

APPENDIX D

Hazardous Materials Documentation

ASTM PHASE I ENVIRONMENTAL SITE ASSESSMENT
GARDENA VALLEY 1 & 2 LANDFILL
CARSON, CALIFORNIA

by
Haley & Aldrich, Inc.
San Diego, California

for
WPT Industrial, LP
Minneapolis, Minnesota

File No. 200757
February 2021





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Attention: Jonah Chodosh

Subject: ASTM Phase I Environmental Site Assessment
Gardena Valley 1 & 2 Landfill
Carson, California


Ladies and Gentlemen:

The enclosed report presents the results of a Phase I Environmental Site Assessment (Phase I) conducted at the above-referenced property, located at Assessor's Parcel Number 7336-003-043 between Main Street, Torrance Boulevard, Figueroa Street, and Del Amo Boulevard, in Carson, California (herein referred to as the "subject site"). This work was performed by Haley & Aldrich, Inc. (Haley & Aldrich), in accordance with our proposal to WPT Industrial, LP dated 14 January 2021 ("Agreement") as authorized on 15 January 2021. This Phase I was conducted in conformance with the scope and limitations of the American Society for Testing and Materials (ASTM) E 1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process as referenced in 40 Code of Federal Regulations (CFR) Part 312 (the All Appropriate Inquiries [AAI] Rule).

The objective of a Phase I is to assess whether known and suspect "recognized environmental conditions" (REC), historical RECs (HREC), or controlled RECs (CREC) are associated with the subject site, as defined in the ASTM E 1527-13 Standard.

Thank you for the opportunity to perform these services for you. Please do not hesitate to contact us if you have any questions or comments.

Sincerely yours,
HALEY & ALDRICH, INC.


Keith A. Foster
Senior Technical Specialist


Mathew T. Raithel
Senior Technical Specialist

Enclosures

Executive Summary

Haley & Aldrich, Inc. (Haley & Aldrich) has performed a Phase I Environmental Site Assessment (Phase I) of the Gardena Valley 1 & 2 Landfill property in Carson, California (herein referred to as the “subject site”). The scope of work is described and conditioned by our proposal dated 14 January 2021. This Phase I was performed for WPT Industrial, LP who seeks to purchase and redevelop the subject site with the construction of three buildings. This Phase I was performed in conformance with the scope and limitations of the ASTM E 1527-13 Standard and [All Appropriate Inquiries \(AAI\) Rule](#)¹.

SUBJECT SITE DESCRIPTION

The subject site is located between Main Street, Torrance Boulevard, Figueroa Street, and Del Amo Boulevard in the City of Carson, California (Figure 1). Figueroa Street and Main Street form the west and east boundaries of the subject site, respectively. A concrete lined storm drain channel leading to the Dominguez Channel forms the northern border of the subject site, and the El Camino Plaza (consisting of commercial/retail buildings, the Mission Ebenezer Church, and a parking lot) forms the southern border of the subject site. The subject site, which is approximately 14 acres, is currently owned by KL Fenix Corporation and is currently vacant, undeveloped, and unoccupied land. The subject site was formerly used as a Class II municipal landfill between 1956 and 1959.

OBJECTIVE

The objective of a Phase I is to assess whether “[recognized environmental conditions](#)” (REC), [historical RECs](#) (HREC), and controlled RECs (CREC) are associated with the subject site. Our conclusions are intended to help the user evaluate the “[business environmental risk](#)” associated with the subject site. Our opinion regarding a REC's potential impact on the subject site is based on the scope of our work, the information obtained during the course of our work, the conditions prevailing at the time our work was performed, the applicable regulatory requirements in effect at the time our work was performed, our experience evaluating similar sites, and on our understanding of the client's intention to construct three commercial buildings on the subject site.

RECOGNIZED ENVIRONMENTAL CONDITIONS

The ASTM E 1527-13 Standard defines an REC in part as “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a [material threat](#) of a future release to the environment.”

¹ American Society for Testing and Materials (ASTM) E 1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process as referenced in 40 Code of Federal Regulations (CFR) Part 312 (the All Appropriate Inquiries [AAI] Rule) (“ASTM E 1527-13 Standard”). Specified terms as are used in ASTM E 1527-13 are highlighted in blue in this report and defined in the Glossary at the end of the report text.

The following RECs listed below were identified in connection with the subject site.

REC #1: Former Operation of the Gardena Valley 1 & 2 Landfill

The subject site was operated as the Gardena Valley 1 & 2 Landfill between November 1956 and October 1959, which accepted Class II waste including municipal waste and potentially industrial waste. Soil at the subject site was reportedly originally excavated as a borrow site for the construction of the Interstate-110 freeway located to the west, and the resultant on-site excavation was subsequently utilized as a municipal landfill. The excavation was used as a landfill without placement of an engineered liner and without current-day practices which employ landfill gas extraction / monitoring and leachate collection systems. The landfill was subsequently covered with soil from an undocumented source. Analysis of this cover soil during previous site investigations indicated the presence of concentrations of metals, pesticides, and organics, including arsenic, DDT, polychlorinated biphenyls (PCBs), diethylphthalate, and di-n-butylphthalate. Organic chemicals and methane have been detected in landfill gas. Groundwater in the vicinity of the subject site has been impacted with volatile organic compounds.

REC #2: Former Onsite Operations Associated with the Golden Eagle Refinery

According to aerial photographs and documentation in reports reviewed for this Phase I, the subject site was first developed in the 1940s with buildings, storage yards, and possible aboveground storage tanks (containing unknown materials) and wastewater ponds associated with the Golden Eagle Refinery which was located to the south of Torrance Boulevard. These structures were decommissioned by 1956. These operations may have had the potential to have impacted subsurface soil and groundwater beneath the subject site. However, soil was excavated to a maximum depth of approximately 37 feet below ground surface during construction of the landfill, and therefore any impacted soil which may have existed from these former operations may have been excavated. Furthermore, previous sampling in the area did not identify petroleum hydrocarbon impacted soil and groundwater. Groundwater beneath the subject site has been impacted from a variety of sources in the vicinity of the subject site.

REC #3: Potential Impacts from Offsite Sources due to Former Landfills Operated in the Vicinity

The following landfills were formerly operated in the vicinity of the subject site: Gardena Valley 4 Landfill (located west-southwest and crossgradient), Gardena Valley 5 Landfill (located south and downgradient), Cal Compact Landfill (located north-northeast and crossgradient), Werdin Dump (located northeast and crossgradient), and the Southwest Conservation Landfill 4 (located north and upgradient). These landfills have reportedly collectively impacted regional groundwater quality in the vicinity of the subject site.

REC #4: Montrose and Del Amo Superfund Sites

The subject site is located within ½-mile south (and hydrogeologically downgradient) of a National Priority List (NPL) site that actually consists of two adjacent properties: Montrose Chemical and Del Amo Synthetic Rubber Plants. Although the United States Environmental Protection Agency's 1999 Record of Decision (ROD) does not indicate that a contamination plume has extended to beneath the subject site, due to the proximity of the upgradient NPL sites to the subject site, there is the potential that groundwater beneath the subject site may have been or might be impacted in the future by the past releases from these NPL sites.

CONTROLLED RECOGNIZED ENVIRONMENTAL CONDITIONS

The ASTM E 1527-13 Standard defines a CREC 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 with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.

CRECs were not identified in connection with the subject site.

HISTORICAL RECOGNIZED ENVIRONMENTAL CONDITIONS

The ASTM E 1527-13 Standard defines an HREC 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 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).”

HRECs were not identified in connection with the subject site.

SUMMARY

In summary, we identified four RECs during this Phase I.

The remainder of this report contains additional information regarding the Phase I, the resulting findings summarized above, and limitations affecting this report.

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Haley & Aldrich Proposal Dated 14 January 2021

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1. Introduction

This report presents the results of an ASTM Phase I (Phase I) conducted at Gardena Valley 1 & 2 Landfill in Carson, California (herein referred to as the “subject site”). The approximately 14-acre subject site is currently vacant, undeveloped, and unoccupied land property that is located between Main Street, Torrance Boulevard, Figueroa Street, and Del Amo Boulevard in the City of Carson, California, as shown on the Project Locus, Figure 1. This Phase I was conducted in consideration of WPT Industrial, LP intention to purchase and redevelop the property.

1.1 OBJECTIVE

The objective of a Phase I is to assess whether “[recognized environmental conditions](#)” (REC), [historical RECs \(HREC\)](#), and [controlled RECs \(CREC\)](#) are associated with the subject site by evaluating site history, interviews, existing observable conditions, current site use, and current and former uses of adjoining properties as well as potential releases at surrounding properties that may impact the subject site. Our conclusions are intended to help the user evaluate the “[business environmental risk](#)” associated with the subject site.

RECs are defined in the ASTM E 1527-13 Standard as “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or under conditions that pose a [material threat](#) of a future release to the environment.” The definitions of RECs, HRECs, and CRECs are included in the Glossary section of this report.

1.2 SCOPE OF SERVICES

This work was performed by Haley & Aldrich and this Phase I was performed in conformance with the scope and limitations of the ASTM E 1527-13 Standard and All [Appropriate Inquiries \(AAI\)](#) Rule² and in accordance with our proposal to WPT Industrial, LP dated 14 January 2021 (“Agreement”) as authorized on 15 January 2021. The Phase I limitations and Agreement are attached hereto as Appendix A.

As part of this Phase I, Haley & Aldrich conducted visual observations of site conditions and of abutting property use and interviewed a [key site manager](#) (site reconnaissance); reviewed federal, state, tribal, and local environmental database information, federal and state environmental files, previous reports (if identified and provided), and site historical use records; and formulated conclusions regarding the potential presence and impact of RECs.

1.3 NON-SCOPE CONSIDERATIONS

The ASTM E 1527-13 Standard includes the following list of “additional issues” that are non-scope considerations outside of the scope of the ASTM Phase I practice: asbestos-containing materials, biological agents, radon, lead-based paint, lead in drinking water, wetlands, regulatory compliance,

² American Society for Testing and Materials (ASTM) E 1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process as referenced in 40 Code of Federal Regulations (CFR) Part 312 (the All Appropriate Inquiries [AAI] Rule) (“ASTM E 1527-13 Standard”). Specified terms as are used in ASTM E 1527-13 are highlighted in blue in this report and defined in the Glossary at the end of the report text.

cultural and historic resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality unrelated to releases of hazardous substances or petroleum products into the environment, and mold. These items were not included in this Phase I of the subject site.

A limited assessment of the presence of polychlorinated biphenyls (PCBs) is included in the ASTM work scope. Accordingly, our assessment of the presence of PCBs is limited to those potential sources specified in the ASTM E 1527-13 Standard as “electrical or hydraulic equipment known or likely to contain PCBs...to the extent visually and or physically observed or identified from the interview or records review.”

1.4 LIMITING CONDITIONS/DEVIATIONS

Haley & Aldrich completed this Phase I in substantial conformance with the ASTM E 1527-13 Standard. In our opinion, no additions were made to or deviations and deletions made from the ASTM work scope in completing this Phase I.

1.5 USER RESPONSIBILITIES

The completion of this Phase I is only one component of the process required to satisfy the AAI Rule. In addition, the user must adhere to a set of user responsibilities as defined by the ASTM E 1527-13 Standard and the AAI Rule. User responsibilities are discussed in section 6.6 of this report. A user seeking protection from Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) liability as an innocent landowner, bona fide prospective purchaser, or contiguous property owner must complete all components of the AAI process in addition to meeting ongoing obligations. AAI components, CERCLA liability relief, and ongoing obligations are discussed in the AAI Rule and in Appendix XI of the ASTM E 1527-13 Standard.

2. Site Description

A description of the subject site is detailed in the sections below. Refer to Figure 1 for a project locus and Figure 2 for a site plan showing relevant site features and adjacent properties.

2.1 SITE OWNERSHIP, LOCATION, AND VICINITY DESCRIPTION

Site Description	
Owner	KL Fenix Corporation 19401 S. Main Street, Unit 301 Gardena, CA
Operator/Occupant	Not applicable
Current Site Use	Vacant land
Size	14 acres
Building Square Footage	Not applicable
USGS 7.5 Minute Topographic Map	Torrance Quadrangle, 2012
Site County	Los Angeles
Zoning	The site is zoned for light manufacturing as well as an organic refuse landfill.
Parcel Information	7336-003-043
Utilities	Water: Not applicable
	Sewerage: Not applicable
	Electricity: Not applicable
	Gas/Oil/LPG: Not applicable
Heating/Cooling System	Not applicable

Site Description	
Site Vicinity Description	
General Area Description	The site vicinity consists of mixed-use properties including residential, commercial, and industrial developments.
Adjoining Property Description	North: A concrete storm channel across from which lies a storage facility.
	East: Main street beyond which lies Vista Loma Mobile Estates, residences, South Bay Vocational Center, and True Self Dance Studio
	South: A business part consisting of Glory Christian Fellowship, The International Printing Museum, Kelly Paper Store, Waste Tire Product Innovations, Mission Ebenezer Church, and other offices/stores.
	West: South Figueroa Street beyond which is Interstate I-110.

2.2 PHYSICAL SETTING

Subsurface explorations and/or hydrogeologic investigations were not performed for this Phase I. Subject site geology and hydrology were evaluated on the basis of readily available public information and previous assessment reports, and/or based upon our experience and understanding of subsurface conditions in the vicinity of the subject site.

Physical Setting		Source
Topography Summary	The subject is generally flat with areas of differential settling.	1
Site Elevation	Approximately elevation 20-30 feet above mean sea level	1
Overburden Soils/Cover Material	The fill/cover material has been observed to be olive gray to dark yellowish brown clayey silt and silt with little or no plasticity and a stiff consistency. This fill/cover material is reported to be on average approximately 5.5 feet thick. Fill thickness ranges from 1.5 to 19 feet across the subject site. Native material consists of the Dominguez Erosional Gap which include fine-grained silty and clayey flood deposits.	1

Physical Setting		Source
Native Soils	Underlying the surficial soils at the subject site are the intercontinental marine deposits of the Lakewood Formation, which reportedly extends down to 220 feet below ground surface (bgs). The Upper Lakewood formation (approximately 80 feet bgs) consists of silty sands and fine sands which are underlain by sandy gravel or sandy clays. The basement of the Lakewood Formation, known as the Gage Aquifer, consists of an approximately 50-foot thick layer of sands.	1
Depth to Groundwater	Approximately 45-55 ft bgs.	1
Surface Water Flow Direction	Surface water appears to remain on site based on observed surface topography. It should be noted that the parcel map notes a surface water drainage easement on the north west corner of the subject site.	1
Regional Groundwater Flow Direction	Groundwater in the Bellflower aquifer generally flows from the northwest to southeast.	2
Nearest Surface Water Body	The Dominguez Channel is located approximately 3,500 feet northeast of the subject site.	3

Sources:

1. *Final Remedial Action Plan, Wastefill Operable Unit, For a Portion of the Gardena Valley 1 & 2 Landfill*, June 1992, Prepared by Bryan A. Stirrat & Associates, Prepared for London Pacific Investments
2. *Draft Remedial Investigation Report Groundwater Operable Unit for A Portion of the Gardena Valley 1 & 2 Landfill*, July 1991 Prepared by Bryan A. Stirrat & Associates, Prepared for Watt/Walder Limited Partnership
3. *Google Maps*

Environmentally Sensitive Areas		Source
Floodplain	No	1
Mapped Wetlands	No	1
Groundwater Classification	Existing beneficial uses for municipal, agricultural, industrial service, and process supply.	2

Sources:

1. *EDR Report*
2. https://geotracker.waterboards.ca.gov/profile_report?global_id=T10000004414

3. Previous Reports

The following reports previously prepared for the subject site were reviewed for this Phase I. Information contained in these reports is included herein. The previously prepared reports and documents listed below were reviewed as part of this Phase I. Pertinent issues identified in those reports are summarized below. Relevant excerpts from these reports are included in Appendix B.

- *Final Remedial Action Plan, Wastefill Operable Unit, for a Portion of the Gardena Valley 1 & 2 Landfill*, June 1992, prepared by Bryan A. Stirrat & Associates,

This report presents a Remedial Investigation (RI), Baseline Health Risk Assessment (HRA), and Feasibility Study (FS) conducted at the subject site for the wastefill operable unit only (not groundwater beneath the subject site). The report includes a discussion of alternatives for remediation and associated costs. Below is a summary of findings.

The surface layer of soil cover was measured at an average thickness of 5.52 feet across the subject site. Localized areas in the surface soil were found to be contaminated with the following metals: arsenic, barium, beryllium, cadmium, chromium, copper, lead, mercury, nickel, and zinc. In addition, localized areas of surface soils contained DDT and its breakdown products, polychlorinated biphenyls (PCBs), diethylphthalate, and di-n-butylphthalate.

The average thickness of refuse was measured to be 25.15 feet (varying between 15 feet and 33.5 feet bgs), calculated to be a volume of 440,125 cubic yards of refuse. The refuse was found to be contaminated with metals, DDT breakdown products, PCBs, and 24 semi-volatile organic compounds (SVOCs). Volatile organic compounds (VOCs) analyses were not performed of the refuse due to a change in drilling methods for health and safety reasons.

Soil beneath the landfill was not investigated further than 5 feet below the landfill base.

Liquids or saturated areas were not encountered within the landfill during the drilling activities conducted.

Landfill analysis indicated that methane concentrations were within normal ranges for a solid waste disposal site. Landfill gas analysis also detected 16 VOCs as well as other non-identifiable VOCs.

Ambient air sampling and analysis indicated that 9 VOCs were detected, with slightly higher detections from downwind locations than from upwind locations.

A human health risk assessment prepared for the subject site concluded that there was a lifetime cancer risk of four in one million for an onsite trespasser, and a lifetime cancer risk of three in one hundred million for an offsite resident. The report indicates unidentified VOCs constituents detected at the landfill may pose a higher risk. Also, detected ambient air concentrations would also pose a greater risk.

A remedial feasibility study included the evaluation of seven remedial alternatives. The remedial feasibility study concluded that the preferred remedial action alternative of capping

the landfill with a multi-layer clay/asphalt cover, installing a landfill gas collection system, and using a landfill gas flare system to destroy organic chemicals in landfill gas.

The report also provides historical information for the subject site. The Gardena Valley 1 & 2 Landfill operated between November 1956 and October 1959 under a County of Los Angeles Industrial Waste Disposal Permit. The waste permit indicated that the landfill must accept at least 75% residential waste, while the remaining 25% could be "other waste". Permitted wastes included combustible and non-combustible rubbish, mixed garbage, construction refuse, insoluble solid industrial wastes, solid fill, and a "few unspecified innocuous industrial wastes and sludges." Hog waste (animal waste) was reportedly also accepted under certain circumstances. The waste permit required one part of clean soil to be placed in the landfill for every three parts of waste that was disposed of in the landfill. The Regional Water Quality Control Board (RWQCB), under Resolution No. 58-26, indicated that the following wastes were permitted for disposal at the subject site.

- Solid ordinary household wastes
- Semi-liquids (10 gallons per cubic yard)
- Rotary drill mud and crude oil tank bottoms
- Drill crude
- Unrefined petroleum tank cleanings
- Paint sludge and dry paint in drums
- Acetylene sludge
- Auto wash sludge
- Laundry sludge
- Latex
- Lime and soda water
- Molasses
- Cutting oil containing small amounts of hydrocarbons
- Certain semi-liquid wastes (on a case-by-case basis)

Surface Soil Analytical Results

Up to fourteen soil samples were collected from the surface soil cover and analyzed. The following chemicals and maximum concentrations were detected in the landfill cover:

- arsenic = 32 milligrams per kilogram (mg/kg)
- barium = 1,460 mg/kg
- beryllium = 0.6 mg/kg
- cadmium = 1.5 mg/kg
- copper = 144 mg/kg
- lead = 259 mg/kg
- mercury = 18.5 mg/kg
- nickel = 41.1 mg/kg
- zinc = 318 mg/kg

- diethylphthalate = 0.6 mg/kg
- di-n-butyl phthalate = 20 mg/kg
- o,p'-DDD = 0.055 mg/kg
- p,p'-DDD = 13 mg/kg
- p,p-DDE = 32 mg/kg
- p,p-DDT = 65 mg/kg
- o,p'-DDT = 15 mg/kg
- chlordane = 0.088 mg/kg
- Aroclor 1254 = 1.65 mg/kg
- Aroclor 1260 = 1.4 mg/kg

Comparison of the above concentrations with Code of California Regulations (CCR) Title 22 Total Threshold Limit Concentrations (TTL) and 10 times Soluble Threshold Limit Concentrations (10 x STLC) indicates that detected constituent concentrations were below their respective TTLs. However, TTL values for barium, lead, and mercury exceeded 10 times STLC concentrations, which would then require STLC testing to determine whether or not any of these constituents were present at levels that would render the material as hazardous for waste disposal purposes.

In comparison, below are the maximum concentrations of metals detected in "background" soil samples collected between 30 to 50 feet (the report does not indicate the source of the background samples or the number of background samples collected):

- arsenic = not detected
- beryllium = 2.36 mg/kg
- cadmium = 13.74
- chromium = 65.76 mg/kg
- copper = 40.72 mg/kg
- lead = 4.61 mg/kg
- nickel = 36.11 mg/kg
- silver = 1.97
- zinc = 63.25 mg/kg

Landfill Waste and Landfill Base Analytical Results

The following chemicals were detected in the wastefill: metals (antimony, arsenic, barium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, zinc), DDT and its breakdown products, PCBs, and 24 semivolatile organic compounds (SVOCs).

Soils samples were collected from 1.5 feet, 2 feet, and 5 feet below the landfill base. SVOCs were detected in the two foot sample only (naphthalene at 0.48 mg/kg, 2-methylnaphthalene at 0.19 mg/kg, phenanthrene at 0.76 mg/kg, flouranthene at 0.22 mg/kg, butylbenzyl phthalate at 0.75 micrograms per kilogram [ug/kg]). Ethylbenzene (0.4 mg/kg) and xylenes (0.2 mg/kg) were the only two VOCs detected, and were found at 1.5 and 2 feet below the base of the landfill. VOCs were not detected in soil samples collected from 5 feet below the base of the landfill.

Samples collected from 5 feet below the base of the landfill only contained detectable concentrations of metals and did not contain detectable concentrations of VOCs, SVOCs, or pesticides. Below are the maximum concentrations of metals detected in soil samples collected between 1.5 and 5 feet below the base of the landfill:

- arsenic = 23.5 mg/kg
- beryllium = 0.6 mg/kg
- chromium = 21 mg/kg
- copper = 31.1 mg/kg
- lead = 22.5 mg/kg
- nickel = 19.2 mg/kg
- zinc = 74.9 mg/kg

None of the above concentrations exceeded 10 times their respective STLC values which is a proxy used for hazardous waste determination.

Landfill Leachate Analytical Results

Leachate was observed in the four onsite landfill gas monitoring wells. BAS concluded that the leachate originated from surface waters infiltrating through the landfill cover. Leachate samples were collected and analyzed for general minerals, metals, pesticides, PCBs, SVOCs, and VOCs. Pesticides and PCBs were not detected in the leachate samples. 12 VOCs and 7 SVOCs were detected in leachate samples.

- phenol = 23 micrograms per liter (ug/L)
- 1,4-dichlorobenzene = 41 ug/L
- isophorone = 19 ug/L
- benzoic acid = trace levels
- naphthalene = 37 ug/L
- 2-methylnaphthalene = 10 ug/L
- diethylphthalate = trace levels
- vinyl chloride = 2 ug/L
- chloroethane = 15 ug/L
- acetone = 2100 ug/L
- 1,1-dichloroethane = 10 ug/L
- 1,2-dichloroethene (total) = 2 ug/L
- 2-butanone = 10,000 ug/L
- benzene = 10 ug/L
- 4-methyl-2-pentanone = 1700 ug/L
- toluene = 750 ug/L
- ethylbenzene = 180 ug/L
- total xylenes = 350 ug/L

Landfill Gas Analytical Results

The following average concentrations were detected in landfill gas from vapor wells previously located on the subject site:

- methane = 48 percent by volume
- toluene = 21 parts per million (ppm)
- xylenes = 19 ppm
- ethylbenzene = 18 ppm
- 13 other VOCs
- total gaseous non-methane organics (TGNMO) = 5,212 ppm

The report does not indicate the depth of the landfill gas sample collection.

Air Sampling Analytical Results

Nine chemicals were detected in surface air samples, including benzene, dichloromethane, tetrachloroethene, tetrachloromethane, and 1,1,1-trichloroethane. The report reviewed did not indicate the concentrations of these chemicals.

The following twelve compounds were reported as having been detected in ambient air samples (concentrations were not provided in the report):

- benzene
 - ethylbenzene
 - dichloromethane
 - m/p-xylene
 - o-xylene
 - tetrachloroethene
 - tetrachloromethane
 - toluene
 - Trichloroethene
 - 1,1-dichloroethene
 - 1,1,1-trichloroethane
 - p-dichlorobenzene
- *Draft Remedial Investigation Report Groundwater Operable Unit for A Portion of the Gardena Valley 1 & 2 Landfill, July 1993, prepared by Bryan A. Stirrat & Associates*

The purpose of this report was to characterize the nature and extent of groundwater contamination resulting from the landfill, evaluate human health risk, and evaluate remedial options.

17 groundwater monitoring wells were installed at and in the vicinity of the subject site. 8 shallow soil borings were advanced, four of these were converted into vapor wells and four were used for waste characterization purposes. Monitoring wells GW-1, GW-2, and GW-3 were abandoned as the DTSC did not believe that results from samples collected from these wells demonstrated a significant source contribution to groundwater contamination. It should be noted that benzene was detected in wells GW-1,-2, and -3 at concentrations of 0.7, 28, and 30 ug/L, respectively.

Below is a summary of conclusions:

- Chloride, electric conductivity, sulfate, TDS, and manganese exceeded state Maximum Contaminant Levels (MCLs) in the shallow Bellflower aquifer. 1,2-Dichloroethane (1.25 ug/L) exceeded MCLs in a downgradient well GW-6A. Four other VOCs and one SVOC were detected in downgradient wells, but at concentrations below MCLs (1,1-dichloroethane at 1 ug/L, cis-1,2-dichloroethene at 2 ug/L, trichloroethene at 3 ug/L, tetrachloroethene at 3 ug/L, and bis(2-ethylhexyl)phthalate at 20 ug/L). Tetrachloroethene was also detected in an upgradient well at a concentration below its established MCL (1 ug/L).
 - Chloride, electric conductivity, sulfate, TDS, and manganese exceeded state MCLs in the intermediate Bellflower aquifer. Two VOCs were detected in downgradient well GW-6A, but at concentrations below MCLs (acetone at 20 ug/L and methylene chloride at 13 ug/L).
 - Chloride, electric conductivity, sulfate, TDS, and manganese exceeded state MCLs in the deep Bellflower aquifer. The only VOC detected in the deep Bellflower aquifer was carbon disulfide (downgradient well GW-6C) at a concentration of 14 ug/L, and this chemical does not have an established MCL.
 - Chloride, electric conductivity, sulfate, TDS, manganese, 1,2-dichloroethane (5 ug/L), and benzene (2 ug/L) exceeded state MCLs in the Gage aquifer. Several other VOCs were detected in downgradient well GW-6D during one sampling event in May 1991 at concentrations below MCLs. These concentrations were not detected after wells GW-1, GW-2, and GW-3 were abandoned under the supervision of DTSC. This report concludes that these wells, which were installed to approximate depths between 116 and 140 feet bgs, may have formerly created a vertical pathway from the subject site to the Gage aquifer. The following chemicals and concentrations were detected in the Gage aquifer wells: cis-1,2-dichloroethene (13 ug/L), 1,2-dichloroethene (5 ug/L), benzene (2 ug/L), trichloroethene (5 ug/L), tetrachloroethene (7 ug/L), ethylbenzene (2 ug/L), xylenes (2 ug/L), 4-methyl-2-pentanone (10 ug/L), chlorobenzene (2 ug/L), and isophorone (47 ug/L).
- *Final Design Report, Gardena Valley 1 & 2 Landfill, Carson, California, June 1999, prepared by Tetra Tech, Inc.*

This report was prepared for the DTSC and outlines specifications of a landfill cap and landfill gas control system for proper closure of the subject site. The remedial objective includes designing a landfill cap to minimize stormwater infiltration, control stormwater runoff, and prevent

erosion. The landfill cap design consisted of a 24-inch foundation fill layer, a low permeability geosynthetic clay liner, a geocomposite drainage layer, and 18-inch layer of crushed stone base, and a 4-inch asphalt layer. Remedial objectives also included designing a landfill gas extraction system with an incineration system that destroys landfill gas concentrations to acceptable concentrations and prevents offsite migration of landfill gases. The landfill gas extraction system was proposed to consist of 24 vertical extraction wells that transport landfill gas to an onsite flare system. In addition, vapor probes were proposed to be installed outside the refuse area to monitor offsite landfill gas migration.

- *Draft Phase I Environmental Site Assessment, Mission Ebenezer Church Property, 405, 415, and 425 West Torrance Boulevard, August 2002, prepared by LFR Levine Fricke, Prepared for Holland & Knight.*

This Phase I was performed for the Mission Ebenezer Church Property located on the property south of the subject site. This property was reportedly vacant land until the early 1940's when scattered buildings, drum and equipment storage yards, and "possible" wastewater ponds associated with the oil refinery to the south were developed on this property. These ponds were not able to be positively identified by Haley & Aldrich's review of the historical aerial photographs. This operation was ceased in the early 1960, and the property was vacant until the early 1970's when the current onsite buildings were constructed. This Phase I reported that soil sampling conducted in the area of the former refinery buildings indicated petroleum hydrocarbon and possible solvent related VOC contamination. In addition, arsenic concentrations in soil were reportedly detected above industrial preliminary remediation goals (PRGs) at this property during sampling conducted as part of the Gardena Valley 1 & 2 Landfill site characterization.

This Phase I summarizes information regarding the following landfills located in the vicinity:

- The former Gardena Valley 5 Landfill (Golden Eagle Refinery) was located south of Torrance Boulevard. The refinery operated between 1922 and 1984. Oil waste landfarming was performed on approximately 20 acres of this facility, and a Class III landfill was operated between 1962 and 1963 on approximately 10 acres of this facility. This landfill accepted household refuse, construction debris, and less than one percent semi-liquid waste. LASMO Oil and Gas (LASMO) purchased the property in 1991. LASMO submitted a Remedial Action Plan which was approved by the DTSC in July 1994. Lead contaminated soil was treated by solidification and transported offsite in September 1994. An air sparging/vapor extraction (AS/VE) system for treatment of hydrocarbon contaminated soil and groundwater had been constructed and was operated at the site at the time of the report (August 2002).

The DTSC issued a NFA letter for the top 40 feet of soil at this facility in 1995. The AS/VE system was still being operated for remediation of groundwater at the time of the report.

Groundwater monitoring data collected at the Gardena Valley 5 site indicates that groundwater contamination is limited to the Upper Bellflower Aquifer and had not migrated offsite. The AS/VE system had reportedly reduced contaminant concentration by over 90 percent, and the remediation system had been deemed no longer necessary.

A landfill gas collection system reportedly continued to operate under SCAQMD permits. The landfill had been closed under the supervision of the RWQCB.

- The former Gardena Valley Landfill 4 was located at 833 W. Torrance Boulevard, west of the Interstate-110. This unlined landfill was reportedly 22 acres and accepted Class II type refuse and liquid waste consisting of paint sludge, latex waste, cement, sand-water, resins, acetylene sludge, and tank bottom sediments. Benzene, ethylbenzene, naphthalene, tetrachloroethene, chloroform, dichlorobenzene, and DDT had been detected in groundwater beneath this landfill. This report indicates that these chemicals may have originated from the Montrose DDT Plant and the Del Amo Synthetic Rubber Plant.
 - The former Werdin Dump was located at 20402 S. Main Street, on the east side of Main Street. This Class III landfill was operated in 1964 and was developed as a mobile home park in 1968. Household refuse, inorganic solids, and inert materials were reportedly accepted at this landfill. The DTSC issued a NFA letter for this landfill in 1995.
 - The former Cal Compact Landfill was located at 20400 S. Main Street, on the east side of Main Street. This 157 acre Class II landfill was operated between 1959 to 1968. Investigations had detected lead, nickel, arsenic, DDT, herbicides, organic resins, hydrocarbons, and solvents in soil and leachate at this site. Methane gas had been detected escaping from cracks in the landfill cover (between 3 and 20 feet of soil was placed as a landfill cover when the landfill ceased operations).
 - The former Southwest Conservation Landfill is located at 20300 S. Main Street, north of the subject site. This Class II Landfill was operated between 1964 and 1971 and accepted asbestos containing material, oil field and refinery liquid wastes, household wastes, drilling mud, unspecified oil containing waste, and metal sludge. This landfill was not constructed with a bottom liner or a leachate collection system. The DTSC required the preparation of a Preliminary Endangerment Assessment of this landfill in November 1999.
- *Phase II Subsurface Soil, Soil-Vapor, and Groundwater Investigation, 405-425 West Torrance Boulevard, September 2002, Prepared by AEI Consultants*

This investigation, at the above referenced addresses directly south of the subject site, was conducted as part of a due diligence process to investigate the potential impacts from the adjacent landfill to the north (the subject site) and from activities on this site associated with the former Golden Eagle Refinery located to the south, including the potential of above ground storage tanks formerly located on this site associated with the refinery. The investigation consisted of the soil sampling and analysis from five soil borings advanced to depths between 30 and 62 feet below ground surface, collecting a groundwater sample from one of these borings and from two onsite groundwater monitoring wells, collecting four soil gas samples from the perimeter of the subject site landfill, and collecting three soil gas samples further south of the border of the subject site landfill. Groundwater of the semi-perched Upper Bellflower Aquifer was encountered at depths between 40 and 45 feet bgs.

A total of twelve soil samples were collected from depths ranging between 5 feet and 40 feet bgs. Gasoline, diesel, and oil range hydrocarbons were not detected in any of these soil samples. The only VOCs detected in these soil samples were n-butylbenzene (38.2 ug/kg), naphthalene (255 ug/kg), and sec-butylbenzene (25.4 ug/kg) in one soil boring at a depth of 30 feet bgs.

The seven soil gas samples collected at depths of 9.5 feet bgs did not detect reportable concentrations of gasoline, methane, or VOCs.

A hydropunch groundwater sample collected from the Upper Bellflower Aquifer contained cis-1,2-dichloroethene (7.6 ug/L), 1,2-dichloroethane (5.7 ug/L), and t-butyl alcohol (54.3 ug/L). Other VOCs, gasoline, diesel, and oil range hydrocarbons were not detected in this groundwater sample. In addition, VOCs and gasoline, diesel, and oil range hydrocarbons were not detected in a groundwater sample collected from the Middle Bellflower Aquifer and the Lower Bellflower Aquifer.

This investigation concluded that there was no evidence of onsite releases of hydrocarbons or VOCs or evidence of vapor concentrations that could potentially pose a risk to human health.

- *Report on Geotechnical Feasibility Evaluation, Gardena Valley 1 and 2 Property, Carson City, California, August 2005, prepared by Haley & Aldrich.*

Haley & Aldrich conducted this feasibility study to provide preliminary information on geotechnical-related issues to Trammel Crow Company for their use in evaluating the feasibility of developing the property for commercial or retail use. The study scope included researching available geotechnical information, conducting a limited subsurface investigation to view the nature of the waste materials in the landfill, making preliminary evaluations of geotechnical aspects of site building design and construction including estimating order of magnitude geotechnical-related costs, and preparing this report.

Haley & Aldrich excavated 17 test pits within the upper 20 feet of the landfill. The soils and materials within the test pits were observed and documented by a Haley & Aldrich geologist. Soils above the wastefill were logged at depths from the surface to between 5 and 13 feet below surface grade. Wastefill was observed as containing wood construction debris, concrete rubble, paper and cardboard, metal cans and scraps, vegetation, rubber tires, household trash and decomposed waste.

The report documented site development issues including site settlement, building foundation requirements, utilities and transition zones, site grading, storm water detention systems, and landfill gas protection and management.

- *Limited Soil Vapor Survey, 205-305 West Torrance Boulevard, 20793-20795 South Main Street, Carson, California, July 2013, prepared by AEI Consultants.*

The purpose of the investigation was to assess whether methane or VOCs are potentially emanating onto the property from offsite (Gardena Valley 1 & 2 Landfill). A total of four one-inch diameter borings were advanced using a rotohammer drill and dual nested temporary vapor probes were installed within the boreholes, for a total of eight soil vapor probes. No

VOCs were detected in the in the soil vapor samples. Methane was detected in five samples at concentrations ranging from 2.13 to 2,234 ug/L. AEI concluded that the highest detected concentration of methane was still well below the lower explosive limit for methane by volume of air. Based on the findings of the report, AEI recommended no further investigation is warranted to assess soil vapor at this property.

4. Site History

Haley & Aldrich assessed past usage of the subject site and adjoining properties through a review of:

- Topographic Maps dated 1896, 1924, 1930, 1934, 1948, 1951, 1964, 1972, 1981, 2012;
- Aerial Photographs dated 1928, 1947, 1952, 1963, 1977, 1981, 1989, 1994, 2002, 2009, 2012, 2016;
- City Directories dated 1946, 1950, 1970, 1975, 1976, 1980, 1981, 1985, 1986, 1990, 1994;
- Municipal records;
- Previous Reports; and
- Interviews with subject site personnel.

Copies of information obtained from historical references reviewed are included in Appendix C. Unless otherwise noted below, per the ASTM standard, sources were reviewed dating back to 1940 or first developed use, whichever is earlier, and at 5-year intervals if the use of the property has changed within the time period.

4.1 SUBJECT SITE

Past usage of the subject site was assessed through a review of aerial photographs, historical topographic maps, and city directories. Copies of historical references reviewed are included in Appendix C.

According to aerial photographs and documentation in reports reviewed for this assessment, the subject site was first developed in the 1940's with buildings, storage yards, and possible ASTs (containing unknown materials) associated with the Golden Eagle Refinery which operated at the property south of Torrance Blvd. These structures were decommissioned by 1956. The subject site was reportedly used as a borrow pit for fill material to construct the adjacent Interstate-110. As a result of this borrow pit, the subject site was operated as the Gardena Valley 1 & 2 Landfill between November 1956 and October 1959. The subject site has been vacant, undeveloped land since landfill operations ceased in October 1959.

The table below provides a detailed summary of pertinent information from the historical sources reviewed:

Dates	Description of Subject Site	Sources
1924-1934	The 1924 aerial photograph depicts the subject site as being vacant and undeveloped. A slough or water drainage area is visible on the northern portion of the subject site. Torrance Boulevard and Main Street are apparent. Main Street forms the eastern border of the subject site and Torrance Boulevard is located just south of the subject site.	1924-1934 Topo maps 1928 Aerials

Dates	Description of Subject Site	Sources
1947-1952	The 1947 aerial photograph depicts development on the subject site including unpaved driveways, structures, and possibly circular above ground storage tanks.	1930-1951 Topo maps 1947-1952 Aerials
1963 - 2012	The 1963 aerial photograph depicts the subject site as vacant, graded land. The 1964 topographic map no longer contains the slough feature to the north of the subject site and depicts a water channel which is confirmed in the 1977 aerial photograph. Figueroa Street has been constructed and forms the western border of the subject site.	1964-2012 Topo maps 1963 – 2012 Aerials

4.2 ADJOINING PROPERTIES

The table below provides a summary of pertinent information from the historical sources reviewed regarding adjacent properties:

Dates	Description of Adjacent Properties	Sources
1928-1934	North: Slough South: South of subject site is Torrance Boulevard and a property that appears to be developed as an oil refinery consisting of nine ASTs and approximately four smaller ASTs. The oil refinery is listed as Sunset Pacific Oil Tank Farm on the 1930 and 1934 topographic maps. East: Vacant West: Vacant	1924-1934 Topo maps 1928 Aerials
1947-1952	North: Commercial development appears further northwest of the subject site, including approximately seven ASTs. South: Residential structures on the property just south of the subject site, along the north side of Torrance Boulevard. East: Vacant West: Vacant	1930-1951 Topo maps 1947-1952 Aerials

Dates	Description of Adjacent Properties	Sources
1963	<p>North: A channel appears to be under construction and the slough is no longer discernable.</p> <p>South: Property has been graded.</p> <p>East: Additional residential structures.</p> <p>West: Figueroa Street has been constructed and interstate-110 has been constructed west of Figueroa.</p>	1963 Aerial
1977-2016	<p>North: The concrete lined channel can be seen in the 1977 aerial photograph. A storage facility, north of the drainage channel, is constructed in 1977 with progressive development over the subsequent years.</p> <p>South: The property south of the subject site contains commercial buildings in the 1977 aerial photograph and the layout remains largely unchanged in the 2016 aerial photograph. The Sunset Pacific Oil Tank Farm can no longer be seen in the 1989 aerial photograph and the land appears to be graded and remains vacant until 2002 when commercial buildings appear.</p> <p>East: The residences to the east remain largely unchanged from the 1963 photograph. The 2016 aerial photograph depicts open pits to the northeast which is the Cal Compact Landfill.</p> <p>West: Development to the west remains largely unchanged from the previous period.</p>	<p>1964-2012 Topo maps</p> <p>1977 – 2012 Aerials</p>

5. Environmental Records Review

5.1 ENVIRONMENTAL DATABASE RECORDS SEARCH

Haley & Aldrich used the electronic database service, Environmental Data Resources (EDR) to complete the environmental records review. The database search was used to identify properties that may be listed in the referenced agency records, located within the ASTM-specified approximate minimum search distances as shown in the table below. A description of each database searched is in Section 11.2 of this report. The complete environmental database report is provided in Appendix D. Pertinent information obtained from the database is summarized in Section 5.3 below.

Database Searched	Approximate Minimum Search Distance	Subject Site Listed?	Number of Sites within Search Distance ¹
1. NPL Sites	1 mile	No	2
2. Delisted NPL Sites	1 mile	No	0
3. CERCLIS ² Sites	0.5 mile	No	5
4. CERCLIS-NFRAP ² Sites	0.5 mile	Yes	4
5. Federal ERNS	Site only	No	Not Applicable
6. RCRA non-CORRACTS TSD Facilities	0.5 mile	No	1
7. RCRA CORRACTS TSD Facilities	1 mile	No	0
8. RCRA Generators	Site & Adjoining	No	5
9. Federal Institutional/Engineering Controls	Site Only	No	Not Applicable
10. State/Tribal Equivalent NPL Sites	1 mile	No	3
11. State/Tribal Equivalent CERCLIS ² Sites	1 mile	Yes	36
12. State/Tribal Registered Storage Tanks	0.5 mile	No	5
13. State/Tribal Landfills and Solid Waste Disposal Sites	0.5 mile	No	16
14. State/Tribal Leaking Storage Tanks	0.5 mile	No	9
15. State/Tribal Institutional Controls/Engineering Controls ⁴	Site Only	Yes	Not Applicable
16. State/Tribal Voluntary Cleanup Sites	0.5 mile	Yes	8
17. State/Tribal Brownfield Sites	0.5 mile	No	0
18. Orphan Site List ³	Site & Adjoining	No	11

Notes:

1. Some sites may be included on multiple databases.
2. The US EPA retired the CERCLIS database in October 2013. In January 2016, the Superfund Enterprise Management System (SEMS), which replaces the CERCLIS database, became active. The CERCLIS database records search included as part of this assessment includes currently ascertainable data from the SEMS and SEMS-Archive databases as reported through the database vendor.
3. Haley & Aldrich also searched the [Orphan Site](#) List provided in the database report for the subject site and sites adjoining the subject site. Orphan sites are those that, due to incorrect or incomplete addresses, could not be mapped.

5.2 ADDITIONAL ENVIRONMENTAL RECORDS OR FILE REVIEW

To supplement the environmental record search, we contacted the following state and local government agencies and searched applicable online databases. If copies of the documents reviewed were obtained, pertinent material is included in Appendix D. Relevant information obtained is included in the appropriate sections of the report and/or discussed in Section 5.3 below.

Agency	Request Sent or Files Searched		Files Exist and are Available for Review	Files Reviewed
	Subject Site	Adjoining Properties		
Department of Toxic Substances Control	Yes	No	Yes	Yes
Los Angeles Regional Water Quality Control Board	Yes	No	Yes	Yes
Los Angeles County Department of Public Health	Yes	No	No	No

Notes:

1. To date, no responses have been received from the Freedom of Information Act (FOIA) requests noted above. Based on the information obtained through our interviews with key site personnel, and our review of other online records, it does not appear that responses to the FOIA requests should affect our conclusions regarding RECs on the site. However, when a response is received, it will be forwarded to WPT Industrial and, if it affects our conclusions regarding the site, WPT Industrial will be informed.
2. The Department of Toxic Substances Control maintains information regarding environmental assessments related to a variety of industries including landfills.
3. The Los Angeles Regional Water Quality Control Board maintains information regarding groundwater quality.
4. The Los Angeles County Department of Public Health maintains information regarding miscellaneous public health data.

5.3 DETAILED DESCRIPTION OF RELEVANT INFORMATION

5.3.1 Subject Site

The subject site was listed under several classifications in the database report. The table below provides a summary of the various listings.

Listing	Description	Potential Impact
CERCLIS-NFRAP (SEMS-ARCHIVE) ENVIROSTOR DEED VCP HIST Cal-Sites HIST CORTESE CA BOND PLAN FINDS	The subject sites listing on various database entries is a reflection of its historical use as the Gardena Valley 1 & 2 Landfill. In Section 3, various environmental investigations have been undertaken to evaluate potential soil, soil vapor & landfill gas, refuse, leachate, and groundwater impacts related to historical landfill operations. These investigations have revealed impacts to the above environmental media to vary degrees. As such, the DTSC has placed deed restrictions on the property requiring that future development must meet design criteria including engineering controls to mitigate surface infiltration of water through the topsoil and a landfill gas extraction and incineration system. A leachate collection and treatment system may be required if leachate is found to be migrating off-site. Groundwater contamination is considered to be minimal based on the data provided.	The historical landfill activity at the subject site is considered a REC.

5.3.2 Nearby Sites

Several sites were listed in the database report within the applicable search radii or identified in regulatory records reviews. Due to their location with respect to the subject site (on the opposite side of a hydrogeologic barrier, distance from the site, location of the site relative to inferred groundwater flow, subsurface utilities and building levels, etc., or their status (closed out release, etc.), several of the sites are not likely to adversely affect the subject site and are not discussed herein. Only those sites adjacent to the subject site and sites with a potential to have impacted the subject site are discussed below. The complete database report and relevant records review information is included in Appendix D.

Montrose Chemical Corporation & Del Amo Synthetic Rubber Plant Sites

The Montrose site and the Del Amo site are separate, but adjacent, Superfund sites that have commingled groundwater contamination. The former Montrose Chemical and Del Amo plants are located in the Harbor Gateway between the Cities of Torrance and Carson. The Montrose site is approximately one-half miles west/northwest and hydrogeologically upgradient of the subject site. The Del Amo site is located approximately 0.25-miles northwest and hydrogeologically upgradient of the subject site. Overall groundwater contamination associated with these two sites has come to be located over an area extending more than 1.3 miles in length, but its extent differs widely with the depth of the water-bearing unit as well as the lateral location being considered.

Montrose Chemical Corporation operated a technical grade dichloro-diphenyltrichlorethane (DDT) pesticide manufacturing plant in Los Angeles from 1947 to 1982. During its 35 years of operation, the Montrose plant released hazardous substances, pollutants, or contaminants, into the surrounding environment, including surface soils, surface drainage and stormwater pathways, sanitary sewers, the Pacific Ocean, and groundwater.

The Del Amo site was occupied by the United States War Assets Administration, which owned a synthetic rubber manufacturing facility in Harbor Gateway at this location, beginning in 1942. The War Assets Administration entered into operating agreements with Shell Oil Company (Shell), Dow Chemical Company, and several other companies, to operate the plant and to produce synthetic rubber for the United States during World War II. In 1955, Shell purchased the facility and began operating it directly. Shell operated the facility until 1972, at which time operations ceased, the plant was dismantled, and the plant buildings were razed. The plant property has been entirely redeveloped with light industrial and commercial enterprises, with the exception of the area at the south-central border of the former plant property, which is owned by Shell and is the location of the "Del Amo Waste Pits." The site did not take on the name "Del Amo" until later. The former Del Amo synthetic rubber plant property covered 270 acres, roughly 21 times the size of the neighboring Montrose plant property.

Investigations performed at both properties indicated that the groundwater contamination from the Del Amo and Montrose Chemical sites were commingled, and the evaluation of remedial alternatives related to groundwater contamination at one site was inseparable from the same evaluation at the other site. In 1995, the EPA informed the Montrose Chemical and Del Amo Respondents that the EPA intended to unite the remedial selection processes with respect to groundwater, thereby leading to a single feasibility study and a dual-site groundwater Record of Decision (ROD). EPA initiated a process to generate a single feasibility study, called a Joint Groundwater Feasibility Study to provide analysis to this ROD. A ROD addressing the groundwater operable unit at the Montrose Chemical and Del Amo Superfund sites was completed in March 1999.

Maps included in the ROD do not identify contamination plumes extending south onto the Site. In fact, the ROD summarizes the contamination plumes as follows: "low-to-moderate-income residential areas lie adjacent to the two former industrial plants. Most of the benzene plume lies under the former Del Amo plant, but some of it lies under the northern edge of the residential zone south of the former plant. Most of the chlorobenzene plume lies under residential and commercial areas south and southeast of the former Montrose plant, although most of this portion of the chlorobenzene plume is in the Middle Bellflower C-Sand and Gage Aquifer, with most of the overlying water table zone being uncontaminated. The TCE plume (as specifically defined in the ROD) lies entirely within industrial areas. An estimated 2,400 homes lie within one mile and 3,000 people live within one quarter mile to the south, southeast, and southwest of the former Montrose plant."

Based on information readily available from the EPA, the Montrose Chemical and Del Amo Superfund sites continue to be remediated by the identified responsible parties under the guidance of the EPA. While the ROD does not indicate a contaminant plume has extended onto the subject site, the plume margins are close to the subject site and there is a lack of monitoring wells to confirm that the groundwater plume has not reached at the subject site. Due to the proximity of the Superfund sites to the subject site, there is the potential for groundwater beneath the subject site to have been adversely impacted by the Superfund site contaminants.

Other Sites

Property Name & Location	Database/ Record Identified	Description	Potential Impact to Subject Site
<p>Cal Compact 20030 S. Main Street</p>	<p>RESPONSE ENVIROSTOR SWF/LF LDS Cortese HIST CORTESE LOS ANGELES CO. HMS NPDES CIWQS CERS Los ANGELES CO LF METHANE RCRA SQG CA BOND EXP. PLAN</p>	<p>Cal Compact is located approximately ¼-mile north-northeast and hydrogeologically cross gradient from the subject site. The approximately 157-acre landfill was a former Class II landfill that accepted at least 250,000 cubic yards of hazardous waste liquids and sludges. The following chemicals have been detected in soils and leachate at the Cal Compact landfill: heavy metals (lead, nickel, arsenic), DDT, herbicides, organic resins, hydrocarbons, and solvents. The landfill was reportedly capped with between 3 and 20 feet of soil. However, methane and VOCs have been detected in soil gas migrating into surface air. Contamination has also been detected in a perched aquifer beneath this landfill. This landfill is adjacent to the Dominguez Channel, which flows to the Los Angeles Harbor. DTSC has identified 14 PRPs associated with this former landfill. A remedial investigation was begun in 1990.</p>	<p>This site potentially contributes to the regional groundwater contamination in the vicinity of the subject site.</p>
<p>Werdin Dump 20402 S. Main Street</p>	<p>SEMS- ARCHIVE LOS ANGELES CO. HMS HIST CORTESE ENVIROSTOR WMUDS/SW AT</p>	<p>The Werdin Landfill site is located approximately 1/8-mile northeast and is hydrogeologically crossgradient to the subject site. A preliminary assessment of this landfill was completed in 1987 and 1988, and site inspections were completed in 2002. This landfill was archived as “NFRAP” on 28 March 2002. The property was operated as the Werdin Landfill from 1964 to 1968, and has been occupied by a mobile home park from 1968 to present.</p>	<p>This site potentially contributes to the regional groundwater contamination in the vicinity of the subject site.</p>

Property Name & Location	Database/ Record Identified	Description	Potential Impact to Subject Site
Gardena Valley Landfill #5 306 W. Torrance Boulevard	SWF/LF HAZNET CERS LOS ANGELES CO LF METHANE HWTS	The Gardena Valley Landfill #5 is located approximately 1/8-mile south and is hydrogeologically downgradient to the subject site. The landfill formerly accepted inert, liquid, and mixed municipal waste. The landfill is reportedly closed and owned by ENI Oil & Gas Inc. This property is associated with the Former Golden Eagle Refinery. There is an ongoing pump and treat remedy in place that is control volatile organic contaminant flux into the Upper Bellflower at the site.	This site potentially contributes to the regional groundwater contamination in the vicinity of the subject site.
Gardena Valley Landfill #4 833 W. Torrance Boulevard	ENVIROSTOR SWF/LF CERS	The Garden Valley Landfill #4 site is located approximately ¼-mile west-southwest and hydrogeologically cross-gradient from the subject site. A preliminary assessment and site inspection reassessment was conducted in 2015. No other information concerning this site was available in the EDR report.	This site potentially contributes to the regional groundwater contamination in the vicinity of the subject site.
Former Golden Eagle Refinery 21000 S. Figueroa St.	SEMS RCRA-TSDF RCRA-LQG RESPONSE ENVIROSTOR CPS-SLIC SWEEPS UST DEED US FIN ASSUR Cortese LOS ANGELES CO. HMS HWP WDR CERS	Golden Eagle Refining Company is located approximately ¼-mile southwest and hydrogeologically downgradient from the subject site. The SLIC database indicates that substances released at this facility are metals, polyaromatic hydrocarbons (PAHs), petroleum hydrocarbons, semi-volatile organic compounds (SVOCs), and volatile organic compounds (VOCs). There has been active remediation at this site including air sparge/SVE and in-situ chemical oxidation to address dissolved phase benzene, toluene, ethylbenzene, and xylene contamination.	This site potentially contributes to the regional groundwater contamination in the vicinity of the subject site.

Property Name & Location	Database/ Record Identified	Description	Potential Impact to Subject Site
Rollins Leasing Corp 20425 Hamilton Avenue	UST AST LUST Cortese CERS HIST UST RCRA NonGen/NLR FINDS ECHO HAZNET	The Rollins Leasing Corp Facility is located approximately ¼-mile northwest and hydrogeologically upgradient to the subject site. A release of an unreported substance occurred on 8 October 1987 and impacted groundwater. The case was closed on 18 September 1997. EDR indicated that other information associated with this case was not available.	This site potentially contributes to the regional groundwater contamination in the vicinity of the subject site.

5.4 VAPOR MIGRATION

The ASTM 1527-13 standard states that "for the purposes of this practice, "migrate" and "migration" refers to the movement of hazardous substances or petroleum products in any form, including, for example, solid and liquid at the surface or subsurface, and vapor in the subsurface". Thus, this section specifies whether or not we perceive a risk of vapor migration to the subject site.

To assess a vapor migration risk, we conducted a detailed review and analysis of the site-specific environmental database report and/or other reasonably ascertainable records to assess whether:

1. Off-site properties have documented chlorinated volatile organic compound (VOC) contamination located within 100 feet of the subject property, or
2. Off-site properties have documented volatile petroleum hydrocarbon contamination within 30 feet of the subject property.

Based on our records review, it is presumed likely that a potential source of vapor migration currently exists beneath the subject site due to the historical landfill operations at the subject site and due to VOC impacted groundwater in the vicinity of the subject site.

6. Site Reconnaissance and Key Personnel Interview(s)

A site visit to observe subject site conditions was conducted by Bryan Shams of Haley & Aldrich, on 21 January 2021. Access to the subject site was provided by Mr. Young Kim.

Haley & Aldrich personnel observed the subject site property which currently consists of approximately 14 acres of vacant land. Haley & Aldrich also observed the exterior portions of the subject site, including the property boundaries, and observed adjoining property conditions from the subject site boundaries and/or public thoroughfares. No weather-related conditions or other conditions that would limit our ability to observe the subject site or adjoining properties occurred during our site visit.

An interview with Mr. Young Kim, the [key site manager](#), was performed in conjunction with the site visit. Per the ASTM Standard, past owners, operators, and occupants of the subject site who are likely to have material information regarding the potential for contamination at the subject property shall be contacted to the extent that they can be identified and that the information likely to be obtained is not duplicative of information already obtained from other sources. Haley & Aldrich was not provided with contact information in order to interview past owners and/or operators at the subject site. Based upon historical data collected from other sources, this potential data gap is not expected to adversely impact the results of this assessment.

The findings of the site visit and interviews are discussed below. Site photographs are included in Appendix E.

ASTM E 1527-13 Standard Section 10.8 requires that, prior to the site visit, the current subject site owner or key site manager and user, if different from the current owner or key site manager, be asked if there are any helpful documents that can be made available for review. Mr. Kim did not provide documents. However, documents provided by WPT Industrial, LP were reviewed and summarized in Section 3.

6.1 CURRENT USE OF THE PROPERTY

The subject site is currently vacant and has been since the termination of the Gardena Valley 1 & 2 Landfill ceased operations in 1959.

6.2 GENERAL DESCRIPTION OF STRUCTURES

There are currently no structures on the subject site.

6.3 USE, STORAGE, AND DISPOSAL OF PETROLEUM PRODUCTS AND HAZARDOUS MATERIALS

Petroleum products and/or hazardous materials were observed or reported to be used, stored, and/or disposed of at the subject site as described below. The subject site operated as a landfill from 1956 to 1959 and were permitted to receive the following refuse:

6.4 OTHER SUBJECT SITE OBSERVATIONS

The table below summarizes items that were observed and/or reported at the subject site during the site visit other than those items related to use, storage, and disposal of petroleum or hazardous materials (described in Section 6.3 above). If items were observed or reported, they are further described either in the table or below.

Description	Observed or Reported at Time of Site Visit	Observations/Comments
Potable Water Supply	No	
Nearest Drinking Water Source	No	
Sewage Disposal System	No	
Septic System	No	
Unidentified Storage Containers	No	
Wastewater Discharge	No	
Stormwater Discharge	No	
Odors	Yes	Landfill odors were noted during the site visit.
PCBs Associated with Electrical or Hydraulic Equipment	No	
Elevators (Traction or Hydraulic)	No	
Vehicle Maintenance Lifts	No	
Emergency Generators	No	
Sprinkler System Pumps	No	
Heating System	No	
Cooling System	No	
Stains or Corrosion on Floors, Walls, or Ceilings	No	
Floor Drains	No	
Sumps	No	
Catch Basins	No	
Pits, Ponds, Lagoons, and Pools of Liquid	No	
Stained Soil or Pavement	No	
Stressed Vegetation	Yes	Vegetation was noted as being stressed.
Solid Waste and Evidence of Waste Filling	Yes	Previously operated as the Gardena Valley 1 & 2 Landfill.
Dry Wells	No	
Monitoring Wells	Yes	Six 2-inch vapor wells and two uncapped metal pipes approximately 6- to 8-inches in diameter.
Water Supply Wells	No	
Irrigation Wells	No	
Injection Wells	No	

Description	Observed or Reported at Time of Site Visit	Observations/Comments
Abandoned Wells	Yes	On-site groundwater monitoring wells GW-1, GW-2, and GW-3 were abandoned in 1990 during preceding groundwater operable unit investigations, reportedly under DTSC supervision. Evidence of these wells was not visible during the site visit.

Notes:

1. *N/A items are those that were not observed or reported and/or not anticipated to be present given the nature of the site (e.g., building features not present on an undeveloped property).*

6.5 ADJOINING PROPERTY OBSERVATIONS

North of the subject site lies a concrete-lined drainage channel beyond which is a self-storage facility. East of the subject site is Main Street beyond which lies Vista Linda Mobile Estates, various private residences, South Bay Vocational Center, and True Self Dance Studio. South of the subject site is a business park consisting of Glory Christian Fellowship, Mission Ebenezer Church, The International Printing Museum, Waste Tire Product Innovations, Kelly Paper Store, and other offices/stores. West of the site lies S. Figueroa Street and Interstate-110. No potential environmental impacts were found when observing the adjoining property conditions.

6.6 USER RESPONSIBILITIES

The AAI Rule requires that the User of the report consider the following:

- Whether the user has specialized knowledge about previous ownership or uses of the subject site that may be material to identifying RECs;
- whether the user has determined that the subject site’s Title contains environmental liens or other information related to the environmental condition of the property, including engineering and institutional controls and Activity and Use Limitations (AULs), as defined by ASTM;
- whether the user is aware of commonly known or reasonably ascertainable information about the subject site including whether or not the presence of contamination is likely on the subject site and to what degree it can be detected; and
- whether the user has prior knowledge that the price of the subject site has been reduced for environmentally related reasons.

While such information is not required to be provided by the environmental professional(s), the information can assist the environmental professional in identifying recognized environmental conditions. The “All Appropriate Inquiries” Final Rule (40 CFR Part 312) requires that these tasks be performed by or on behalf of a party seeking to qualify for an LLP to CERCLA liability.

Haley & Aldrich was provided with a completed user responsibilities questionnaire, which is attached in Appendix F.

7. Findings and Opinions

7.1 DATA GAPS

Our ability to identify and evaluate RECs at the subject site is conditioned upon [data gaps](#) identified as part of this Phase I.

No significant data gaps were identified during the performance of this Phase I. Thus, it is our opinion that sufficient information was obtained to identify subject site conditions indicative of releases or threatened releases of hazardous substances and petroleum hydrocarbons. Our opinion is limited by the conditions prevailing at the time our work is performed and the applicable regulatory requirements in effect. However, the soil, soil vapor, leachate, and groundwater data collected at the subject site was collected in the 1980s to early 1990s. No recent data has been collected to evaluate current groundwater conditions at the subject site.

7.2 RECOGNIZED ENVIRONMENTAL CONDITIONS

The ASTM E 1527-13 Standard defines an REC in part as “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.”

Our opinion regarding a REC's potential impact on the subject site is based on the scope of our work, the information obtained during the course of our work, the conditions prevailing at the time our work was performed, the applicable regulatory requirements in effect at the time our work was performed, our experience evaluating similar sites, and on our understanding of the client's intended use for the subject site.

The following RECs listed below were identified in connection with the subject site.

REC #1: Former Operation of the Gardena Valley 1 & 2 Landfill

The subject site was operated as the Gardena Valley 1 & 2 Landfill between November 1956 and October 1959, which accepted Class II waste including municipal waste and potentially industrial waste. Soil at the subject site was reportedly originally excavated as a borrow site for the construction of the Interstate-110 freeway located to the west, and the resultant on-site excavation was subsequently utilized as a municipal landfill. The excavation was used as a landfill without placement of an engineered liner and without current-day practices which employ landfill gas extraction / monitoring and leachate collection systems. The landfill was subsequently covered with soil from an undocumented source. Analysis of this cover soil during previous site investigations indicated the presence of concentrations of metals, pesticides, and organics, including arsenic, DDT, polychlorinated biphenyls (PCBs), diethylphthalate, and di-n-butylphthalate. Organic chemicals and methane have been detected in landfill gas. Groundwater in the vicinity of the subject site has been impacted with volatile organic compounds.

REC #2: Former Onsite Operations Associated with the Golden Eagle Refinery

According to aerial photographs and documentation in reports reviewed for this Phase I, the subject site was first developed in the 1940s with buildings, storage yards, and possible aboveground storage tanks (containing unknown materials) and wastewater ponds associated with the Golden Eagle Refinery which was located to the south of Torrance Boulevard. These structures were decommissioned by 1956. These operations may have had the potential to have impacted subsurface soil and groundwater beneath the subject site. However, soil was excavated to a maximum depth of approximately 37 feet below ground surface during construction of the landfill, and therefore any impacted soil which may have existed from these former operations may have been excavated. Furthermore, previous sampling in the area did not identify petroleum hydrocarbon impacted soil and groundwater. Groundwater beneath the subject site has been impacted from a variety of sources in the vicinity of the subject site.

REC #3: Potential Impacts from Offsite Sources due to Former Landfills Operated in the Vicinity

The following landfills were formerly operated in the vicinity of the subject site: Gardena Valley 4 Landfill (located west-southwest and crossgradient), Gardena Valley 5 Landfill (located south and downgradient), Cal Compact Landfill (located north-northeast and crossgradient), Werdin Dump (located northeast and crossgradient), and the Southwest Conservation Landfill 4 (located north and upgradient). These landfills have reportedly collectively impacted regional groundwater quality in the vicinity of the subject site.

REC #4: Montrose and Del Amo Superfund Sites

The subject site is located within ½-mile south (and hydrogeologically downgradient) of a National Priority List (NPL) site that actually consists of two adjacent properties: Montrose Chemical and Del Amo Synthetic Rubber Plants. Although the United States Environmental Protection Agency's 1999 Record of Decision (ROD) does not indicate that a contamination plume has extended to beneath the subject site, due to the close proximity of the upgradient NPL sites to the subject site, there is the potential that groundwater beneath the subject site may have been or might be impacted in the future by the past releases from these NPL sites.

7.3 CONTROLLED RECOGNIZED ENVIRONMENTAL CONDITIONS

The ASTM E 1527-13 Standard defines a CREC 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 with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.

CRECs were not identified in connection with the subject site.

7.4 HISTORICAL RECOGNIZED ENVIRONMENTAL CONDITIONS

The ASTM E 1527-13 Standard defines an HREC as an environmental condition "a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls

(for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).”

HRECs were not identified in connection with the subject site.

7.5 DE MINIMIS CONDITIONS

The ASTM E 1527-13 Standard defines *de minimis* conditions as those conditions which “do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.” The ASTM E 1527-13 Standard notes that “conditions determined to be *de minimis* are not recognized environmental conditions.”

De minimis conditions were not identified in connection with the subject site.

8. Conclusions

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of the ASTM Practice E 1527 of Gardena Valley 1 & 2 Landfill, in Carson, California, the property. Any exceptions to or deletions from, this practice are described in Section 1.4 of this report.

This assessment has revealed no evidence of recognized environmental conditions (RECs) in connection with the property except for the following:

- REC #1: Former Operation of the Gardena Valley 1 & 2 Landfill
- REC #2: Former Onsite Operations Associated with the Golden Eagle Refinery
- REC #3: Potential Impacts from Offsite Sources due to Former Landfills Operated in the Vicinity
- REC #4: Montrose and Del Amo Superfund Sites

Refer to Section 7.2 above for our opinion regarding those RECs listed above.

9. Environmental Professional Certification

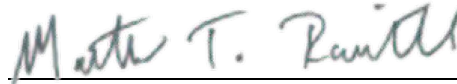
The undersigned declare the following:

We declare that, to the best of our professional knowledge and belief, we meet the definition of [Environmental Professional](#) as defined in §312.10 of 40 CFR Part 312 and

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



Keith A. Foster
Senior Technical Specialist



Mathew T. Raitel
Senior Technical Specialist

10. Credentials

This Phase I report was prepared by Keith Foster, under the direct supervision of Mathew Raithel, who served as the Environmental Professional(s) for this project. Qualification information for the project personnel is provided below.

Keith Foster
Senior Technical Specialist

This report was prepared by Keith Foster, who served as the project geologist for this project. Mr. Foster has over 10 years of experience managing and conducting Phase I and Phase II environmental site assessments, investigations, and remedial implementation programs throughout California, Arizona, Florida, and abroad. His experience includes commercial and industrial facilities, defense sites, power plants, and drinking water infrastructure.

Mathew Raithel
Senior Technical Specialist

This report was prepared by Mathew Raithel, who served as the project scientist for this project. Mr. Raithel has over 20 years of experience managing and conducting Phase I and Phase II environmental site assessments and investigations throughout Southern California and Arizona, including commercial and industrial facilities and linear projects such as electrical transmission lines and natural gas pipelines.

11. Glossary and Other Descriptions

11.1 GLOSSARY

All Appropriate Inquiry (AAI) — that inquiry constituting “all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice” as defined in CERCLA, 42 U.S.C §9601(35)(B), that will qualify a party to a commercial real estate transaction for one of threshold criteria for satisfying the LLPs to CERCLA liability (42 U.S.C §9601(35)(A) & (B), §9607(b)(3), §9607(q); and §9607(r)), assuming compliance with other elements of the defense.

Business Environmental Risk — a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in this practice. Consideration of business environmental risk issues may involve addressing one or more non-scope considerations.

Controlled Recognized Environmental Condition (CREC) — 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).

Data Gap — a lack of or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information. Data gaps may result from incompleteness in any of the activities required by this practice, including, but not limited to site reconnaissance (for example, an inability to conduct the site visit), and interviews (for example, an inability to interview the key site manager, regulatory officials, etc.).

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

Environmental Professional — a person meeting the education, training, and experience requirements as set forth in 40 CFR §312.10(b).

Historical Recognized Environmental Condition (HREC) — 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, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

Key Site Manager — the person identified by the owner or operator of a property as having good knowledge of the uses and physical characteristics of the property.

Material Threat — a physically observable or obvious threat which is reasonably likely to lead to a release that, in the opinion of the environmental professional, is threatening and might result in impact to public health or the environment. An example might include an aboveground storage tank system that contains a hazardous substance and which shows evidence of damage. The damage would represent a material threat if it were deemed serious enough that it may cause or contribute to tank integrity failure with a release of contents to the environment.

Orphan Site — (not ASTM E 1527-13 definition) — sites that could not be mapped due to poor or inadequate address information.

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

11.2 DESCRIPTIONS OF DATABASES SEARCHED

Numerous regulatory databases were searched during this Phase I. Each database reviewed is described in the database report presented in Appendix D. Those databases required by the ASTM E 1527-13 Standard are identified below.

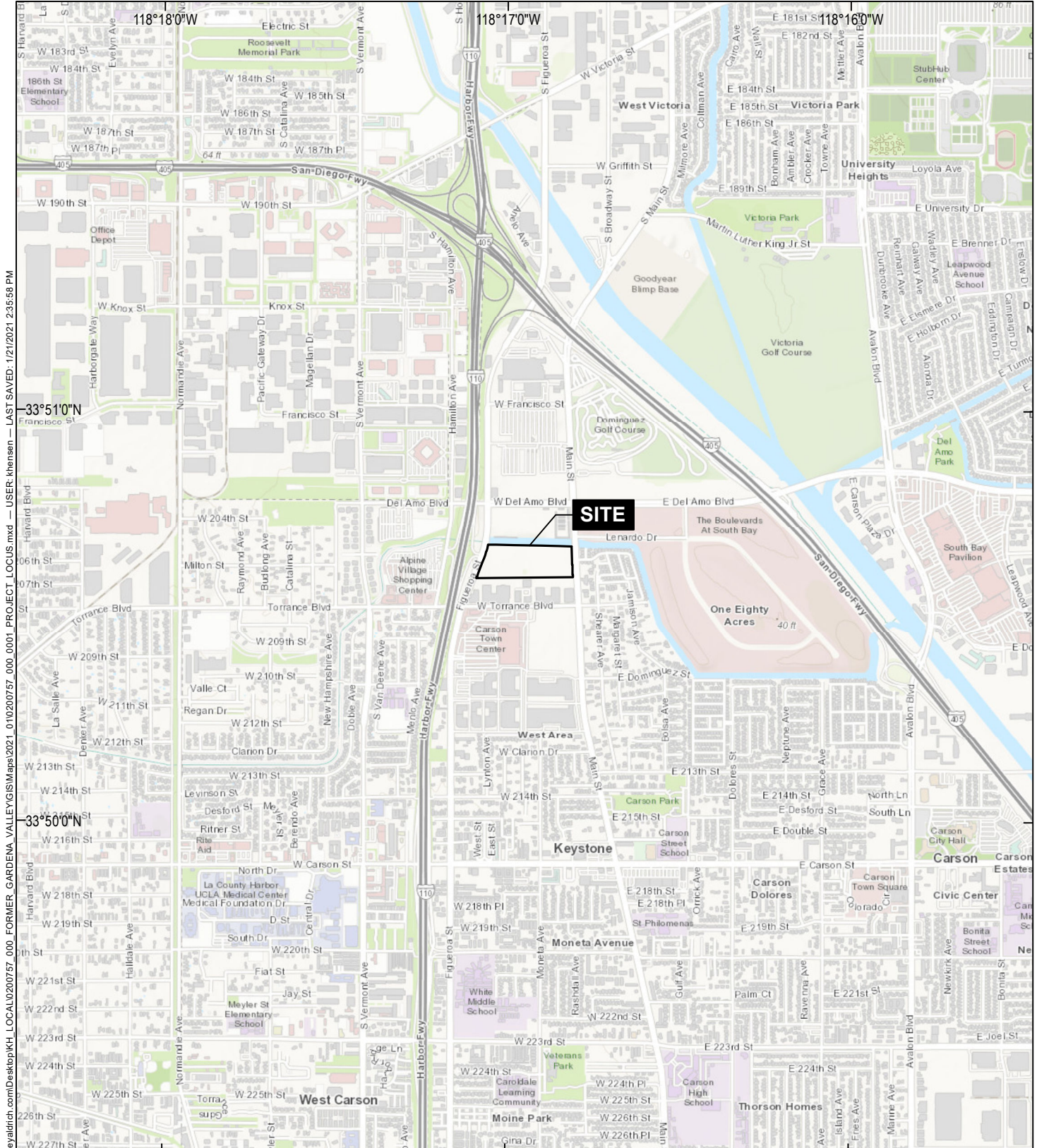
1. **NPL Sites:** The National Priorities List (NPL) is a list of contaminated sites that are considered the highest priority for cleanup by the U.S. Environmental Protection Agency (USEPA).
2. **Delisted NPL Sites:** The Delisted National Priorities List (NPL) is a list of formal NPL sites formerly considered the highest priority for cleanup by the USEPA that met the criteria of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) for deletion from the NPL because a no further response was appropriate.
3. **CERCLIS Sites:** The Comprehensive Environmental Response, Compensation, and Liability Act Information System (CERCLIS) list identifies sites which are suspected to have contamination and require additional investigation to assess whether they should be considered for inclusion on the NPL.
4. **CERCLIS-NFRAP Sites:** CERCLIS-NFRAP status indicates that a site was once on the CERCLIS List but has No Further Response Actions Planned (NFRAP). Sites on the CERCLIS-NFRAP List were removed from the CERCLIS List in February 1995 because, after an initial investigation was performed, no contamination was found, contamination was removed quickly, or the contamination was not significant enough to warrant NPL status.
5. **Federal ERNS:** The Federal Emergency Response Notification System (ERNS) list tracks information on reported releases of oil and hazardous materials.
6. **RCRA non-CORRACTS TSD facilities:** The Resource Conservation and Recovery Act (RCRA) non-CORRACTS TSD Facilities List tracks facilities which treat, store, or dispose of hazardous waste and are not associated with corrective action activity.

7. **RCRA CORRACTS TSD facilities:** The RCRA CORRACTS TSD Facilities list catalogues facilities that treat, store, or dispose of hazardous waste and have been associated with corrective action activity.
8. **RCRA Generators:** The RCRA Generator list is maintained by the USEPA to track facilities that generate hazardous waste.
9. **Federal Institutional Controls/Engineering Controls:** The Federal Institutional Control list and Engineering Control list are maintained by the USEPA. Some Institutional Control and Engineering Control information may not be made publicly available and therefore will not be included on this registry.
10. **State and Tribal Equivalent NPL/CERCLIS Sites:** The (ASTM E 1527-13 Standard) requires searching “State and Tribal Equivalent NPL Sites.” In California, the equivalent NPL is the Response, which is maintained by the Department of Toxic Substances Control.
11. **State and Tribal Equivalent CERCLIS Sites:**
The (ASTM E 1527-13 Standard) requires searching “State and Tribal Equivalent CERCLIS Sites.” In California, the equivalent CERCLIS is the ENVIROSTOR database, which is maintained by the Department of Toxic Substances Control.
12. **State and Tribal Registered Storage Tanks:** The SWRCB maintains a list of aboveground and underground storage tanks registered with the SWRCB.
13. **State and Tribal Landfills and Solid Waste Disposal Sites:** DTSC maintains a list of regulated waste disposal sites.
14. **State and Tribal Leaking Storage Tanks:** SWRCB maintains a list of Leaking Storage Tanks (LUST/LAST). The LUST/LAST lists are a listing of release sites that have an Underground or Aboveground Storage Tank listed as the source.
15. **State and Tribal Institutional Controls/Engineering Controls:** DTSC maintains a list of sites with Institutional controls or Engineering controls in place.
16. **State and Tribal Voluntary Cleanup Sites:** DTSC maintains a list of Voluntary Cleanup sites.
17. **State and Tribal Brownfield Sites:** DTSC maintains a list of Brownfield sites which includes properties where redevelopment or re-use may be compromised by the presence or presumed presence of hazardous materials or petroleum.

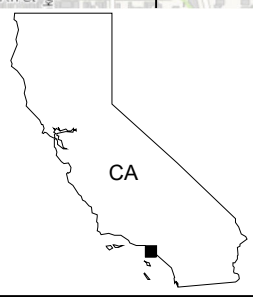
12. References

1. Topographic Map, Torrance Quadrangle, United States Geological Survey 7.5 minute series, 2012.
2. Haley & Aldrich, Inc., site visit conducted by Bryan Shams on 21 January 2021.
3. Young Kim, interview with Haley & Aldrich, 21 January 2021.
4. Environmental Data Resources, Database Report, dated 19 January 2021.

FIGURE



GIS FILE PATH: C:\Users\kthensen\OneDrive - haleyaldrich.com\Desktop\KH_LOCAL\0200757_000_FORMER_GARDENA_VALLEY\GIS\Maps\2021_0110\200757_000_0001_PROJECT_LOCUS.mxd — USER: kthensen — LAST SAVED: 1/21/2021 2:35:58 PM



MAP SOURCE: ESRI
 SITE COORDINATES: 33°50'38"N, 118°16'55"W

**HALEY
ALDRICH**

FORMER GARDENA VALLEY NO. 1 AND 2 LANDFILL
 CARSON, CALIFORNIA

PROJECT LOCUS

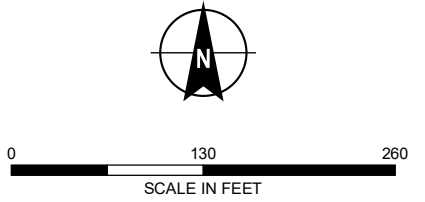
APPROXIMATE SCALE: 1 IN = 2000 FT
 JANUARY 2021

FIGURE 1



LEGEND
SITE BOUNDARY

NOTES
1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. ASSESSOR PARCEL DATA SOURCE: LOS ANGELES COUNTY
3. AERIAL IMAGERY SOURCE: ESRI



HALEY ALDRICH FORMER GARDENA VALLEY NO. 1 AND 2 LANDFILL
CARSON, CALIFORNIA

SITE PLAN

JANUARY 2021

FIGURE 2