product.
Radon	A radioactive gas resulting from radioactive decay of naturally-occurring radioactive materials in rocks and soils containing uranium, granite, shale, phosphate, and pitchblende. Radon concentrations are measured in picoCuries per Liter of Air. Exposure to elevated levels of radon creates a risk of lung cancer; this risk generally increases as the level of radon and the duration of exposure increases. Outdoors, radon is diluted to such low concentrations that it usually does not present a health concern. However, radon can accumulate in building basements or similar enclosed spaces to levels that can pose a risk to human health. Indoor radon concentrations depend primarily upon the building's construction, design and the concentration of radon in the underlying soil and ground water. The EPA recommended annual average indoor "action level" concentration for residential structures is 4.0 pCi/l.
RCRA	Resource Conservation and Recovery Act. Federal act regulating solid and hazardous wastes from point of generation to time of disposal ('cradle to grave'). 42 U.S.C. 6901 et seq.
RCRA Generators	The RCRA Generators database, maintained by the EPA, lists facilities that generate hazardous waste as part of their normal business practices. Generators are listed as either large (LQG), small (SQG), or conditionally exempt (CESQG). LQG produce at least 1000 kg/month of non-acutely hazardous waste or 1 kg/month of acutely hazardous waste. SQG produce 100-1000 kg/month of non-acutely hazardous waste. CESQG are those that generate less than 100 kg/month of non-acutely hazardous waste.
RCRA CORRACTS/ TSDs	The USEPA maintains a database of RCRA facilities associated with treatment, storage, and disposal (TSD) of hazardous materials which are undergoing "corrective action". A "corrective action" order is issued when there is a release of hazardous waste or constituents into the environment from a RCRA facility.
RCRA Non-CORRACTS/ TSDs	The RCRA Non-CORRACTS/TSD Database is a compilation by the USEPA of facilities which report storage, transportation, treatment, or disposal of hazardous waste. Unlike the RCRA CORRACTS/TSD database, the RCRA Non-CORRACTS/TSD database does not include RCRA facilities where corrective action is required.
RCRA Violators List	RAATS. RCRA Administrative Actions Taken. RAATS information is now contained in the RCRIS database and includes records of administrative enforcement actions against facilities for noncompliance.
RCRIS	Resource Conservation and Recovery Information System, as defined in the Records Review section of this report.



### Description of Selected General Terms and Acronyms

Term/Acronym	Description
REC	Recognized Environmental Conditions are defined by ASTM E1527-21 as 1) the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment. A de minimis condition is not a recognized environmental condition.
SCL	State "CERCLIS" List (see SPL /State Priority List, below).
SPCC	Spill Prevention, Control and Countermeasures. SPCC plans are required under federal law (Clean Water Act and Oil Pollution Act) for any facility storing petroleum in tanks and/or containers of 55-gallons or more that when taken in aggregate exceed 1,320 gallons. SPCC plans are also required for facilities with underground petroleum storage tanks with capacities of over 42,000 gallons. Many states have similar spill prevention programs, which may have additional requirements.
SPL	State Priority List. State list of confirmed sites having contamination in which the state is actively involved in clean up activities or is actively pursuing potentially responsible parties for clean up. Sometimes referred to as a State "CERCLIS" List.
SQG	Small Quantity Generator
SWF/LF	State and/or Tribal database of Solid Waste/Landfill facilities. The database information may include the facility name, class, operation type, area, estimated operational life, and owner.
TPH	Total Petroleum Hydrocarbons
TRI	Toxic Release Inventory. Routine EPA report on releases of toxic chemicals to the environment based upon information submitted by entities subject to reporting under the Emergency Planning and Community Right to Know Act.
TSCA	Toxic Substances Control Act. A federal law regulating manufacture, import, processing and distribution of chemical substances not specifically regulated by other federal laws (such as asbestos, PCBs, lead-based paint and radon). 15 U.S.C 2601 et seq.
USACE	United States Army Corps of Engineers
USC	United States Code
USGS	United States Geological Survey
USNRCS	United States Department of Agriculture-Natural Resource Conservation Service



### Description of Selected General Terms and Acronyms

Term/Acronym	Description
UST	Underground Storage Tank. Most federal and state regulations, as well as ASTM E1527-21, define this as any tank, incl., underground piping connected to the tank, that is or has been used to contain hazardous substances or petroleum products and the volume of which is 10% or more beneath the surface of the ground (i.e., buried).
VCP	State and/or Tribal facilities included as Voluntary Cleanup Program sites.
VOC	Volatile Organic Compound
Wetlands	<p>Areas that are typically saturated with surface or ground water that creates an environment supportive of wetland vegetation (i.e., swamps, marshes, bogs). The <u>Corps of Engineers Wetlands Delineation Manual</u> (Technical Report Y-87-1) defines wetlands as areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. For an area to be considered a jurisdictional wetland, it must meet the following criteria: more than 50 percent of the dominant plant species must be categorized as Obligate, Facultative Wetland, or Facultative on lists of plant species that occur in wetlands; the soil must be hydric; and, wetland hydrology must be present.</p> <p>The federal Clean Water Act which regulates "waters of the US," also regulates wetlands, a program jointly administered by the USACE and the EPA. Waters of the U.S. are defined as: (1) waters used in interstate or foreign commerce, including all waters subject to the ebb and flow of tides; (2) all interstate waters including interstate wetlands; (3) all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, etc., which the use, degradation, or destruction could affect interstate/ foreign commerce; (4) all impoundments of waters otherwise defined as waters of the U. S., (5) tributaries of waters identified in 1 through 4 above; (6) the territorial seas; and (7) wetlands adjacent to waters identified in 1 through 6 above. Only the USACE has the authority to make a final wetlands jurisdictional determination.</p>