Appendix F. Phase I Soil Report



Phase I Environmental Site Assessment and Document Review

Former HITCO Carbon Composites Property 1600 and 1606 West 135th Street Gardena, California

> Prepared for: Overton Moore Properties 19700 South Vermont Avenue, Suite 101 Torrance, California 90502

> > Prepared by: Ardent Environmental Group, Inc. 1827 Capital Street, Suite 103 Corona, California 92880

> > > July 20, 2021 Project No. 101251001



July 20, 2021 Project No. 101251001

Mr. Jason Hines Overton Moore Properties 19700 South Vermont Avenue, Suite 101 Torrance, California 90502

Subject: Phase I Environmental Site Assessment and Document Review Former HITCO Carbon Composites Property 1600 and 1606 West 135th Street Gardena, California

Dear Mr. Hines:

Ardent Environmental Group, Inc. (Ardent) has performed a Phase I Environmental Site Assessment (ESA) and Document Review of the above-referenced property (site). The work was completed in general accordance with the Professional Services Agreement dated May 24, 2021, between Overton Moore Properties and Ardent. The attached report presents our methodology, findings, opinions, and conclusions regarding the environmental conditions at the site. We appreciate the opportunity to be of service to you on this project. If there are any questions, please feel free to call the undersigned at your convenience. We appreciate this opportunity to be of service.

Sincerely,

Ardent Environmental Group, Inc.

Matthew Ponkh ...

Matthew Penksaw Staff Scientist

PAR/MP/aw

Distribution: (1) Addressee

Paul A. Roberts, P.G. Principal Geologist

TABLE OF CONTENTS

PAGE

EXI	ECUTI	VE SUMMARY	1
1.	INTR	ODUCTION	7
	1.1.	Purpose of Phase I ESA	7
	1.2.	Involved Parties	9
	1.3.	Scope of Work	9
	1.4.	Limitations and Exceptions	.10
	1.5.	Special Terms and Conditions	.11
	1.6.	User Reliance	.11
	1.7.	Physical Limitations	.11
	1.8.	Data Gaps	.11
2.	GENI	ERAL SITE CHARACTERISTICS	.11
	2.1.	Location and Legal Description	.12
	2.2.	Site Description and Current Site Uses/Operations	.12
		2.2.1. Site Description	.12
		2.2.2. Occupants	.12
		2.2.3. Heating and Cooling Systems	.12
		2.2.4. Sewage Disposal/Septic Systems	.13
		2.2.5. Potable Water	.13
	2.3.	Adjacent Properties	.13
3.	USEF	R PROVIDED INFORMATION	.13
	3.1.	Current Title Information	.13
	3.2.	Environmental Liens or Activity and Use Limitations	.14
	3.3.	Specialized Knowledge	.14
	3.4.	Commonly Known or Reasonably Ascertainable Information	.14
	3.5.	Valuation Reduction for Environmental Issues	.14
	3.6.	Reason for Performing Phase I ESA	.14
	3.7.	Other User Provided Information	.14
		3.7.1. Historical Land Use and Operations	.16
		3.7.2. Acquisition Agreement	.16
		3.7.3. Chemical Uses and Initial Investigations	.16
		3.7.4. Initial Investigations and Regulatory Involvement	.17
		3.7.5. 2014 Phase I ESA by Environ, dated July 2014	.17
		3.7.6. Human Health Risk Assessments by Parsons, dated 2010 and 2014	.21
		3.7.7. Previous Investigations at HITCO I Property, dated 1993 through 2014	.21
		3.7.8. 2016 Subsurface Investigation by Ramboll/Environ, dated June 10, 2016	.23
		3.7.9. 2018 Phase I ESA by HMC, dated January 16, 2018	.25
		3.7.10. 2020 Phase I ESA by Ramboll, dated November 2020	.26
		3.7.11. Ardent's Evaluation of the Data	.28
4.	PHYS	SICAL SETTING	.33
	4.1.	Site Topography	.33
	4.2.	Geology	.33
	4.3.	Oil and Gas Maps	.33
	4.4.	Site Hydrology	.33



		4.4.1. Surface Waters	.34
		4.4.2. Groundwater	.34
5.	HIST	ORICAL LAND USE	.36
	5.1.	Summary of Historical Land Use of the Property	.36
	5.2.	Summary of Historical Land Use of Adioining Properties	.37
	5.3.	Fire Insurance Rate Maps.	.37
	5.4	Historical Aerial Photographs.	.37
	5.5	Building Departments	.37
	5.6	City Directories	.38
	5.7.	Interviews	.38
	••••	5.7.1. Interview with Owner	.38
		5.7.2. Interview with Site Manager	.38
		5.7.3. Interviews with Occupant	.38
		5.7.4. Interviews with Local Government Officials	.39
		5.7.5. Interviews with Others	.39
	5.8.	Previous Reports and Documents	.39
6.	SITE	RECONNAISSANCE	.39
	61	Use and Storage of Hazardous Substances and Petroleum Products	41
	62	Storage and Disposal of Hazardous Wastes.	.41
	63	Unidentified Substance Containers	.42
	6.4.	Aboveground Storage Tanks (ASTs) and Underground Storage Tanks (USTs)	.42
	6.5.	Evidence of Releases	.42
	6.6.	Polychlorinated Biphenyls (PCBs)	.42
	6.7.	Suspect Asbestos-Containing Building Materials (ACMs)	.42
	6.8.	Lead Based Paint (LBP)	.43
	6.9.	Indications of Water Damage or Mold Growth	.43
	6.10.	Wastewater Systems	.43
	6.11.	Stormwater Systems	.43
	6.12.	Wells	.43
	6.13.	Other Subsurface Structures	.43
	6.14.	Other Issues	.43
7.	ENVI	RONMENTAL DATABASE SEARCH	.43
	7.1	Federal National Priorities List (NPL): Distance Searched – 1 mile	44
	7.2	Federal Delisted NPL Distance Searched – 1 mile	44
	73	Federal Comprehensive Environmental Response. Compensation and Liability	•••
		Information System (CERCLIS) List: Distance Searched – 0.5 mile	.45
	7.4	Federal Corrective Action Report (CORRACTS): Distance Searched – 1 mile	45
	7.5.	Federal Resource Conservation and Recovery Act (RCRA) Treatment. Storage.	
		and Disposal Facilities (TSDF) List: Distance Searched – 0.5 mile	.45
	7.6.	Federal RCRA Generators List: Distance Searched – Site and Adioining Properties	.45
	7.7.	Federal Institutional Control/Engineering Control Registries: Distance Searched –	
		Site	.46
	7.8.	Federal Emergency Response Notification System (ERNS) List: Distance	
		Searched – Site	.47
	7.9.	EnviroStor Database (EnviroStor) or State-Equivalent CERCLIS: Distance	
		Searched – 1 mile	.47
	7.10.	State Solid Waste Landfill Sites (SWLF): Distance Searched – 0.5 mile	.47



	7.11. State Leaking Underground Storage Tank (LUST) Lists: Distance Searched –	40
	7.12. State Underground Storage Tank (UST) and Aboveground Storage Tank (AST)	48
	Registration List: Distance Searched – Site and Adjoining Properties	48
	7.13. State Voluntary Cleanup Programs (VCPs): Distance Searched – 0.5 mile	49
	7.14. Indian Reservations: Distance Searched – 1 mile	49
	7.15. Other Non-ASTM and AAI Database: Distance Searched – Site	49
8.	VAPOR ENCROACHMENT CONDITION (VEC)	50
9.	REGULATORY RECORDS REVIEW	50
10.	FINDINGS, OPINIONS AND CONCLUSIONS	51
	10.1. Findings and Opinions	51
	10.2. Conclusions	54
11.	RECOMMENDATIONS	55
12.	REFERENCES	57
13.	QUALIFICATIONS STATEMENT AND SIGNATURE OF ENVIRONMENTAL	
	PROFESSIONAL	58

<u>Tables</u>

Table 1 – Summary	f VOCs in Soil During	Ramboll/Environ's 2016	Phase II Investigation
-------------------	-----------------------	------------------------	------------------------

- Table 2 Summary of VOCs in Soil Gas During Ramboll/Environ's 2016 Phase II Investigation
- Table 3 Areas of Concern, Previous Investigations, and Recommendations for Further Work

Figures

- Figure 1 Site Location Map
- Figure 2 Former HITCO Carbon Composites Property and Surrounding Vicinity
- Figure 3 Property Addresses and APNs
- Figure 4 Site Plan and Building Numbers
- Figure 5 Key Potential Source Areas
- Figure 6 Well Location Map
- Figure 7 Groundwater Elevation Contour Map Zone A
- Figure 8 PCE in Groundwater Zone A
- Figure 9 TCE in Groundwater Zone A
- Figure 10 Cis-1,2-DCE in Groundwater Zone A
- Figure 11 Concentrations of PCE in Soil Collected by Ramboll in 2016
- Figure 12 Concentrations of VOCs in Soil Gas Collected by Ramboll in 2016
- Figure 13 Recognized Environmental Condition

Appendices

- Appendix A Photographic Documentation
- Appendix B Client Provided Information
- Appendix C Previous Environmental Reports
- Appendix D Historical Information
- Appendix E Environmental Database Report
- Appendix F Resumes



EXECUTIVE SUMMARY

Ardent Environmental Group, Inc. (Ardent) was retained by Overton Moore Properties (OMP) to perform a Phase I Environmental Site Assessment (ESA) and Document Review of the former HITCO Carbon Composites, Inc. (HITCO) facility located at 1600 and 1606 West 135th Street in the city of Gardena, California ("site," "subject property," or "HITCO II property"). For over 50 years, the site was formerly part of a larger property that was occupied by various owners including British Petroleum Advanced Materials (BP) and HITCO Carbon Composites, Inc. (HITCO; collectively referred to herein as the "larger property" or the "HITCO facility"). An approximately 4.69-acre portion of the larger property, at 1720 West 135th Street, was sold to OMP in 2015 for commercial redevelopment (referred to herein as the "divested property" or the "HITCO I property"). OMP is now considering purchasing approximately 10.78-acres of the remaining larger property is referred to herein as the "HITCO II property"). The remaining portion of the larger property.

The larger property has been used to manufacture silica and carbon-based products for aerospace and commercial applications. A number of environmental investigations and subsequent soil remediation have been completed on the site. These releases have impacted groundwater with volatile organic compounds (VOCs) which are being remediated by BP. OMP is considering purchasing the site for partial commercial redevelopment. Document review and site assessment activities for this report were conducted between May 24, 2021, and June 9, 2021.

In summary, the following items were noted:

- The site and larger property were vacant land or used for agricultural purposes from at least 1923 to 1947. During this time, the northern portion of the site contained a residential building. From at least 1947 through the late-1950s, the larger property was reportedly used for plastics manufacturing purposes. Most of the existing buildings on the site were noted in a 1952 aerial photograph. Beginning in approximately 1961, HITCO began occupying the larger property for the manufacture of silica and carbon-based products for aerospace and commercial applications. The site has been used for office, manufacturing, and warehouse purposes since this time. Currently, AVCorp Composite Fabricators, Inc. (AVCorp) occupies the site for similar manufacturing purposes.
- Since at least 1993, a number of investigations have been completed at the site and larger property. Soil, soil gas, and groundwater at the site and on the remaining HITCO property have been found to be impacted with VOCs, namely tetrachloroethene (PCE) and trichloroethene (TCE). Soil and groundwater characterization and remediation are being completed under the direction and oversight of the California Regional Water



Quality Control Board, Los Angeles Region (LARWQCB) under a voluntary basis. Onsite soil characterization and remediation has been completed by HITCO. Groundwater characterization and monitoring for the larger property, including the site, have been completed by BP.

- There are currently 28 groundwater monitoring wells on the site that are periodically monitored by BP as part of its on-going groundwater investigation/remediation for the larger property. Shallow groundwater beneath the site has been measured at a depth of approximately 22 to 25 feet below the ground surface (bgs) and flows in a southeasterly direction. BP is currently completing semi-annual groundwater monitoring on a voluntary basis (i.e., no Cleanup and Abatement Order or Consent Order has been issued). The site vicinity has been used for industrial/manufacturing purposes for over 50 years. Some of the adjacent facilities may have contributed to the VOC groundwater issues.
- In 2001, McLaren/Hart prepared a comprehensive FS that was presented to the LARWQCB for review and approval. The 2001 FS included a review of all investigations completed to-date which identified 27 areas of concern, 20 of which were located on the HITCO II property. The main chemicals of concern were VOCs, namely PCE, TCE, and cis-1,2-deichloroethene (cis-1,2-DCE), which had affected soil, soil gas, and groundwater. Based on these investigations, five areas of concern which were located on-site (Areas 14b, 14c, 11, 13, and 24) were determined to need remediation due to elevated concentrations of VOCs in soil which threatened groundwater. These areas were subsequently remediated using soil vapor extraction (SVE) under the direction and oversight of the LARWQCB. Following operation of the SVE, the LARWQCB agreed that no further in-situ remediation was warranted. Although a no further action (NFA) letter is pending following completion of a Remedial Action Plan (RAP) for groundwater remediation, this work is currently being completed by BP.
- Residual VOC contamination in soil gas has been evaluated for possible human health risks due to vapor intrusion on the HITCO I and HITCO III properties. During completion of the human health risk assessments (HHRAs) on the HITCO III property, the southern buildings on HITCO II were also evaluated. Based on the results, no immediate human health risk was identified for current occupants of the site, or for occupants on the HITCO I and III properties.
- Ramboll/Environ completed a Phase II investigation in 2016 (post-SVE remediation) to further assess current site conditions (soil and soil gas) in the upper 10 feet of soil in selected areas of the site, including former areas of concern and in random locations. These data were evaluated to assess areas that might need further soil remediation prior to proposed site redevelopment. The evaluation was based on the fact that geotechnical requirements will likely include reworking soils to a depth of approximately 5 feet bgs during future redevelopment. Based on these data, Ramboll/Environ concluded that (1) some areas of the site will need to be further remediated by excavation and off-site disposal due to elevated VOCs in soil and/or soil gas, (2) a Soil Management Plan (SMP) will need to be prepared and implemented during redevelopment, including air emission monitoring, and (3) future buildings will need to be constructed with vapor control systems (i.e. vapor barriers) for precautionary measures. It should be noted that Ramboll/Environ used wrong regulatory screening values while evaluating the data and used old data that was collected prior to soil remediation activities.
- Ardent compared the 2016 data collected by Ramboll/Environ to current cleanup guidelines that are typically accepted by the LARWQCB, including the California



Regional Water Quality Control Board, San Francisco Bay Region Environmental Screening Levels (SFRWQCB-ESLs) for the protection of groundwater and the California Department of Toxic Substances Control Screening Levels and EPA Regional Screening Levels for the protection of human health through possible vapor intrusion at industrial/commercial properties (DTSC-SLi and EPA-RSLi); modifying the ambient indoor air screening levels using a 0.0005 attenuation factor and 10E-5 cancer risk factor. Based on Ardent's evaluation of current data and information obtained during completion of this Phase I ESA, the following areas of possible environmental concern were identified.

Possible Vapor Intrusion – Ramboll/Environ installed 27 soil borings throughout the site which were used to collect soil gas samples. Of the 27 sample points, only four indicated concentrations of VOCs exceeding the regulatory screening values (borings B08 associated with Area 6, B22 associated with Area 14b, and B25 and B27 associated with Areas 14c and 24). These sample points were located on the outer edges of the property (i.e., outside the location of future building pads) and were only slightly above the conservative screening values. Three of the locations were also noted in areas of previous SVE operations (Areas 14b, 14c, and 24), which have been approved by the LARWQCB as needing no further remediation. Due to the possible vapor intrusion issues, this feature would be considered a recognized environmental condition (**REC No. 1**).

Historical Industrial Activities – Due to more than 70 years of industrial/manufacturing activities completed at the site, it is likely that other unknown environmental conditions may be encountered during grading or redevelopment activities. These possible concerns would be considered an REC (REC No. 2).

Area 2 – Former Diesel Underground Storage Tank (UST): A 20,000-gallon diesel fuel UST was removed from the site in 1992 under the direction and oversight of the Los Angeles County Department of Public Works (LACDPW). The case was transferred to the LARWQCB. Following removal, approximately 2,400 cubic yards of impacted soil were excavated and disposed of off-site. Laboratory results of confirmation soil samples indicated no detectable to low concentrations of petroleum hydrocarbons. Based on these results, the LARWQCB issued a NFA letter on May 15, 1996. This former UST would be considered a historical-REC (HREC No. 1).

Area 6 – Former Acetone UST: During the Ramboll/Environ 2016 Phase II investigation and as noted above, elevated concentrations of PCE were reported in soil gas in boring B08. Although these soil gas concentrations would not be considered an environmental concern, no soil samples were analyzed. If elevated concentrations of VOCs are discovered in discrete soil samples exceed human health risk or protection of groundwater criteria, soil remediation may be needed. The lack of soil sampling in this area would be considered an REC (**REC No. 3**).

Area 11 – Surface Drainage Sump: During completion of the 2001 FS, Area 11 was noted as an environmental concern due to elevated concentrations of VOCs in soil. This area was subsequently remediated using SVE under the direction and oversight of the LARWQCB. Following operation of the SVE, the LARWQCB agreed that no further in-situ remediation was warranted. Although a NFA letter is pending following completion of a RAP for groundwater remediation, this work is currently



being completed by BP. Based on this information, Area 11 would be considered an HREC **(HREC No. 2)**.

Area 14b – Adjacent East of "Not HITCO Property": Elevated concentrations of PCE have been reported in shallow soil (boring B22, up to 10 feet bgs) that exceed the regulatory screening level for the protection of groundwater; the lateral extent of which is unknown. This detection would be considered an REC (REC No. 4).

Area 14c – Adjacent East of "Not HITCO Property": Elevated concentrations of PCE have been reported in shallow soil (boring B27, up to 5 feet bgs) that exceed the regulatory screening level for the protection of groundwater; the lateral extent of which is unknown. This detection would be considered an REC (REC No. 5).

Area 24 – Pump House: During completion of the 2001 FS, Area 24 was noted as an environmental concern due to elevated concentrations of VOCs in soil. This area was subsequently remediated using SVE under the direction and oversight of the LARWQCB. Following operation of the SVE, the LARWQCB agreed that no further in-situ remediation was warranted. Although a NFA letter is pending following completion of a RAP for groundwater remediation, this work is currently being completed by BP. Based on this information, Area 24 would be considered an HREC (HREC No. 3).

Boring B16: Elevated concentrations of PCE have been reported in shallow soil (boring B16, up to 5 feet bgs) that exceed the regulatory screening level for the protection of groundwater; the lateral extent of which is unknown. This detection would be considered an REC (**REC No. 6**).

Along 135th Street, West of Building 2 – According to historical documents, industrial wastewater discharges occurred in the area of the existing northern parking lot, west of Building 2. There is no documentation as to the exact location of the discharges. This former activity would be considered an REC (REC No. 7).

Historical Outdoor Trenches - Outdoor trenches were historically located in specific areas of the site and used to convey wastewater. These former features were reportedly located between Buildings 10 and 21, south of Building 10, and south of Buildings 4 and 73. Since the exact location of these former features is unknown, no sampling was conducted. These former features would be considered an REC (**REC No. 8**).

- Based on the age of the on-site buildings, asbestos containing building materials (ACMs) and lead-based paint (LBP) may be present (**De Minimis Condition No. 1**). It should be noted that a previous limited asbestos survey conducted at the site in 1995 identified ACMs in Buildings 1, 2, 5, and 32.
- No other on- or off-site environmental concerns were noted.

CONCLUSIONS

Ardent has performed this Phase I ESA in general conformance with the scope and limitations of the American Society for Testing and Materials (ASTM) Practice E 1527-13, ASTM Standard E 2600-15, and the EPA Standards and Practices for All Appropriate Inquiries (AAI), Final Rule (40 CFR, Part 312), for the former HITCO Carbon Composites facility located at 1600 and 1606



West 135th Street in the city of Gardena, California. Any limitations or exceptions encountered during completion of this report are stated in Section 1.4. Based on the information received to date, no evidence or indication of RECs, HRECs, controlled-RECs (CRECs), or conditions indicative of releases or threatened releases of hazardous substances on, at, in, or to the subject property has been revealed, with the exception of the following.

<u>RECs</u>

- **REC No. 1**: Possible Vapor Intrusion
- REC No. 2: Historical Industrial Activities
- REC No. 3: Area 6 Former Acetone UST
- **REC No. 4:** Area 14b Adjacent East of "Not HITCO Property"
- REC No. 5: Area 14c Adjacent East of "Not HITCO Property"
- **REC No. 6:** Boring B16
- **REC No. 7:** Along 135th Street, West of Building 2
- **REC No. 8:** Historical Outdoor Trenches

HRECs

- HREC No. 1: Area 2 Former Diesel UST
- HREC No. 2: Area 11 Surface Drainage Sump
- HREC No. 3: Area 24 Pump House

<u>CRECs</u>

• No CRECs have been identified during completion of this report.

De-Minimis Condition

• **De-Minimis Condition No. 1: ACMs and LBP** - Although not considered an environmental concern by ASTM, ACMs and LBP may be present.

RECOMMENDATIONS

Based on the results of this Phase I ESA, Ardent recommends the following:

- REC No. 1: Possible Vapor Intrusion An updated HHRA should be completed to verify that no mitigation measures are needed in existing buildings. The client may consider installing vapor intrusion mitigation systems in newly constructed buildings for precautionary measures.
- **REC No. 2: Historical Industrial Activities** A SMP should be prepared presenting the scope of work to monitor air emissions and manage unknown environmental concerns that might be encountered during redevelopment.
- REC No. 3: Area 6 Former Acetone UST Soil samples should be collected in the vicinity of previous soil boring B08 which indicated elevated concentrations of PCE in



soil gas to determine whether elevated concentrations of VOCs are present in discrete soil samples. If elevated concentrations of VOCs are reported in soil exceeding the human health risk or protection of groundwater criteria, the volume of soil will need to be characterized in the upper 10 feet for remediation by excavation and off-site disposal prior to redevelopment.

- **REC No. 4: Area 14b Adjacent East of "Not HITCO Property" –** Soil samples need to be collected in the vicinity of boring B22 to characterize the lateral extent of elevated PCE detected at 5 and 10 feet bgs. Prior to beginning work, a work plan should be submitted to the LARWQCB for approval. Once the extent has been determined, impacted soil should be excavated and removed from the site prior to redevelopment.
- REC No. 5: Area 14c Adjacent East of "Not HITCO Property" Soil samples need to be collected in the vicinity of boring B27 to characterize the lateral extent of elevated PCE detected at 5 feet bgs. Prior to beginning work, a work plan should be submitted to the LARWQCB for approval. Once the extent has been determined, impacted soil should be excavated and removed from the site prior to redevelopment.
- REC No. 6: Boring B16 Soil samples need to be collected in the vicinity of boring B16 to characterize the lateral extent of elevated PCE detected at 5 feet bgs. Prior to beginning work, a work plan should be submitted to the LARWQCB for approval. Once the extent has been determined, impacted soil should be excavated and removed from the site prior to redevelopment.
- REC No. 7: Along 135th Street, West of Building 2 Since the exact location of these reported discharges is unknown, additional sampling is not recommended at this time. Ardent recommends that this area be monitored for stains, odors, or elevated photoionization detector (PID) readings during soil disturbances in accordance with the SMP.
- **REC No. 8: Historical Outdoor Trenches** Since the exact location of these features is unknown, additional sampling is not recommended at this time. Ardent recommends that this area be monitored for stains, odors, or elevated PID readings during soil disturbances in accordance with the SMP.
- **De-Minimis Condition No. 1: ACMs and LBP** Prior to redevelopment, a comprehensive asbestos and LBP survey should be completed. If identified, ACMs should be removed, and LBP stabilized by a state-certified abatement contractor before demolition.
- Existing Groundwater Wells The existing groundwater monitoring wells should be removed and relocated under the direction of the LARWQCB or protected during redevelopment for use after construction activities.



1. INTRODUCTION

Ardent Environmental Group, Inc. (Ardent) was retained by Overton Moore Properties (OMP) to perform a Phase I Environmental Site Assessment (ESA) and Document Review for the former HITCO Carbon Composites facility located at 1600 and 1606 West 135th Street in the city of Gardena, California ("site," "subject property," or "HITCO II property;" Figure 1). The work was conducted in general accordance with the Professional Services Agreement dated May 24, 2021, between OMP and Ardent. For over 50 years, the site was formerly part of a larger property that was occupied by various owners including British Petroleum Advanced Materials (BP) and HITCO Carbon Composites, Inc. (HITCO; collectively referred to herein as the "larger property" or the "HITCO facility"). An approximately 4.69-acre portion of the larger property, at 1720 West 135th Street, was sold to OMP in 2015 for commercial redevelopment (referred to herein as the "divested property" or the "HITCO I property"). OMP is now considering purchasing approximately 10.78-acres of the remaining larger property (referred to herein as the "HITCO II property"). The remaining portion of the larger property is referred to herein as the HITCO III property"). Herein as the HITCO III property (Figure 2).

The larger property has been used to manufacture silica and carbon-based products for aerospace and commercial applications. A number of environmental investigations and subsequent soil remediation have been completed on the site. These releases have impacted groundwater with volatile organic compounds (VOCs) which are being remediated by BP. OMP is considering purchasing the site for partial commercial redevelopment. The following sections identify the purpose, the involved parties, the scope of work, and the limitations and expectations associated with the Phase I ESA.

1.1. Purpose of Phase I ESA

In accordance with the American Society for Testing and Materials (ASTM) E 1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Standard E 1527-13), the objective of the Phase I ESA was to identify, to the extent feasible pursuant to ASTM Standard E 1527-13, recognized environmental conditions (RECs), historical RECs (HRECs), controlled RECs (CRECs), or conditions indicative of releases or threatened releases of hazardous substances on, at, in, or to the subject property.



ASTM defines RECs as "...the presence or likely presence of any hazardous substance 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." ASTM defines HRECs 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)." ASTM defines CRECs as a REC "...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)."

Other environmental considerations include site features or conditions that may have an environmental component of interest, but which do not meet the ASTM definition of a REC, CREC, or HREC. ASTM does not necessarily require any actions to address the presence or condition, but such conditions are identified for the sake of thoroughness and completeness.

The United States Environmental Protection Agency ("USEPA" or "EPA") has stated that ASTM Standard E 1527-13, is consistent with the Standards and Practices for All Appropriate Inquires (AAI), Final Rule (40 Code of Federal Regulations [CFR], Part 312) and is compliant with the statutory criteria for all appropriate inquires. All appropriate inquires, as defined in the AAI Final Rule, must be conducted by persons seeking the landowner liability protections under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) prior to acquiring a property or seeking or receiving federal Brownfields grants under the authorities of CERCLA. The purpose of AAI, as defined in the AAI Final Rule, was to identify releases and threatened releases of hazardous substances which cause or threaten to cause the incurrence of response costs.



As part of this Phase I ESA, Ardent also assessed whether a vapor encroachment condition (VEC) exists at the site. The VEC assessment was completed following the ASTM E 2600-15 Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions (ASTM Standard E 2600-15). The objective of this work was to evaluate the possibility that hazardous materials or other adverse environmental conditions are present due to past or present use of the site and/or properties in the site vicinity.

1.2. Involved Parties

Mr. Matthew Penksaw and Mr. Paul Roberts of Ardent conducted the historical research, site reconnaissance, regulatory inquiries, and document review. Mr. Paul Roberts completed oversight and management. Mr. Roberts meets the definition of an environmental professional as set forth in the AAI Final Rule.

1.3. Scope of Work

Ardent's scope of work for this Phase I ESA is consistent with ASTM Standard E1527-13. The scope of work included the activities listed below.

- **Review of User Provided Information** Review of information regarding title and judicial records for environmental liens or activity and use limitations, recorded environmental liens, actual or specialized knowledge or commonly known information regarding environmental conditions at the site, the relationship of the purchase price of the property to the fair market value, readily available maps, environmental reports, and other environmental documents pertaining to the site, as available and obtained from the user/client.
- Records Review Acquisition and review of records, including federal, state, tribal, and local regulatory agency databases, for the site and for properties located within a specified radius of the site; local regulatory agency files for the site and selected nearby properties of potential environmental concern; physical setting sources, including topographic maps, geologic maps, and geologic and hydrogeologic reference documents; and historic land use information including aerial photographs, historical fire insurance rate maps, building department records, and city directories, as necessary, that are reasonably ascertainable, publicly available, can be obtained within reasonable time and cost, and are practically reviewable.
- Vapor Encroachment Condition (VEC) Review available regulatory and client provided data to assess Tier 1 non-numeric screening for the site. Ardent evaluated whether contaminants were present in soil and/or groundwater in the site vicinity which might pose a VEC at the site.
- Site Reconnaissance Performance of a site reconnaissance to visually observe the site and any structure(s) located on the site to the extent not obstructed by bodies of water, adjacent buildings, or other obstacles. The purpose of the site reconnaissance is to obtain information indicating the likelihood of identifying RECs in connection with the



site, including the general site setting, site usage, use and storage of hazardous materials and petroleum products, disposal of waste products and materials, sources of polychlorinated biphenyls (PCBs), and evidence of releases and possible risks of contamination from activities at adjacent properties.

- Interviews Interviews with site representatives, including owners, occupants, and site managers, regarding the environmental condition of the site to the extent necessary and such persons are available. Interviews with state and/or local government officials, as necessary.
- Report Evaluation of the information and data obtained by the Phase I ESA process outlined above and preparation of this Phase I ESA report documenting findings and providing opinions and conclusions regarding possible environmental impacts and RECs at the site.

1.4. Limitations and Exceptions

The environmental services described in this report have been conducted in general accordance with current regulatory guidelines and the standard-of-care exercised by environmental consultants performing similar work in the project area. No warranty, expressed or implied, is made regarding the professional opinions presented in this report. This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. Ardent should be contacted if the reader requires any additional information or has questions regarding the content, interpretations presented, or completeness of this document.

The findings, opinions, and conclusions are based on an analysis of the observed site conditions and the referenced literature. It should be understood that the conditions of a site could change with time as a result of natural processes or the activities of man at the subject property or nearby sites. In addition, changes to the applicable laws, regulations, codes, and standards of practice may occur due to government action or the broadening of knowledge. The findings of this report may, therefore, be invalidated over time, in part or in whole, by changes over which Ardent has no control. Ardent cannot warrant or guarantee that not finding indicators of any particular hazardous material means that this particular hazardous material or any other hazardous materials do not exist on the site. Additional research, including invasive testing, can reduce the uncertainty, but no techniques now commonly employed can eliminate the uncertainty altogether.



1.5. Special Terms and Conditions

As indicated in Section 13.1.5 of ASTM Standard E 1527-13, the following, which is not intended to be all inclusive, represents out-of-scope items with respect to a Phase I ESA: asbestos-containing materials (ACMs), radon, lead-based paint (LBP), lead in drinking water, wetlands, regulatory compliance, cultural and historic risk, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality unrelated to releases of hazardous substances or petroleum products into the environment, biological agents, and mold. As part of our agreement with the client and as included within the Phase I Environmental Site Assessment Scope of Work, Ardent visually assessed site buildings (if present) for possible ACMs, LBP, and mold and researched the potential for radon exposure at the site. In addition, ASTM Standard E 2600-15 supplements the ASTM Standard E 1527-13 to include evaluation of VEC using Tier 1 screening.

This study did not include an evaluation of geotechnical conditions or potential geologic hazards. In addition, Ardent did not address interpretations of zoning regulations, building code requirements, or property title issues.

1.6. User Reliance

This report may be relied upon and is intended exclusively for use by the client, its partners, members, investors, affiliates, successors and assigns, and lenders. Any use or reuse of the findings, opinions, and/or conclusions of this report by parties other than the foregoing parties is undertaken at said parties' sole risk.

1.7. Physical Limitations

No physical limitations were encountered during completion of this assessment.

1.8. Data Gaps

No significant data gaps were noted during the preparation of this Phase I ESA report.

2. GENERAL SITE CHARACTERISTICS

The following sections describe the location and the current uses of the site and adjacent properties. A site location map is presented as Figure 1, a site plan is provided as Figure 2, and a site vicinity map is presented as Figure 3. Selected photographs of the site and surrounding properties are provided in Appendix A.



2.1. Location and Legal Description

The site comprises the northeastern portion of the larger property and a small swatch of land located along the eastern side of the larger property (Figure 2). As noted on Figure 3, the larger property was divided into five parcels with separate Tax Assessor's Parcel Numbers (APNs). The site includes two full APNs (6102-013-026 and -027), and a portion of the APN 6102-013-029. The site has been assigned two addresses including 1600 West 135th Street and 1606 West 135th Street (Figure 3). It should be noted that the address of 1600 West 135th Street is also used by the HITCO III property, which formerly had an address of 1551 West 139th Street. The HITCO I property has an address of 1720 West 135th Street. A complete legal description of the larger property is presented in the Preliminary Title Report provided in Appendix B.

The site is bounded as shown on Figure 2. Site boundary information was obtained during the site reconnaissance and information provided by the client.

2.2. Site Description and Current Site Uses/Operations

The following paragraphs present a description of the structures present at the site, the tenants currently occupying the site, the activities being conducted on-site, the heating and cooling systems utilized in the site building, the sewage disposal system, and the potable water provider for the site, if any.

2.2.1. Site Description

The site is an irregularly shaped property, comprising approximately 10.78-acres. The site is developed with a number of commercial buildings as depicted on Figure 4. These buildings are currently being used for warehouse, manufacturing, and office purposes (Figure 2).

2.2.2. Occupants

The site is currently occupied by AVCorp Composite Fabricators, Inc. (AVCorp) who uses the site to manufacture silica and carbon-based products for aerospace and commercial applications.

2.2.3. Heating and Cooling Systems

Heating and cooling systems at the site building are powered by electricity and natural gas which are provided by the local utility provider.



2.2.4. Sewage Disposal/Septic Systems

Sewage is reportedly connected to the municipal sewer system. There has been no indication that septic tanks have been used at the site.

2.2.5. Potable Water

Potable water is supplied by the local water purveyor.

2.3. Adjacent Properties

The site is located in a predominantly industrial area, with some sporadic residential properties (Figure 2). The numerous industrial businesses immediately adjacent to the site are shown on Figure 2. The HITCO III property is located west of the site and as discussed herein is completing remediation activities.

Some of the surrounding properties which may have contributed to the known impacted soil include Stone Manufacturing, a metal fabricator and furniture manufacturer, located immediately west of the site. Further west is Complete Charter Lines, and to the northwest by Weiss Sheet Metal, a metal fabricator and stockyard. Briles Aerospace, a small parts manufacturing facility, is located north of the site and beyond West 135th Street. Miscellaneous industrial facilities border the site to the east, including Charles E. Thomas Construction Company, a construction equipment yard listed on several environmental databases for a historical underground storage tank (UST) release (Figure 2).

3. USER PROVIDED INFORMATION

The following sections summarize information provided by the user to assist the environmental professional in identifying the possibility of RECs in connection with the subject property, and to fulfill the user's responsibilities in accordance with Section 6 of ASTM Standard E1527-13. A copy of the user questionnaire as completed by Mr. Jason Hines of OMP is presented in Appendix B.

3.1. Current Title Information

A Preliminary Title Report was provided by OMP for review. The Preliminary Title Report was prepared by First American Title Insurance Company dated June 5, 2021. According to the Preliminary Title Report, the current owner of the site is "SGL Composites Inc., a Delaware corporation," also referred to herein as SGL Carbon (SGL). A copy of the Preliminary Title Report is included in Appendix B.



3.2. Environmental Liens or Activity and Use Limitations

Based on our review of available documentation, no records of environmental liens or activity and use limitations (AULs) were noted associated with the subject property. In addition, Mr. Hines was not aware of any environmental liens or AULs against the subject property that are filed or recorded under federal, state, or local law.

3.3. Specialized Knowledge

Mr. Hines indicated that, for purposes of this assessment, the client has no specialized knowledge or experience pertaining to the site or the adjacent properties that is material to RECs in connection with the subject property.

3.4. Commonly Known or Reasonably Ascertainable Information

Mr. Hines indicated the client is aware of commonly known or reasonably ascertainable information pertaining to the site that is material to RECs in connection with the subject property. The site has historically impacted groundwater which BP is currently remediating.

3.5. Valuation Reduction for Environmental Issues

In a transaction involving the purchase of a parcel of commercial real estate, the user shall consider the relationship of the purchase price of the property to fair market value of the property if the property was not affected by hazardous substances or petroleum products. Mr. Hines indicated the purchase price reflects fair market value.

3.6. Reason for Performing Phase I ESA

Ardent was retained by OMP to perform the Phase I ESA and Document Review as part of its real estate due diligence activities during purchase of the property.

3.7. Other User Provided Information

A number of environmental investigations have been completed for the larger property, some of which were completed under the direction of regulatory agencies, namely the California Regional Water Quality Control Board, Los Angeles Region (LARWQCB). The owner of the site provided OMP copies of some of these reports and others were obtained from regulatory files or databases.

In 2001, BP retained McLaren-Hart/Jones, Inc. (McLaren/Hart) to complete a very comprehensive Feasibility Study for the larger property (referred to herein as the "2001



FS"). The 2001 FS included a summary of the site land historical uses, results of previous investigations dating back to 1995, and areas of environmental concern (Figure 5). The areas of concern were further evaluated based on a human health risk and threat to groundwater. Based on these studies, a remedial action plan (RAP) was presented to the LARWQCB.

In 2014, Environ completed a Phase I ESA of the larger property which identified additional areas of concern (referred to herein as the "2014 Phase I ESA"). In 2016, an additional investigation was completed by Ramboll/Environ on the HITCO II and IIII properties to investigate some of the areas of concern identified in the 2014 Phase I ESA (referred to herein as the Ramboll/Environ 2016 Phase II investigation"). It should be noted that by this time, Environ and Ramboll, two different environmental consulting firms, had merged.

In 2018, a potential buyer of the HITCO II and III properties retained Hazard Management Consulting, Inc. (HMC) to complete a Phase I ESA (referred to herein as the "2018 Phase I ESA"). The purchase was not completed, and in 2020, Ramboll was again retained to complete a new Phase I ESA (referred to herein as the "2020 Phase I ESA") of the HITO II property.

The following presents the historical land use and operations, land acquisition agreements, chemical uses, and initial investigations (i.e. results of the 2001 FS and Ramboll/Environ 2016 Phase II investigation). The following also presents a summary of the Phase I ESA reports. Following its review, Ardent reevaluated the data and presented its own summary of the findings and conclusions.

It should be noted that most of the reports provided or available to Ardent dated pre-2001 were incomplete, with no illustrations of boring locations and different building outlines and designations. As discussed below, remediation occurred after the 2001 sampling event, and therefore, a comparison of these old data to current regulatory guidelines was not completed. In addition, the newer reports (dated post-2014) did not include illustrations which accurately depicted boring or sampling locations, but rather showed large sample designations on aerial photographs. The building designations and descriptions had changed over the years and were inconsistent in the reports reviewed. In addition, regulatory screening guidelines have also changed over the years. As noted below



Ramboll/Environ used wrong screening levels for its evaluation of data. The rationale for the soil and soil gas points were not clearly discussed in these reports.

3.7.1. Historical Land Use and Operations

The larger property is used as a carbon composite manufacturing facility which comprised approximately 26-acres and contained approximately 35 buildings. The buildings were used for office, manufacturing, and warehouse purposes. The on-site building designations and uses are presented on Figure 4.

The larger property was initially developed in the 1940s by Zenith Plastics (1947-1956). Other historical owners included 3M Company (1956-1961), H.I. Thompson Company (i.e., HITC; 1960-1961), Armco Steel (1969-1985), Owens-Corning Fiberglass Corporation (1985-1987), BP Advanced Materials (BP, 1987-1995), HITCO Technologies, Inc. (1995-1997), HITCO Carbon Composites, Inc. (1997present), and AVCorp (2015-present). In the early years (1947-1961), the larger property was used to manufacture plastics, and converted to manufacturing carbon composites in 1961.

3.7.2. Acquisition Agreement and Future Indemnification

In 1995, HITCO and BP merged. According to the merger agreement dated November 17, 1995, remediation of contamination discovered before the merger date and three years after merging (i.e., November 17, 1998) would be the responsibility of BP. After November 17, 1998, HITCO's responsibility would increase in annual increments until by the seventh anniversary of the closing date (i.e., November 17, 2002), HITCO would be 100 percent responsible for releases discovered after the merger date.

BP has actively been responsible for all soil and groundwater remediation to-date and is named as Atlantic Richfield Company, a BP Affiliated Company or ARCO, as the responsible party. For purposes of this report, references to BP and ARCO are one in the same.

3.7.3. Chemical Uses and Initial Investigations

Chemical uses at the larger property included petroleum hydrocarbons, acids, solvents, paints, varnishes, and other chemicals (Environ, 2014). Impacted soil, soil



gas, and groundwater have been detected at the larger property including chlorinated solvents, namely tetrachloroethylene (PCE) and trichloroethene (TCE), and to a lesser extent petroleum hydrocarbons. Chlorinated solvent use and storage at the larger property ceased in 1998. All known USTs which were the source of the petroleum hydrocarbon impacted media were removed from the larger property in 1985 or 1992.

3.7.4. Initial Investigations and Regulatory Involvement

In 2001, a very comprehensive FS was completed for the larger property. The 2001 FS included a summary of the site land historical uses, results of previous investigations dating back to 1995, and areas of environmental concern. Based on these studies, 27 "Key Potential Source Areas" (designated as "Areas 1 through 27") were identified on the larger property, 20 of which were located on the subject site (Figure 5). Based on previous investigations, 11 of the 20 areas of concern located on the site were determined to have a low risk of impacting groundwater and no further work was recommended (Areas 2, 3, 5, 6, 14a, 15, 20, 21, 25, 26, and 27). Of the remaining areas, the primary source of PCE in groundwater at the site included Areas 14b, 14c, 11, 13, and 24. In a letter dated January 29, 2002, the LARWQCB approved the 2001 FS and soil, and groundwater remediation began.

Based on the results of these investigations, shallow groundwater at approximately 25 feet bgs (referred to as "Zone A") was shown to be impacted with VOCs, namely PCE, TCE, and cis-1,2-dichloroethene (cis-1,2-DCE). As discusses herein, sources within the larger property, including the subject site, were identified (Figures 6 through 10).

3.7.5. 2014 Phase I ESA by Environ, dated July 2014

The 2014 Phase I ESA was completed for SGL for the larger property and included a summary of the 2001 FS and current conditions of the property. At the time of this report, 20 of the 27 areas of concern outlined in the 2001 FS were identified on the site. These included the following, with locations provided on Figure 5:

Area 2 – Former Diesel UST

Area 3 – Former Gasoline UST

Area 4 – Former Resin/Solvent Waste UST



- Area 5 Former Solvent UST
- Area 6 Former Acetone UST
- Area 11 Surface Drainage Sump
- Area 13 East of Hydraulic Presses Building
- Areas 14a, 14b, and 14c Area Adjacent to "Not HITCO Property"
- Area 15 Former Drum Storage Area
- Area 16 Former Degreaser and Hydraulic Presses
- Area 17 Solvent Usage and Hydraulic Presses
- Area 19 Solvent Uses
- Area 20 Hydraulic Presses
- Area 21 Drum Storage Area
- Area 24 Pump House
- Area 25 Former Septic Tank
- Area 26 Wastewater Sump
- Area 27 Former Septic Tank

Based on the results of the 2001 FS and 2014 Phase I ESA, Environ identified the following RECs, HRECs, CRECs, other findings, and non-scope considerations. This report did not include recommendations.

<u>RECs</u>

- **Historical Industrial Operations** This general listing was due to the historical chemical use, handling, and storage practices at the larger property.
- Area 3 Former Gasoline UST: This UST was removed in 1985. Although no detectable concentrations of benzene, toluene, ethylbenzene, and xylenes (BTEX) were reported in soil gas and soil samples, PCE and/or TCE were detected in soil gas samples at concentrations up to 10 micrograms per liter (ug/l). In addition, a groundwater well located downgradient from this former UST indicated concentrations of benzene slightly exceeding the Maximum Contaminant Level (MCL). Regulatory closure had not been received.
- Area 4 Former Resin/Solvent Waste UST: Following removal of this UST in 1985, laboratory results of soil samples were described by others as presenting a possible pathway through soil to groundwater. Laboratory results of soil gas samples indicated concentrations of PCE and/or TCE up to 10 ug/l. Regulatory closure had not yet been obtained.
- Area 5 Former Solvent UST: VOCs were not detected in soil samples, although laboratory results of soil gas samples indicated concentrations of PCE and/or TCE up to 10 ug/l. Regulatory closure had not yet been obtained.



- Area 6 Former Acetone UST: Following removal of this UST, laboratory results of soil samples indicated no detectable concentrations of VOCs. However, during later soil gas investigations, PCE and TCE were detected at concentrations up to 34 ug/l and 74 ug/l, respectively.
- Areas 11, 13, 14b, 14c, and 24 Several areas with impacts to soil were identified during initial investigations as having a potential to impact groundwater including on-site Area 11 (Surface Drainage Sump), Area 13 (East of Hydraulic Presses Building), Area 14b and 14c (Area Adjacent to "Not HITCO Property"), and Area 24 (Pump House). Beginning in 2004, soil vapor and groundwater extraction systems were operated for approximately one year at which time closure was requested. The LARWQCB agreed with the shutdown of the remediation systems but did not grant closure to these areas due to the on-going groundwater issues.
- Area 15 Former Drum Storage Area: TCE was detected in one soil gas sample at 4.7 ug/l at 5 feet.
- Area 16 Former Degreaser and Hydraulic Presses: PCE and TCE were detected in soil gas at concentrations up to 47 ug/l and 21 ug/l, respectively.
- Area 17 Solvent Usage and Hydraulic Presses: PCE and TCE were detected in soil gas at concentrations up to 25.6 ug/l and 17.4 ug/l, respectively.
- Area 19 Solvent Uses: Laboratory results of soil samples were described by others as presenting a possible pathway through soil to groundwater. PCE was later discovered in soil gas samples at concentrations up to 52 ug/l.
- Area 21 Drum Storage Area: PCE and TCE were detected in soil gas at concentrations up to 5.2 ug/l and 16.8 ug/l, respectively.
- Area 26 Wastewater Sump: Laboratory results of soil samples indicated no detectable concentrations of VOCs. However, during later soil gas investigations, PCE was detected at concentrations up to 7 ug/l.
- Area 27 Former Septic Tank: PCE and TCE were detected in soil gas at concentrations up to 6.7 ug/l and 16.4 ug/l, respectively.
- **On-Site Groundwater Contamination:** VOCs are known to be present in groundwater beneath the site. Groundwater is encountered in three approximately 5-foot-thick silt/sand zones at approximately 30, 50, and 70 feet bgs which are interpreted to be hydraulically connected. In addition, groundwater is encountered in a saturated sand zone at a depth of approximately 90 feet bgs. Elevated concentrations of VOCs are found primarily in the 30- and 50-foot zones and predominantly include PCE, TCE, and cis-1-2-dichloroethene (cis-1,2-DCE).
- **VOC Vapor Intrusion:** Based on the results of the soil gas sampling completed throughout the larger property, a possible vapor intrusion issue is likely.

HRECs

• Area 2 – Former Diesel UST: This 20,000-gallon UST was removed in 1992. During removal, impacted soil was noted. In 1993 and 1996, groundwater



monitoring was completed which indicated relatively low concentrations of petroleum hydrocarbons. In 1996, approximately 2,400 cubic yards of impacted soil was removed and laboratory results of 35 confirmation soil samples indicated no detectable concentrations of BTEX. Thirty-four of the 35 soil samples indicated low concentrations of total petroleum hydrocarbons as diesel fuel (TPHd, less than 30 milligrams per kilogram [mg/kg]), with the remaining sample indicating 440 mg/kg. Based on these results, the LARWQCB issued a no further action letter dated May 15, 1996. Based on these results, the former 20,000-gallon diesel UST associated with Area 2 would be considered an HREC.

<u>CRECs</u>

• No CRECs associated with the site (HITCO II property) were identified.

Other Findings

"Other findings" were described by Environ as areas of contingent risk that are not considered RECs.

- Areas 14a, 20, and 25: Area 14a (Area Adjacent to "Not HITCO Property"), Area 20 (Hydraulic Presses), and Area 25 (Former Septic Tank) were investigated prior to the 2001 FS and laboratory results indicated no detectable concentrations of VOCs in soil gas. Therefore, these areas were not considered an environmental concern to the site.
- Potential Migration of Contamination from Off-Site Properties: Based on the results of the 2014 Phase I ESA, other potential sources of impacted groundwater exist in the site vicinity. These facilities are located within close proximity to the larger property and were listed on regulatory databases as having had releases. The facilities include Charles E. Thomas Company, Western Recycling/Matsumoto Property, Tamco Enterprises, and Former Sonic Industries.

Non-Scope Considerations

Non-scope considerations are defined by Environ as other possible concerns that are not required by ASTM or AAI.

- Asbestos-Containing Materials (ACMs): A limited asbestos survey was completed throughout the larger property in 1995 by Environmental Management Consultants, Inc. (EMC). Based on the results, ACMs were identified in Buildings 1, 2, 5, and 32 on the HITCO II property. During Environ's site visit, a number of other suspect materials that were not sampled by EMC were present in buildings that were constructed prior to 1981. Based on this information, other ACMs may be present.
- Water Intrusion/Mold: Although a mold survey was not completed, there was no reported concerns with mold issues by site personnel. Mold would not be considered an environmental concern to the site.



- Lead-Based Paint: Based on the age of the on-site buildings, LBP is likely present.
- **Radon:** According to the California Radon database, none of the tested buildings in its study measured radon levels above 4 picocuries per liter (pCi/l). Radon would not be considered an environmental concern to the site.

3.7.6. Human Health Risk Assessments by Parsons, dated 2010 and 2014

In 2010, Parsons completed a Soil Gas Investigation Report for the southern parking area of the Boeing III property and limited site vicinity (Parsons, 2010). To evaluate the potential adverse effects of detected chemicals to industrial workers at the site and larger property, Parsons completed a Human Health Risk Assessment (HHRA) as part of the report. This evaluation incorporated data collected from two borings located on-site (N11 and N12; located immediately west of Building 25) and borings located in the southern parking area of the Boeing III property.

Based on the results of the HHRA, Parsons determined that no vapor intrusion issue was present within the existing on-site Building 25, the southern parking area of the Boeing III property, or a hypothetical building in the southern parking area of the Boeing III property. Carcinogenic risks for all three scenarios were either below or within the EPA target risk range of 1 in 1,000,000 (10E-6) to 1 in 10,000 (10E-4) and the non-carcinogenic hazard values for each of the three scenarios were below the threshold hazard index of 1.

This information was provided to the LARWQCB who did not request additional investigations or indoor air sampling.

3.7.7. Previous Investigations at HITCO I Property, dated 1993 through 2014

Based on soil investigations completed from 1993 through 2006, three areas of VOC-impacted soils were discovered on the HITCO I property, referred to as the Western Source Area, Southern Source Area, and the Regulated Waste Storage Area. In 2006, the site was purchased by Headlands Realty Corporation for planned redevelopment that retained URS Corporation (URS) to remediate the impacted soils using soil vapor extraction (SVE) technology under the direction of the LARWQCB. Following completion of the soil remediation, elevated concentrations of VOCs were still present in soil samples collected in the Western Source Area. These soils were excavated to a depth of approximately 10 feet bgs. Laboratory results of confirmation



samples indicated elevated concentrations of VOCs remaining at depth. As part of the redevelopment plan, the entire site was then graded to a depth of approximately 5 feet bgs.

In 2008, a soil gas survey indicated elevated concentrations of VOCs still remaining in the Western and Southern Source Areas. Because the soil gas results did not correlate with the discrete soil sample results in the Southern Source Area, it was believed that the elevated soil gas in this area was due to off-gassing groundwater or from the remaining elevated VOC-impacted soil in the Western Source Area. Based on this assumption, a vapor extraction system (VES) was again installed and operated in the Western Source Area. Following completion of soil remediation, the site was sold back to HITCO who retained Conestoga Rovers & Associates (CRA) to use URS' data to prepare HHRAs for the site. CRA used historical laboratory results and results of soil gas samples collected from the existing vapor extraction wells to prepare two HHRAs, one for the Western Source Area and one for the Southern Source Area. Following review by regulatory agencies, another re-vised HHRA was completed by CRA using all data from both areas. CRA concluded that although the model exceeded the cancer risk of 10E-6 criteria, future cancer risk was limited due to the fact that no building or human receptors were present. The LARWQCB reevaluated the HHRA using commercial standards and a 10E-5 cancer risk scenario. According to the LARWQCB, no human health risk was present, and therefore, a no further action (NFA) letter was issued on September 10, 2012.

In 2014, a potential purchaser of the site retained Stantec Consulting Services (Stantec) to complete a limited soil gas survey in the central portion of the site to assess remaining concentrations. Based on the results, elevated concentrations of PCE (up to 324 micrograms per liter [ug/l]), TCE (up to 149 ug/l), vinyl chloride (up to 1.62 ug/l), and other breakdown products were reported, well above the regulatory screening values at that time. CRA again prepared another HHRA, using the new data and the previous soil gas data obtained from the extraction wells. Again, CRA concluded that although the model exceeded the cancer risk of 10E-6 criteria, future cancer risk was limited due to the fact that no building or human receptors were present. The LARWQCB reevaluated the HHRA using commercial standards and a 10E-5 cancer risk scenario. According to the LARWQCB, no human health risk was



present, and therefore, an affirmation of the NFA letter was issued on September 15, 2014.

This property was successfully purchased and redeveloped with a large commercial warehouse building. The building was constructed with a passive vapor barrier system.

3.7.8. 2016 Subsurface Investigation by Ramboll/Environ, dated June 10, 2016

Since the completion of the 2001 FS, investigations have identified the chemicals of concern at the site to include VOCs, namely PCE, TCE, 1,1,1-trichloroethene (1,1,1-TCA), 1,1-dichloroethene (1,1-DCE), cis-1,2-DCE, 1,2-dichloroethane (1,2-DCA), 1,1,2-trichloroethane (1,1,2-TCA), vinyl chloride, benzene, and carbon tetrachloride. The most prevalent VOCs are PCE and TCE. Remediation by soil vapor extraction (SVE) had reportedly been completed in Areas 14b, 14c, 11, 13, and 24, as well as off-site dual phase extraction and an iron permeable reactive barrier for VOC-impacted groundwater.

The objectives of the Ramboll/Environ 2016 Phase II investigation were to further assess the chemical composition of shallow soils (less than 10 feet bgs) for possible reuse on the site during future redevelopment, and to update soil gas data, where appropriate to evaluate possible VOC vapor intrusion issues. According to Ramboll/Environ, soil boring locations were selected in areas where historical soil data were not available or as confirmation in areas where detected VOC concentrations in historical soil data exceeded screening levels. The rationale of each soil boring/soil gas point was not provided in the report. The locations were presented on a large scaled aerial photograph.

The scope of work included the drilling of 44 soil borings throughout the HITCO II and HITCO III properties to depths of up to 10 feet bgs for the collection of soil and soil gas samples. Soil samples were analyzed for TPH, VOCs, and Title 22 metals, while soil gas samples were analyzed for VOCs. Laboratory results of TPH and metals were considered low.



Concentrations of VOCs in soil were compared to the May 1996 LARWQCB Interim Site Assessment & Cleanup Guidebook, using attenuation factors. VOCs in soil gas were compared to DTSC and EPA screening levels for industrial/commercial land use for ambient indoor air, with cancer risk factors of 1 in 1,000,000 (10E-6); 1 in 100,000 (10E-5); and 1 in 10,000 (10E-4). It should be noted that a number of calculation mistakes were identified by Ardent during review of the Ramboll/Environ tables which were reflected in the Ramboll/Environ conclusions. The report included laboratory results and laboratory data.

Based on these results, Ramboll/Environ produced a map showing (1) the areas of the site where soils could be reworked for geotechnical purposes (i.e. low concentrations of VOCs in discrete soil and soil gas samples) under the management of a Soil Management Plan (SMP), and (2) areas of the site where soils would need to be remediated by excavation and off-site disposal to a depth of approximately 5 feet bgs (assumed depth of the geotechnical requirements and soils with elevated concentrations of VOCs exceeding the protection of groundwater and human health risk screening levels). Ramboll/Environ concluded that some soil remediation will be needed prior to grading, that a SMP will need to be prepared and implemented, and that future buildings would need to be constructed with vapor control systems (i.e., vapor barriers).

In a memorandum dated June 24, 2016, Ramboll/Environ presented an estimated volume of impacted soil that would need to be remediated prior to grading at the HITCO II and III properties, and an outline of tasks that would need to be completed to ready the properties for redevelopment. Based on this memorandum, the following tasks were provided for the site (i.e., HITCO II property):

- Task 1: Preparation of a SMP and Agency Notification A SMP would need to be developed which would outline the procedures for handling impacted soils encountered during grading. The SMP would be approved by the LARWQCB.
- Task 2: Additional Characterization of Uncertain Area This task is related to the off-site SVE system associated with Area 1 and the HITCO III property.
- Task 3: Construction Oversight of Excavation and Grading Based on VOCs detected in shallow soil gas, on-going monitoring of soil emissions will



need to be completed as per South Coast Air Quality Management District's (SCAQMD) Rule 1166.

- Task 4: Transportation and Off-Site Disposal Soil in selected areas of the site would need to be excavated and disposed of off-site.
- Task 5: Import Soil Import soil would need to be obtained to replace the impacted soil removed from the site.
- Task 6: Construction Completion Report Following completion of the above work, a completion report documenting the remediation and monitoring activities would need to be prepared for submittal to the LARWQCB

As presented below in Section 3.7.12, Ardent independently reevaluated the 2016 data and generally concurs with Ramboll/Environ on its conclusions and recommendations. Based on the relatively low concentrations of VOCs detected in soil vapor, the chances of VOC emissions during grading exceeding the South Coast Air Quality Management District's (SCAQMD) Rule 1166 would be low (i.e. VOC concentrations exceeding 50 parts per million [ppm] as measured with a photoionization detector meter). However, since VOCs are present the site, SCAQMD monitoring per Rule 1166 should be conducted during soil disturbances.

3.7.9. 2018 Phase I ESA by HMC, dated January 16, 2018

The 2018 Phase I ESA was again completed for the HITCO II and III properties. HMC outlined the results of the previous investigations and presented a preliminary scope of work for additional investigations. As presented herein, Ardent concurs with HMC and others that vapor control measures, such as vapor barriers, should be installed in future buildings. Ardent also agrees that some limited soil sampling will be needed to further assess previously detected VOCs in soil prior to excavation and off-site disposal prior to grading.

HMC also recommended some additional soil sampling in areas not previously sampled, such as next to a Silver Recovery Unit in Building 8 to assess whether a release of silver had occurred; next to a paint booth in Building 12 where hexavalent chromium containing paint was used; and in areas of hydraulic presses where hydraulic oils may have contained PCBs. Based on additional information obtained



during Ardent's Phase I ESA, these features would no longer be considered an environmental concern.

The 2018 Phase I ESA concluded that the historical manufacturing land use would be considered an REC. If redevelopment were to occur, HMC concluded that "...hazardous materials will be encountered in shallow soil that may require special handling under a SMP." Certain VOCs in the shallow soil may also pose a vapor mitigation condition, and therefore, a vapor mitigation system should be designed into future buildings or an updated HHRA should be completed to evaluate whether a mitigation system is warranted.

3.7.10. 2020 Phase I ESA by Ramboll, dated November 2020

Ramboll completed a Phase I ESA for the HITCO II property in 2020. Based on the historical data, Ramboll identified the historical land use and the known VOC impacted soil, soil gas, and groundwater as RECs.

According to Ramboll's interpretation of the data, PCE, TCE, and cis-1,2-DCE are present in soil at certain locations of the site which exceed the regulatory screening levels. Based on these findings, some soil excavation and off-site disposal will likely be required prior to redevelopment of the site. The majority of the site contains soils that could likely be reused during grading. Ramboll recommends the preparation and implementation of a SMP to help manage soil characterization, remediation, and reuse.

Areas of VOC impacted soil gas, namely PCE, TCE, cis-1,2-DCE, and vinyl chloride, are also present at the site. These areas may need additional sampling and/or mitigation measures. Ramboll recommended a more specific evaluation of these areas at a time when redevelopment plans had been finalized. Ramboll noted that attenuation factors used for calculating risk-based screening levels in California are evolving. As such, a review of the data using current soil vapor screening levels should be conducted.

Groundwater beneath the site is encountered in five distinct and laterally continuous sand layers. Shallow groundwater beneath the site is encountered at approximately



23 feet bgs (referred to as "Zone A" or the "30-foot sand") and flows in a southeasterly direction.

It should be noted that a number of the screening levels used by Ramboll in its report were incorrect. As presented below, Ardent reevaluated these results based on current regulatory guidelines.

3.7.11. On-Going Groundwater Characterization and Remediation

Due to the historical releases of VOCs, groundwater beneath the site and adjoining properties have been impacted with chlorinated solvents, namely PCE, TCE, and cis-1,2-DCE. Due to the date of the releases, BP has been named the responsible party and is currently completing semi-annual groundwater monitoring on a voluntary basis (i.e., no Cleanup and Abatement Order or Consent Order has been issued). The site vicinity has been used for industrial/manufacturing purposes for over 50 years. Some of the adjacent facilities may have contributed to the VOC groundwater issues.

As discussed in Section 4.2.2, a number of hydrogeologic zones of saturated groundwater exist in the site vicinity, referred to by others as Zones A through E. Figure 6 shows the on- and off-site groundwater monitoring wells located in the site vicinity. There are currently 28 groundwater monitoring wells on the site that are periodically monitored by BP as part of its on-going groundwater investigation/remediation for the larger property. Shallow groundwater beneath the site (Zone A) has been measured at a depth of approximately 22 to 25 feet below the ground surface (bgs) and flows in a southeasterly direction (Figure 7).

As noted on Figures 8 through 10, PCE, TCE, and cis-1,2-DCE have been detected in Zone A. Groundwater monitoring has been conducted since 1996, on a quarterly basis through 2013 and semiannual since 2013. AECOM is retained by BP to complete semiannual groundwater monitoring events. Soil and groundwater remediation are being completed at Area 1, located on the HITCO III property (Figure 5). The groundwater remediation activities began in 2018 and included in-site anaerobic bioremediation (ISAB) to hydraulically contain and prevent migration of the most contaminated groundwater from the HITCO III property. Off-site plume remediation south of 135th Street has included in-site chemical oxidation (ISCO)



using permanganate to ensure that the concentrations in off-site areas do not increase.

3.7.12. Ardent's Evaluation of the Data

Ardent reevaluated the 2016 data collected by Ramboll/Environ and compared the results to current soil and soil gas criteria presented in the California Department of Toxic Substances Control (DTSC) and EPA guidelines for the protection of human health at industrial/commercial properties as well as the protection of groundwater using the California Regional Water Quality Control Board, San Francisco Bay Region Environmental Screening Levels (SFRWQCB-ESLs) for leachability to drinking water. VOCs in soil gas were compared to the DTSC Regional Screening Levels and/or the EPA Screening Levels for indoor air at industrial/commercial properties, modified using the DTSC approved attenuation factor of 0.0005 for a future commercial building (DTSC-RSLi and/or EPA-SLi) and a cancer risk factor of 10E-5. Due to the age of previous soil and soil gas analytical results in the 2001 FS, and the fact that on-site soil remediation had been completed since the collection of these samples, Ardent did not reevaluate these data. A summary of the 2016 Ramboll/Environ data for soil and soil gas are presented as Tables 1 and 2.

Based on current guidelines, soil with concentrations of PCE exceeding screening guidelines for the protection of groundwater through leachability include soil borings B16, B22, and B27 (Figure 11). These results were similar to what Ramboll/Environ suggested based on older regulatory guidelines for the protection of groundwater.

Soil gas concentrations exceeding current regulatory guidelines as a possible vapor intrusion risk were identified in borings B08, B22, B25, and B27. The location of these areas is depicted on Figure 12. These locations were different than those depicted by Ramboll/Environ in its report due to Ramboll/Environs use of old data and the use of wrong screening values. Due to the possible change of soil gas concentrations over time due to the operation of an SVE, Ardent's interpretation of the 2016 data (i.e., post SVE operations) is assumed to be more accurate.

Based on this reevaluation, the following summary is presented.

• In 2001, McLaren/Hart prepared a comprehensive FS that was presented to the LARWQCB for review and approval. The 2001 FS included a review of all



investigations completed to-date which identified 27 areas of concern, 20 of which were located on the HITCO II property. The main chemicals of concern were VOCs, namely PCE, TCE, and cis-1,2-DCE, which had affected soil, soil gas, and groundwater. Based on these investigations, five areas of concern which were located on-site (Areas 14b, 14c, 11, 13, and 24) were determined to need remediation due to elevated concentrations of VOCs in soil which threatened groundwater. These areas were subsequently remediated using SVE under the direction and oversight of the LARWQCB. Following operation of the SVE, the LARWQCB agreed that no further in-situ remediation was warranted. Although a NFA letter is pending following completion of a RAP for groundwater remediation, this work is currently being completed by BP.

- Residual VOC contamination in soil gas has been evaluated for possible human health risks due to vapor intrusion on the HITCO I and HITCO III properties. During completion of the HHRAs on the HITCO III property, the southern buildings on HITCO II were also evaluated. Based on the results, no immediate human health risk was identified for current occupants of the site, or for occupants on the HITCO I and III properties.
- Ramboll/Environ completed a Phase II investigation in 2016 (post-SVE remediation) to further assess current site conditions (soil and soil gas) in the upper 10 feet of soil in selected areas of the site, including former areas of concern and in random locations. These data were evaluated to assess areas that might need further soil remediation prior to proposed site redevelopment. The evaluation was based on the fact that geotechnical requirements will likely include reworking soils to a depth of approximately 5 feet bgs during future redevelopment. Based on these data, Ramboll/Environ concluded that (1) some areas of the site will need to be further remediated by excavation and off-site disposal due to elevated VOCs in soil and/or soil gas, (2) a SMP will need to be prepared and implemented during redevelopment, including air emission monitoring, and (3) future buildings will need to be constructed with vapor control systems (i.e., vapor barriers) for precautionary measures. It should be noted that Ramboll/Environ used wrong regulatory screening values while evaluating the data and used old data that was collected prior to soil remediation activities.
- Ardent compared the 2016 data collected by Ramboll/Environ to current cleanup guidelines that are typically accepted by the LARWQCB, including the SFRWQCB-ESLs for the protection of groundwater and the DTSC-SLi and EPA-RSLi for the protection of human health through possible vapor intrusion at industrial/commercial properties; modifying the ambient indoor air screening levels using a 0.0005 attenuation factor and 10E-5 cancer risk factor.
- Based on Ardent's evaluation of current data and information obtained during completion of this Phase I ESA, the following areas of environmental concern were identified.

Possible Vapor Intrusion – Ramboll/Environ installed 27 soil borings throughout the site which were used to collect soil gas samples. Of the 27 sample points, only four indicated concentrations of VOCs exceeding the regulatory screening values (borings B08 associated with Area 6, B22 associated with Area 14b, and B25 and B27 associated with Areas 14c and



24). These sample points were located on the outer edges of the property (i.e., outside the location of future building pads) and were only slightly above the conservative screening values. Three of the locations were also noted in areas of previous SVE operations (Areas 14b, 14c, and 24), which have been approved by the LARWQCB as needing no further remediation. Due to the possible vapor intrusion issues, this feature would be considered an REC (**REC No. 1**).

Historical Industrial Activities – Due to more than 70 years of industrial/manufacturing activities completed at the site, it is likely that other unknown environmental conditions may be encountered during grading or redevelopment activities. These possible concerns would be considered an REC (**REC No. 2**).

Area 2 – Former Diesel UST: A 20,000-gallon diesel fuel UST was removed from the site in 1992 under the direction and oversight of the LACDPW. The case was transferred to the LARWQCB. Following removal, approximately 2,400 cubic yards of impacted soil were excavated and disposed of off-site. Laboratory results of confirmation soil samples indicated no detectable to low concentrations of petroleum hydrocarbons. Based on these results, the LARWQCB issued a NFA letter on May 15, 1996. This former UST would be considered an HREC (HREC No. 1).

Area 6 – Former Acetone UST: During the Ramboll/Environ 2016 Phase II investigation and as noted above, elevated concentrations of PCE were reported in soil gas in boring B08. Although these soil gas concentrations would not be considered an environmental concern, no soil samples were analyzed. If elevated concentrations of VOCs are discovered in discrete soil samples exceed human health risk or protection of groundwater criteria, soil remediation may be needed. The lack of soil sampling in this area would be considered an REC (**REC No. 3**).

Area 11 – Surface Drainage Sump: During completion of the 2001 FS, Area 11 was noted as an environmental concern due to elevated concentrations of VOCs in soil. This area was subsequently remediated using SVE under the direction and oversight of the LARWQCB. Following operation of the SVE, the LARWQCB agreed that no further in-situ remediation was warranted. Although a NFA letter is pending following completion of a RAP for groundwater remediation, this work is currently being completed by BP. Based on this information, Area 11 would be considered an HREC (HREC No. 2).

Area 13 – East of Hydraulic Presses Building: Investigations completed in this area prior to the 2001 FS provided no evidence of an environmental concern. Subsequent consultants raised the possible concern that hydraulic oils associated with the hydraulic presses may have contained PCBs; these chemical constituents were not previously analyzed by others. During completion of this Phase I ESA, no evidence of hydraulic presses was noted in this area. According to site contacts, the presses formerly utilized aboveground piping and were located on concrete. The presses were recently removed, and the area was redeveloped with an autoclave which included a subterranean basement. Based on this information, there is a low


likelihood that residual PCBs, if any, are present, and therefore, the lack of PCB analysis would not be considered an environmental concern.

Area 14b – Adjacent East of "Not HITCO Property": Elevated concentrations of PCE have been reported in shallow soil (boring B22, up to 10 feet bgs) that exceed the regulatory screening level for the protection of groundwater; the lateral extent of which is unknown. This detection would be considered an REC (REC No. 4).

Area 14c – Adjacent East of "Not HITCO Property": Elevated concentrations of PCE have been reported in shallow soil (boring B27, up to 5 feet bgs) that exceed the regulatory screening level for the protection of groundwater; the lateral extent of which is unknown. This detection would be considered an REC (REC No. 5).

Area 16 – Former Degreaser and Hydraulic Presses: Investigations completed in this area prior to the 2001 FS provided no evidence of an environmental concern. Subsequent consultants raised the possible concern that hydraulic oils associated with the hydraulic presses may have contained PCBs; these chemical constituents were not previously analyzed by others. During completion of this Phase I ESA, no evidence of hydraulic presses was noted in this area. According to site contacts, the presses formerly utilized aboveground piping and were located on concrete associated with a historical building. The new building was reportedly constructed in 2008 which included the excavation and/or the reworking of soils for geotechnical purposes. Based on this information, there is a low likelihood that residual PCBs, if any, are present, and therefore, the lack of PCB analysis would not be considered an environmental concern.

Area 17 – Solvent Uses and Hydraulic Presses: Investigations completed in this area prior to the 2001 FS provided no evidence of an environmental concern. Subsequent consultants raised the possible concern that hydraulic oils associated with the hydraulic presses may have contained PCBs; these chemical constituents were not previously analyzed by others. During completion of this Phase I ESA, no evidence of hydraulic presses was noted in this area. According to site contacts, the presses formerly utilized aboveground piping and were located on concrete associated with a historical building. The new building was reportedly constructed in 2008 which included the excavation and/or the reworking of soils for geotechnical purposes. Based on this information, there is a low likelihood that residual PCBs, if any, are present, and therefore, the lack of PCB analysis would not be considered an environmental concern.

Area 20 – Hydraulic Press: Investigations completed in this area prior to the 2001 FS provided no evidence of an environmental concern. Subsequent consultants raised the possible concern that hydraulic oils associated with the hydraulic presses may have contained PCBs; these chemical constituents were not previously analyzed by others. During completion of this Phase I ESA, no evidence of hydraulic presses was noted in this area. According to site contacts, the presses formerly utilized aboveground piping and were located on concrete associated with a historical building. The new building was reportedly constructed in 2008



which included the excavation and/or the reworking of soils for geotechnical purposes. Based on this information, there is a low likelihood that residual PCBs, if any, are present, and therefore, the lack of PCB analysis would not be considered an environmental concern.

Area 24 – Pump House: During completion of the 2001 FS, Area 24 was noted as an environmental concern due to elevated concentrations of VOCs in soil. This area was subsequently remediated using SVE under the direction and oversight of the LARWQCB. Following operation of the SVE, the LARWQCB agreed that no further in-situ remediation was warranted. Although a NFA letter is pending following completion of a RAP for groundwater remediation, this work is currently being completed by BP. Based on this information, Area 24 would be considered an HREC (HREC No. 3).

Boring B16: Elevated concentrations of PCE have been reported in shallow soil (boring B16, up to 5 feet bgs) that exceed the regulatory screening level for the protection of groundwater; the lateral extent of which is unknown. This detection would be considered an REC (**REC No. 6**).

Former Silver Recovery Unit, Building 8: The Silver Recovery Unit located in Building 8 was used to process photo recovery wastes. According to previous consultants, a floor drain was noted in this room. Since no soil samples had been collected in the vicinity of the floor drain, others raised this feature as a possible environmental concern. During completion of Ardent's Phase I ESA, no Silver Recovery Unit or evidence of a floor drain was noted. The concrete appeared in good condition. Based on this information and type of chemical (i.e., metals), there is a low likelihood that a possible release may have affected the soil. Ardent, therefore, does not consider the former Silver Recovery Unit a possible environmental concern.

Paint Booth, Building 12 – According to others, the paint associated with the Paint Booth located in Building 12 included hexavalent chromium (i.e., based on signage on the paint booth). Since no soil samples had been collected or analyzed for hexavalent chromium in the vicinity of the paint booth, other consultants raised this feature as a possible environmental concern. During Ardent's site visit, the paint booth was still present, however, hexavalent chromium containing paint was no longer used. The paint booth was located on concrete and contained an air handling and ventilation system which controlled overspray and filtered the air prior to emitting to the atmosphere. Based on this information, very little overspray would contact the ground surface. Based on the condition of the concrete and implementation of the overspray management unit, there is a low likelihood that hexavalent chromium containing paint would have impacted the soil. Based on this information, Ardent does not considered the paint booth an environmental concern to the site.

Along 135th Street, West of Building 2 – According to historical documents, industrial wastewater discharges occurred in the area of the existing northern parking lot, west of Building 2. There is no documentation as to the exact location of the discharges. This former activity would be considered an REC (REC No. 7).



Historical Outdoor Trenches - Outdoor trenches were historically located in specific areas of the site and used to convey wastewater. These former features were reportedly located between Buildings 10 and 21, south of Building 10, and south of Buildings 4 and 73. Since the exact location of these former features is unknown, no sampling was conducted. These former features would be considered an REC (**REC No. 8**).

ACMs and LBP - Based on the age of the on-site buildings, asbestos containing building materials (ACMs) and lead-based paint (LBP) may be present (**De Minimis Condition No. 1**). It should be noted that a previous limited asbestos survey conducted at the site in 1995 identified ACMs in Buildings 1, 2, 5, and 32.

4. PHYSICAL SETTING

The following sections include discussions of topographic, geologic, and hydrogeologic conditions in the vicinity of the site, based upon our document review and our visual reconnaissance of the site and adjacent areas.

4.1. Site Topography

Based on the review of the United States Geological Survey (USGS) 7.5 Minute Series, Inglewood, Topographic Quadrangle Map, dated 2012, the site has an approximate elevation of 50 feet above mean sea level (msl). The local topography is generally flat with a minor slope to the southwest.

4.2. Geology

The site is located within the south-central to western portion of the Transverse Ranges in an area locally known as the Los Angeles Coastal Plain or the Los Angeles Basin. The site is underlain by alluvium deposits of Quaternary (recent) age deposits. The alluvium consists of gravel, sand, sandy silt, silt, and clay with shale pebbles. The site is predominantly underlain by interbedded clay and silt with some silty sand.

4.3. Oil and Gas Maps

Based on a review of the California Department of Conservation, Geologic Energy Management Division (CalGEM) on-line well finder, the site is not located within an oil field and no oil or natural gas wells have been drilled on the site.

4.4. Site Hydrology

The following sections discuss the site hydrology in terms of both surface waters and groundwater.



4.4.1. Surface Waters

No surface water bodies such as lakes, streams, or channels are located on the site or in the immediate site vicinity.

4.4.2. Groundwater

The site is located on the Los Angeles Coastal Plain, in the West Coast Basin. The West Coast Basin consists of several physiographic divisions, including the Torrance Plain, Long Beach Plain, El Segundo Sand Hills, Dominguez Gap, Alamitos Gap, and portions of the Baldwin Hills, Rosecrans Hills, Dominguez Hills, Signal Hill, and Palos Verdes Hills. The site is located on the Torrance Plain between the Gardena syncline and the Rosecrans anticline, both of which are northwest-southeast trending subsurface features.

The Torrance Plain is underlain by the Lakewood Formation, which is comprised of marine and continental gravels, sand, silt, and clay with shale pebbles. The hydrogeological setting of the West Coast Basin is complex, and several aquifers have been identified in the vicinity of the site. The Bellflower Aquiclude, which consists of low permeable sediments, occurs near surface grade, and extends to a depth of approximately 110 to 130 feet bgs. The Bellflower Aquiclude is not considered a water-producing zone. Beneath the Bellflower Aquiclude is the Gage Aquifer, which extends to a depth of approximately 270 feet bgs. The Gage Aquifer has moderate to low permeability and is therefore considered a secondary producer in the basin and contains few domestic or irrigation wells that are in production.

The Bellflower Aquiclude extends to a depth of approximately 140 feet beneath the site. Historical groundwater investigations have discovered five distinct and laterally continuous sand layers within the saturated zone of the Bellflower Aquiclude; four of which are located above a 90-foot aquitard. AECOM is retained by BP to complete semiannual groundwater monitoring events. AECOM described the site-specific geology beneath as the following:

- **Vadose Zone** The vadose zone comprises flood plain deposits with occasional riparian channel deposits.
- **Zone A** The unit corresponds to historical references to the 30-foot sand and is generally encountered in the site vicinity at depths of between approximately



16 and 26 feet bgs. Wells in this zone are screened at depths ranging from approximately 8 to 36 feet bgs.

- **Confining Unit 1** Based on historical well construction details, this confining layer may also be part of what was referred to as the 30-foot sand and is generally encountered between approximately 25 and 35 feet bgs.
- **Zone B** This unit corresponds to the upper portion of what was historically referred to as the 50-foot sand (or silty sand). This zone is generally encountered at a depth of between approximately 36 and 47 feet bgs. Wells in this zone are screened at depths ranging from approximately 37 to 60 feet bgs.
- **Confining Unit 2** This unit separates Zone B from Zone C and comprises approximately 2 to 5 feet of silt with many sand laminations.
- Zone C This unit is composed of two distinct aquifers, referred to as C1 and C2, and Confining Unit 3. All three units correspond to what was historically referred to as the 50- and 70-foot sands based on screen intervals of historical monitoring wells. Wells in this zone are screened at depths ranging from approximately 52 to 74 feet bgs.
- Confining Unit 4 This unit separates Zone C and Zone D and consists of silt with occasional fine sand laminations and interbeds. It should be noted that no "Confining Unit 3" was describe by AECOM in its hydrogeologic description.
- Zone D This unit is comprised of fluvial and easterly deposit sequence. According to AECOM, no wells have been screened in this zone (AECOM, 2021).
- **90-Foot Aquitard** This unit is laterally continuous across the larger property with a thickness of 2 to 5 feet. It consists of marsh land deposits with a high percentage of plant debris, peat, and clay.
- Zone E This is a sand unit located beneath the 90-foot aquitard and is hydraulically disconnected from the shallower zones. Groundwater samples collected from existing groundwater well PRB-4C (screened in Zone E), located immediately south of and downgradient from the larger property, have reported no detectable concentrations of VOCs. One well is located in this zone (PRB-4C) which is screened from approximately 92 to 97 feet bgs. This well has been designated by AECOM to be located within the "70-foot sands" (AECOM, 2021).
- **Gage Aquifer** According to AECOM, the wells located within the Gage Aquifer are screened at depths ranging from approximately 147 to 183 feet bgs.

As noted on Figure 6, 28 groundwater monitoring wells are located on the subject property. These wells are screened in the 30-, 50-, and 70-foot sands which correlate to Zones A, B, and C and will need to be protected, or removed and replaced, prior to and during redevelopment and following approval from the LARWQCB and BP (well owners). Based on the latest semiannual groundwater event completed by AECOM in



September 2020, shallow groundwater at the site has been measured at depths of approximately 22 to 25 feet bgs and flows in a southeasterly direction (AECOM, 2021). As noted on Figures 8 through 10, the main chemicals of concern in Zone A are PCE, TCE, and cis-1,2-DCE. According to AECOM, Zones B and C are also impacted with these chemicals. These chemicals have migrated approximately 0.5-mile south of and downgradient from the site.

Groundwater remediation is currently being completed by BP in the vicinity of off-site Buildings 16, 17, and 18 (referred to as "Area 1" by others; Figures 4 and 5). Remediation in this area has included SVE, the installation of a zero valent iron permeable reactive barrier system to help diminish the migration of VOCs off the larger property, pump-and-treat, and the implementation of an enhanced anaerobic bioremediation system to complete reductive dechlorination of PCE and TCE. Going forward, groundwater remediation will include groundwater extraction, treatment, and off-site disposal; in-situ zero valent iron permeable reactive barrier treatment; and/or in-situ enhanced anaerobic bioremediation treatment (AECOM, 2021).

5. HISTORICAL LAND USE

Ardent conducted a historical record search for both the site and surrounding areas. This included a review of one or more of the following sources that were found to be both reasonably ascertainable and useful for the purposes of this Phase I ESA: historical aerial photographs, historical fire insurance maps, historical city directories, building permits and plans, topographic maps, property tax records, zoning/land use records, and a review of prior environmental assessment reports regarding the site. Copies of historical data are provided in Appendix E.

5.1. Summary of Historical Land Use of the Property

The site and larger property were vacant land or used for agricultural purposes from at least 1923 to 1947. During this time, the northern portion of the site contained a residential building. From at least 1947 through the late-1950s, the larger property was reportedly used for plastics manufacturing purposes. Most of the existing buildings on the site were noted in a 1952 aerial photograph. Beginning in approximately 1961, HITCO began occupying the larger property for the manufacture of silica and carbon-based products for aerospace and commercial applications. The site has been used for office, manufacturing,



and warehouse purposes since this time. Currently, AVCorp occupies the site for similar manufacturing purposes.

5.2. Summary of Historical Land Use of Adjoining Properties

The site vicinity was used for agricultural purposes and vacant land from at least 1923 through the late-1940s. By the early 1950s, properties in the site vicinity began development for commercial, retail, industrial, and some residential purposes. By the early 1970s, properties in the site vicinity were fully developed as they exist today.

5.3. Fire Insurance Rate Maps

Historical Sanborn Fire Insurance Rate Maps (Sanborn maps) were requested from Environmental Data Resources Inc. (EDR) of Milford, Connecticut. According to EDR, there are no Sanborn maps available for the site vicinity.

5.4. Historical Aerial Photographs

Historical aerial photographs for the years 1923, 1928, 1938, 1947, 1952, 1963, 1972, 1979, 1983, 1989, 1994, 2002, 2005, 2009, 2012, and 2016 were provided by EDR. The following presents a summary of our review.

- **1923, 1928, 1938, and 1947** The site and site vicinity were being used for agricultural purposes. A small residential building was located in the northern portion of the site.
- 1952 Most of the existing industrial buildings located on the site were noted in this photograph. Commercial buildings were also noted on the HITCO I property and in the site vicinity. The HITCO III property continued to be used for agricultural purposes or vacant land.
- 1963, 1972, 1979, 1983, 1989, 1994, 2002, 2005, 2009, 2012, and 2016 The larger property appears to be fully developed for commercial purposes. By 2009, the HITCO I property was vacant land. An increase in manufacturing and industrial activities was noted in the site vicinity.

5.5. Building Departments

Building permits for the site and surrounding properties are maintained by the City of Gardena Building and Safety Department (GBSD). Ardent requested records for the site using the address of 1606 West 135th Street and the address which is shared with the larger property (1600 West 135th Street).



Based on the review, miscellaneous building permits were noted in the GBSD for the 1600 West 135th Street address. However, since this address is shared with the larger property, it was very difficult to determine which permits were associated with which buildings.

5.6. City Directories

City directories were obtained from EDR for the site. Selected city directories from 1920 through 2014 were reviewed. EDR also provided some city directory listings for other properties in the site vicinity.

The site address at 1606 West 135th Street was listed as Fickeissen J E from 1950 thru 1960. The larger property at 1600 West 135th Street was listed as a plastics manufacturing facility beginning in 1957 (Zenith Plastics Co.) and as an aerospace materials manufacturer from 1967 to the present (HITCO, AMCO Steel Corp., SGL Carbon Composites, Inc., BP Chemical, etc.). Additional listings for the site include "Thompson H I Fiber Glass Co. Aerospace Division" (1964), Aero Ceramics, Inc. (1967), and Tiger Credit Union (1994). In general, the site vicinity was listed as industrial facilities beginning in the late 1950's.

5.7. Interviews

Interviews were conducted by Ardent with key site personnel (e.g., past and present owners, operators, and/or occupants), with the objective of obtaining information indicating RECs in connection with the subject property. The following are the site personnel interviewed for purposes of this assessment, and a summary of their comments with regards to site conditions.

5.7.1. Interview with Owner

The site is owned by SGL and the site tenant is AVCorp. During the site reconnaissance, Ardent interviewed Mr. Gerard Taccini, Director of Operations for SGL. Mr. Taccini has been employed by SGL for 35 years and is very familiar with the site. Details of this interview are presented throughout this report.

5.7.2. Interview with Site Manager

No site manager was available for interview.

5.7.3. Interviews with Occupant

Ardent was not allowed to interview employees of AVCorp.



5.7.4. Interviews with Local Government Officials

Representatives of local regulatory agencies were interviewed during completion of this report. The information obtained is presented throughout this report.

On July 6, 2021, Ardent contacted Ms. Nicole Alkov, case handler with the LARWQCB to discuss the current regulatory status of the site. According to Ms. Alkov, the site has undergone extensive investigations throughout the years. These investigations have adequately identified environmental concerns, have investigated those concerns, and have remediated VOC-impacted soil that might be contributed to the local groundwater issues. An SVE system operated in Areas 11, 13, 14b, 14c, and 24 to a point where no further remediation is necessary. The LARWQCB is not planning to reopen the case. The only reason a NFA letter has not been issued is due to the open groundwater remediation case that is currently being completed by BP.

The only way the LARWQCB would reopen a soil case would be if new data is collected indicating a possible risk to human health (i.e., exceeding the DTSC and/or EPA values) or threat to groundwater (i.e., exceeding the SFRWQCB-ESLs for the protection of drinking water).

5.7.5. Interviews with Others

No other interviews were completed during this Phase I ESA.

5.8. Previous Reports and Documents

OMP provided Ardent with a number of environmental reports which are summarized in Section 3.7.

6. SITE RECONNAISSANCE

The site and site vicinity reconnaissance were performed by Ardent on July 9, 2021. Ardent was escorted throughout the site by Mr. Taccini of SGL. The site reconnaissance involved a walking tour of the site and visual observations of adjoining properties. At the time of the site reconnaissance, the weather was sunny with no weather-related obstructions noted. On-site photography was limited to protect proprietary information. Selected photographs taken during these activities are included in Appendix A.



During the site reconnaissance, the site was developed with several buildings occupied by AVCorp to manufacture silica and carbon-based products for aerospace and commercial applications. According to Mr. Taccini, some renovations occurred in 2008 which included the removal of equipment and buildings, with the redevelopment of new buildings (Figure 13). Mr. Taccini indicated, to the best of his knowledge, none of the on-site buildings are equipped with soil vapor mitigation systems (VIMSs).

Composite products are manufactured primarily for aircraft applications by curing "prepreg material" (a cloth impregnated with either an epoxy or phenolic resin) in molds under high temperature and pressure in ovens, or autoclaves. The molded material is then machined to the finished shape and sent to finishing for hardware attachment and top-coating. Finishing operations for some products include assembly (drilling holes in the structures, applying attachment hardware, and/or using adhesives to assemble the finished product) and top-coating (paint mixing, and hand application by spray painting in paint spray booths). Ancillary operations include packaging, shipping, and administrative operations. AVCorp also uses a number of small chillers and cooling towers for cooling water; reverse osmosis/deionization water system; and general building and machinery/equipment maintenance. A Quality Control Laboratory is also present on the site which submerge manufactured composite structures into an AST of deionized water, and internal tests using ultrasound and x-rays to scan the structures for potential flaws (Building 21). Transfer of materials are conducted using battery and propane operated forklifts, boom-lifts, scissor lifts, and carts. In-house maintenance is completed.

Chemicals and materials used at the site include fiber composites, adhesives, paints, nonchlorinated solvents, resins, acids, calcium carbonate, nitrogen, carbon dioxide, propane, hydrogen, fiberglass blankets, silica cloth, and natural gas. Maintenance related chemicals include lubricating oils, greases, and hydraulic oils, welding gases, cooling water treatment chemicals, and sanitizers.

A number of hazardous materials and wastes are stored throughout the site in 55-gallon drums, ASTs, and fire cabinets. Chemicals used at the site include non-chlorinated solvents, petroleum hydrocarbons (i.e., lubricating and hydraulic oils), and metals. Overall, very good housekeeping practices were noted throughout the site. Access to some of the buildings was not allowed due to proprietary activities.



According to Mr. Taccini, the hydraulic presses described by other in Areas 13, 16, 17, and 20 were no longer present. The hydraulic presses associated with Area 13 had been removed in 2008 and an autoclave was constructed with a subterranean basement. Soil in this area was excavated to a depth of approximately 8 feet bgs and removed from the site.

The hydraulic presses associated with Areas 16, 17, and 20 were located in historical buildings that were removed in 2008 prior to the construction of the existing buildings (Figure 13). The piping associated with the hydraulic presses was aboveground and these features were located on concrete foundations. The soils associated with the new buildings were excavated for geotechnical purposes, with most of the soils being removed from the site.

The former Silver Recovery Unit reportedly located in Building 8 generated small quantities of silver during the photo processing activities. This unit is no longer present, and no floor drains are located in Building 8 (Taccini, 2021). The floors of this building are concrete and appeared in good condition. No environmental concerns were noted.

Approximately three years ago, paint containing hexavalent chromium was no longer used on the site. The Paint Booth noted in Building 12 was in good condition and was equipped with an overspray management system that eliminated paint from contacting the floor. The air handling and ventilation system-controlled overspray and filtered air prior to emitting to the atmosphere. No environmental concerns were noted.

The following information is required by ASTM.

6.1. Use and Storage of Hazardous Substances and Petroleum Products

Storage and use of hazardous substances and petroleum products were noted throughout the site. No stains or evidence of a release were noted. Based on this information, the use and storage of hazardous materials and petroleum products would not be considered an environmental concern to the site.

6.2. Storage and Disposal of Hazardous Wastes

Hazardous waste is stored in many locations throughout the site and is disposed of periodically by a state-licensed hazardous waste disposal company. No stains or evidence of a release was noted in these areas. Based on this information, the storage and disposal of hazardous wastes would not be considered an environmental concern to the site.



6.3. Unidentified Substance Containers

No unidentified substance containers were noted at the site.

6.4. Aboveground Storage Tanks (ASTs) and Underground Storage Tanks (USTs)

As discussed above, numerous ASTs were noted throughout the site and used to store compressed nitrogen and propane. ASTs containing deionized water are located in Building 21. Based on the type of materials being stored (i.e., water and gasses), these features would not be considered an environmental concern to the site.

No evidence of USTs (i.e., vent pipes, fill ports, manhole covers) was observed at the site during the site reconnaissance, and no reported USTs are present.

6.5. Evidence of Releases

No evidence of chemical releases on the site, such as odors, stressed vegetation, stains, leaks, pools of liquids, and spills, were observed during the site reconnaissance.

6.6. Polychlorinated Biphenyls (PCBs)

Historically, PCBs (a group of hazardous substances and suspected human carcinogens) were widely used as an additive in cooling oils for electrical components. Typical sources of PCBs can include electrical transformers. One pad-mounted transformer was observed at the site, south of Building 4 (Figure 13). No staining or evidence of a release was noted. This feature would not be considered an environmental concern to the site.

6.7. Suspect Asbestos-Containing Building Materials (ACMs)

The manufacture of most ACMs was phased out in the 1970s, ending in 1980. Previously manufactured ACMs that were in stock continued to be used through approximately 1981. Some non-friable ACMs are still manufactured (e.g., roofing mastics). In general, buildings constructed after 1981 have a negligible potential to contain friable ACMs and a low potential for most non-friable ACMs, with the exception of roofing materials.

Based on the age of the on-site buildings, ACMs may be present. It should be noted that a previous limited asbestos survey conducted at the site in 1995 identified ACMs in Buildings 1, 2, 5, and 32.



6.8. Lead Based Paint (LBP)

The manufacture of LBP was phased out in approximately 1978. Based on the probable age of the site buildings (1950s), LBP may be present.

6.9. Indications of Water Damage or Mold Growth

No visual evidence of water damage or mold was observed.

6.10. Wastewater Systems

No wastewater systems were observed on the site. Wastewater is discharged to the sanitary sewer. Off-site sampling points are used to verify wastewater quality. AVCorp completes semi-annual sampling.

6.11. Stormwater Systems

Stormwater floor drains were noted at various locations throughout the site. No staining or dumping was noted in the vicinity of these features, and therefore, these features would not be considered an environmental concern to the site.

6.12. Wells

Numerous groundwater monitoring wells were noted throughout the site (Figure 6). No production or commercial groundwater wells were noted.

6.13. Other Subsurface Structures

No other subsurface structures of possible environmental concern were noted.

6.14. Other Issues

No other on- or off-site issues of environmental concern were noted during the site visit.

7. ENVIRONMENTAL DATABASE SEARCH

A computerized environmental information database search was performed by EDR for this Phase I ESA on May 28, 2021. The database search included federal, state, local, and tribal databases. A summary of the environmental databases searched, their corresponding search radii, and number of noted facilities of environmental concern is presented in Appendix E. In addition, a description of the assumptions and approach to the database search is provided in Appendix E. The review was conducted to evaluate whether the site or properties within the vicinity of the site have been reported as having experienced significant unauthorized releases of hazardous substances or other events with potentially adverse environmental effects.



As noted above, the site shares an address with the larger property (i.e., 1600 West 135th Street). This address was listed on a number of databases for permitting purposes and regulatory oversight due to the manufacturing land use. Since specific building numbers were not noted, it is unclear as to which permits where associated with the site. As noted in Section 3.7, the site and larger property are undergoing extensive investigations and remediation efforts due to past releases. These past releases, which have affected soil, soil gas, and groundwater, would be considered an REC. The remaining site address of 1606 West 135th Street was not listed on regulatory databases.

The site is located within an area of historical and current industrial use, and many surrounding properties within close proximity to the site are listed on regulatory databases. Based on the chemical uses, close proximity, and shallow depth to groundwater, these facilities may have contributed to the VOC-impacted groundwater known to exist beneath the site.

The following paragraphs describe the databases that contain noted properties of environmental concern and include a discussion of the regulatory status of the facilities and potential environmental impact to the subject site.

7.1. Federal National Priorities List (NPL): Distance Searched – 1 mile

The NPL is the USEPA's database of uncontrolled or abandoned hazardous waste properties identified for priority remedial actions under the Superfund program. This database includes proposed NPL listings.

Neither the site nor properties located within the search radius were listed on this database.

7.2. Federal Delisted NPL: Distance Searched – 1 mile

This database contains delisted NPL properties under the Superfund program. The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the USEPA uses to delete properties from the NPL. In accordance with 40 Code of Federal Regulations (CFR) 300.425. (e), properties may be deleted from the NPL where no further response is appropriate.

Neither the site nor properties located within the search radius were listed on this database.



7.3. Federal Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) List: Distance Searched – 0.5 mile

The CERCLIS database contains properties which are either proposed or on the NPL and properties which are in the screening and assessment phase for possible inclusion on the NPL. This database also includes properties listed as No Further Remedial Action Planned (NFRAP). These facilities are listed on either the Superfund Enterprise Management System (SEMS) or SEMS-Archive databases (SEMS-ARCHIVE).

The site was not listed. Neither the site nor facilities within the search radius were listed on the SEMS database. Four facilities within the search radius were listed on the SEMS-ARCHIVE database with regulatory status of NFRAP. Based on the regulatory status, these facilities would not be considered an environmental concern to the site.

7.4. Federal Corrective Action Report (CORRACTS): Distance Searched – 1 mile

The USEPA maintains this database of Resource Conservation and Recovery Act (RCRA) facilities that are undergoing corrective action. A corrective action order is issued when there has been a release of hazardous waste or constituents into the environment from a RCRA facility.

Neither the site nor properties located within the search radius were listed on this database.

7.5. Federal Resource Conservation and Recovery Act (RCRA) Treatment, Storage, and Disposal Facilities (TSDF) List: Distance Searched – 0.5 mile

The RCRA TSDF database (non-CORRACTS) is a compilation by the EPA of facilities that report generation, storage, transportation, treatment, or disposal of hazardous waste. Inclusion on this list is for permitting purposes and is not indicative of a release.

Neither the site nor properties located within the search radius were listed on this database.

7.6. Federal RCRA Generators List: Distance Searched – Site and Adjoining Properties

This list identifies facilities that generate hazardous waste as defined by RCRA and classifies generators as either large, small, or very small quantity generators (LQG, SQG, or VSQG, respectively). Inclusion on this list is for permitting purposes and is not indicative of a release.



The larger property was listed on this database as SGL Composites, Inc. at 1600 West 135th Street (EPA ID: CAD046452439) as a large quantity generator of hazardous waste from 1980 to the present. Biennial waste disposal reports for the site were available from 2001 through 2011 and 2015 through 2019. These reports contained records of chemical usage and disposal of materials including halogenated solvents (i.e., PCE, TCE, etc.) in 2005 (5.45-tons) and 2009 (7.78-tons) and for usage and disposal of miscellaneous wastes, including chromium and/or mercury in 2001 (0.63-ton), 2003 (0.17-ton), 2005 (0.83-ton), 2009 (3.06-tons), and 2011 (4.643-tons).

Violations in 1985, 1994, and 2011 were noted for this listing. The 2011 violation was listed as "Generators – Pre-Transport" with a violation dated November 3, 2011, and a return to compliance on January 30, 2012.

The larger property was also listed on this database as AVCorp Composite Fabrication, Inc. at the address of 1600 West 135th Street (EPA ID: CAD000631747) as a small quantity generator of hazardous wastes from 1990 through 2020. One biennial waste disposal report for the site was available in 2017 for the disposal of 9.39-tons of miscellaneous waste, including chromium.

Seven adjacent facilities were listed on this database. Stone Manufacturing, located northwest of the site at 1636 West 135th Street was listed on as a large quantity generator. Five facilities were listed as small quantity generators, including Wilco Associates, Inc., located northwest of the site at 1627 West 135th Street; Versatile Engineering, located north of the site at 1559 West 135th Street; Sure Pak Industries, located immediately east of the site at 13625 South Alma Avenue; and Charles E. Thomas Company, located immediately east of the site at 13701 South Alma Avenue, and Copyland, located north of the site at 1635 West 135th Street.

7.7. Federal Institutional Control/Engineering Control Registries: Distance Searched – Site

These lists identify properties with engineering and/or institutional controls. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or affect human health. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post



remediation care requirements intended to prevent exposure to contaminants remaining on the site. Deed restrictions are generally required as part of the institutional controls.

The site was not listed on this database.

7.8. Federal Emergency Response Notification System (ERNS) List: Distance Searched – Site

The ERNS database, maintained by the USEPA, contains information on reported releases of oil and hazardous substances.

The site was not listed on this database.

7.9. EnviroStor Database (EnviroStor) or State-Equivalent CERCLIS: Distance Searched – 1 mile

The EnviroStor database, also known as the State-equivalent CERCLIS, is maintained by the Cal-EPA DTSC. This database contains information on annual work plans (AWP), and both known and potentially contaminated properties. Two-thirds of these properties have been classified, based on available information, as needing no further action (NFA) by the DTSC. The remaining properties are in various stages of review and remediation to determine if a problem exists. These properties are presented by EDR on the EnviroStor database.

The site was not listed on this database. Twenty-five facilities within a 1-mile radius from the site were listed. As previously noted, groundwater in the site vicinity has been locally impacted due to the historical and current manufacturing and industrial activities. Due to the close proximity of these facilities to the site and shallow groundwater conditions, these off-site facilities may have had an adverse effect on groundwater beneath the property.

7.10. State Solid Waste Landfill Sites (SWLF): Distance Searched – 0.5 mile

The SWLF database consists of open and closed solid waste disposal facilities and transfer stations. The data comes from the Integrated Waste Management Board's Solid Waste Information System (SWIS) and the State Water Resources Control Board (SWRCB) Waste Management Unit Database (WMUD).

The site was not listed. Seven facilities are located within the site vicinity. Six of the seven facilities are listed as closed, while one is an active transfer station. No other information



was provided. Due to the close proximity of these facilities to the site and shallow groundwater conditions, these off-site facilities may have had an adverse effect on groundwater beneath the property.

7.11. State Leaking Underground Storage Tank (LUST) Lists: Distance Searched – 0.5 mile

The LUST information system is obtained from the SWRCB and the LARWQCB database.

The larger property was listed on the CA LUST database as SGL Composites, Inc. (Facility ID I-02510) at 1600 West 135th Street with a status of Case Closed as of May 15, 1996. The larger property was also listed on the CA CPS-SLIC database as BP Chemical at 1600 135th Street with a status of "Site Assessment" for VOCs and as BP Chemicals (HITCO) at 1600 West 135th Street with a facility status of "Open – Remediation" due to impacted soil and groundwater.

Forty facilities in the site vicinity were listed. As previously noted, groundwater in the site vicinity has been locally impacted due to the historical and current manufacturing and industrial activities. Due to the close proximity of these facilities to the site and shallow groundwater conditions, these off-site facilities may have had an adverse effect on groundwater beneath the property.

7.12. State Underground Storage Tank (UST) and Aboveground Storage Tank (AST) Registration List: Distance Searched – Site and Adjoining Properties

UST and AST databases are provided by the SWRCB. Inclusion on these lists is for permitting purposes and is not indicative of a release.

The larger property at 1600 West 135th Street was listed on the California Statewide Environmental Evaluation and Planning System (CA SWEEPS) UST database for one UST with an active status as of June 30, 1989. The larger property was also listed on the Hazardous Substance Storage Container Database (HIST) UST database for the following 7 tanks:

- 6,000-gallon UST installed in 1958 with no contents listed,
- 6,000-gallon "waste" UST installed in 1958,
- 20,000-gallon diesel fuel UST installed in 1977,
- 30,000-gallon diesel fuel UST installed in 1997 with duplicate listings,



- 1,000-gallon unleaded gasoline UST with no installation date listed,
- 10,000-gallon diesel fuel UST with no installation date listed,
- 5,000-gallon UST with no installation date or contents listed.

One adjacent facility, Charles E. Thomas Company, located immediately east of the site at 13701 South Alma Avenue, was listed on these databases for 3 USTs with an active status as of June 30, 1989, and no contents listed.

7.13. State Voluntary Cleanup Programs (VCPs): Distance Searched – 0.5 mile

The State VCP database lists low threat level properties with either confirmed or unconfirmed releases. Project proponents have requested that the DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

The site was not listed. Two active facilities were located at least 0.18-mile cross- to downgradient from the site. Based on the distance and direction, these facilities would not be considered an environmental concern to the site.

7.14. Indian Reservations: Distance Searched – 1 mile

This list depicts Indian administered lands of the United States that have an area equal to or greater than 640-acres. No Indian Reservations were listed within a 1-mile radius from the site. Due to the lack of Indian Reservations within 1-mile of the site, other tribal database listings required by ASTM and AAI were deemed not applicable. These listings would include tribal-equivalent NPL, CERCLIS, Landfill and/or Solid Waste Disposal, LUST, UST and AST Registrations, Institutional Control/Engineering Control Registries, VCPs, and Brownfields.

Neither the site nor the properties within the search radius were listed on this database.

7.15. Other Non-ASTM and AAI Database: Distance Searched – Site

Other databases were included in the EDR report but are not required by ASTM or AAI. The larger property was listed on a number of these databases including the former Spills, Leaks, Investigations, and Cleanup (SLIC) listing (currently known as the Cleanup Program Sites [CPS]), US Brownfields, CERS Haz Waste, RCRA NonGen, RMP, ICIS, US Airs, ECHO, Cortese, Drycleaners, EMI, ENF, HAZNET, Historical Cortese, Los Angeles County Permit, NPDES, WDS, WDR, CIWQS, CERS, and HWTS. These listings were for the 1600



West 135th Street address and there was no indication as to whether these listings were for the site or larger property.

8. VAPOR ENCROACHMENT CONDITION (VEC)

Ardent completed a VEC study for the site using Tier 1 criteria as recommended by ASTM E 2600-15. The Tier 1 screening identifies surrounding facilities that pose a possible vapor intrusion source to the site based on the results of the Phase I ESA investigations and certain criteria outlined by ASTM. These criteria include a certain distance from the target site (referred to by ASTM as within the "area of concern"); the types of chemicals used (referred to by ASTM as the "chemicals of concern"); and a plume test to determine if the plume associated with a source of contamination is close enough to the site to impact indoor air quality. A VEC is defined by ASTM as "...the presence or likely presence of chemicals of concern vapors in the vadose zone of the target property caused by the release of vapors from contaminated soil and/or groundwater either on or near the target property identified by the Phase I ESA." Based on the completion of this Phase I ESA, a possible vapor intrusion issue may be present.

9. REGULATORY RECORDS REVIEW

The SCAQMD, LARWQCB, DTSC, Los Angeles County Fire Department (LACFD), Los Angeles County Department of Public Works (LACDPW), Los Angeles County Sanitation Districts (LACSD), and Los Angeles County Department of Public Health (LACDPH) are the lead regulatory agencies for permitting and regulating USTs, ASTs, LUST cases, and/or facilities that use, store, or generate hazardous waste or hazardous materials. Ardent reviewed on-line databases and requested file reviews from these agencies. No files were identified during this review for the site address at 1606 West 135th Street.

With the exception of the LACFD, no files were identified for the historical larger property address at 1551 West 139th Street. The larger property address at 1600 West 135th Street was listed on regulatory databases or indicated as having files at the SCAQMD, LARWQCB, DTSC, LADPW, and LACSD. Ardent reviewed available files for the larger property. However, it is difficult to separate records for the site from records for the larger property. Therefore, these records were not used in the interpretation of possible environmental issues for the site.



10. FINDINGS, OPINIONS AND CONCLUSIONS

Based upon the results of this Phase I ESA, the following findings, opinions, and conclusions are provided.

10.1. Findings and Opinions

The following presents a summary of findings associated with this Phase I ESA performed for the subject property, including known or suspect RECs, HRECs, CRECs, and other environmental considerations (i.e., de minimis environmental conditions or conditions that generally do not present a material risk of harm to public health or the environment).

- The site and larger property were vacant land or used for agricultural purposes from at least 1923 to 1947. During this time, the northern portion of the site contained a residential building. From at least 1947 through the late-1950s, the larger property was reportedly used for plastics manufacturing purposes. Most of the existing buildings on the site were noted in a 1952 aerial photograph. Beginning in approximately 1961, HITCO began occupying the larger property for the manufacture of silica and carbonbased products for aerospace and commercial applications. The site has been used for office, manufacturing, and warehouse purposes since this time. Currently, AVCorp occupies the site for similar manufacturing purposes.
- Since at least 1993, a number of investigations have been completed at the site and larger property. Soil, soil gas, and groundwater at the site and on the remaining HITCO property have been found to be impacted with VOCs, namely PCE and TCE. Soil and groundwater characterization and remediation are being completed under the direction and oversight of the LARWQCB under a voluntary basis. On-site soil characterization and remediation has been completed by HITCO. Groundwater characterization and monitoring for the larger property, including the site, have been completed by BP.
- There are currently 28 groundwater monitoring wells on the site that are periodically monitored by BP as part of its on-going groundwater investigation/remediation for the larger property. Shallow groundwater beneath the site has been measured at a depth of approximately 22 to 25 feet bgs and flows in a southeasterly direction. BP is currently completing semi-annual groundwater monitoring on a voluntary basis (i.e., no Cleanup and Abatement Order or Consent Order has been issued). The site vicinity has been used for industrial/manufacturing purposes for over 50 years. Some of the adjacent facilities may have contributed to the VOC groundwater issues.
- In 2001, McLaren/Hart prepared a comprehensive FS that was presented to the LARWQCB for review and approval. The 2001 FS included a review of all investigations completed to-date which identified 27 areas of concern, 20 of which were located on the HITCO II property. The main chemicals of concern were VOCs, namely PCE, TCE, and cis-1,2-DCE, which had affected soil, soil gas, and groundwater. Based on these investigations, five areas of concern which were located on-site (Areas 14b, 14c, 11, 13, and 24) were determined to need remediation due to elevated concentrations of VOCs in soil which threatened groundwater. These areas were subsequently remediated using SVE under the direction and oversight of the LARWQCB. Following operation of the SVE, the LARWQCB agreed that no further in-situ remediation was warranted. Although



a NFA letter is pending following completion of a RAP for groundwater remediation, this work is currently being completed by BP.

- Residual VOC contamination in soil gas has been evaluated for possible human health risks due to vapor intrusion on the HITCO I and HITCO III properties. During completion of the HHRAs on the HITCO III property, the southern buildings on HITCO II were also evaluated. Based on the results, no immediate human health risk was identified for current occupants of the site, or for occupants on the HITCO I and III properties.
- Ramboll/Environ completed a Phase II investigation in 2016 (post-SVE remediation) to further assess current site conditions (soil and soil gas) in the upper 10 feet of soil in selected areas of the site, including former areas of concern and in random locations. These data were evaluated to assess areas that might need further soil remediation prior to proposed site redevelopment. The evaluation was based on the fact that geotechnical requirements will likely include reworking soils to a depth of approximately 5 feet bgs during future redevelopment. Based on these data, Ramboll/Environ concluded that (1) some areas of the site will need to be further remediated by excavation and off-site disposal due to elevated VOCs in soil and/or soil gas, (2) a SMP will need to be prepared and implemented during redevelopment, including air emission monitoring, and (3) future buildings will need to be constructed with vapor control systems (i.e., vapor barriers) for precautionary measures. It should be noted that Ramboll/Environ used wrong regulatory screening values while evaluating the data and used old data that was collected prior to soil remediation activities.
- Ardent compared the 2016 data collected by Ramboll/Environ to current cleanup guidelines that are typically accepted by the LARWQCB, including the SFRWQCB-ESLs for the protection of groundwater and the DTSC-SLi and EPA-RSLi for the protection of human health through possible vapor intrusion at industrial/commercial properties; modifying the ambient indoor air screening levels using a 0.0005 attenuation factor and 10E-5 cancer risk factor. Based on Ardent's evaluation of current data and information obtained during completion of this Phase I ESA, the following areas of environmental concern were identified.

Possible Vapor Intrusion – Ramboll/Environ installed 27 soil borings throughout the site which were used to collect soil gas samples. Of the 27 sample points, only four indicated concentrations of VOCs exceeding the regulatory screening values (borings B08 associated with Area 6, B22 associated with Area 14b, and B25 and B27 associated with Areas 14c and 24). These sample points were located on the outer edges of the property (i.e., outside the location of future building pads) and were only slightly above the conservative screening values. Three of the locations were also noted in areas of previous SVE operations (Areas 14b, 14c, and 24), which have been approved by the LARWQCB as needing no further remediation. Due to the possible vapor intrusion issues, this feature would be considered a recognized environmental condition **(REC No. 1)**.

Historical Industrial Activities – Due to more than 70 years of industrial/manufacturing activities completed at the site, it is likely that other unknown environmental conditions may be encountered during grading or redevelopment activities. These possible concerns would be considered an REC (REC No. 2).



Area 2 – Former Diesel Underground Storage Tank (UST): A 20,000-gallon diesel fuel UST was removed from the site in 1992 under the direction and oversight of the Los Angeles County Department of Public Works (LACDPW). The case was transferred to the LARWQCB. Following removal, approximately 2,400 cubic yards of impacted soil were excavated and disposed of off-site. Laboratory results of confirmation soil samples indicated no detectable to low concentrations of petroleum hydrocarbons. Based on these results, the LARWQCB issued a NFA letter on May 15, 1996. This former UST would be considered a historical-REC (HREC No. 1).

Area 6 – Former Acetone UST: During the Ramboll/Environ 2016 Phase II investigation and as noted above, elevated concentrations of PCE were reported in soil gas in boring B08. Although these soil gas concentrations would not be considered an environmental concern, no soil samples were analyzed. If elevated concentrations of VOCs are discovered in discrete soil samples exceed human health risk or protection of groundwater criteria, soil remediation may be needed. The lack of soil sampling in this area would be considered an REC (**REC No. 3**).

Area 11 – Surface Drainage Sump: During completion of the 2001 FS, Area 11 was noted as an environmental concern due to elevated concentrations of VOCs in soil. This area was subsequently remediated using SVE under the direction and oversight of the LARWQCB. Following operation of the SVE, the LARWQCB agreed that no further in-situ remediation was warranted. Although a NFA letter is pending following completion of a RAP for groundwater remediation, this work is currently being completed by BP. Based on this information, Area 11 would be considered an HREC (HREC No. 2).

Area 14b – Adjacent East of "Not HITCO Property": Elevated concentrations of PCE have been reported in shallow soil (boring B22, up to 10 feet bgs) that exceed the regulatory screening level for the protection of groundwater; the lateral extent of which is unknown. This detection would be considered an REC (**REC No. 4**).

Area 14c – Adjacent East of "Not HITCO Property": Elevated concentrations of PCE have been reported in shallow soil (boring B27, up to 5 feet bgs) that exceed the regulatory screening level for the protection of groundwater; the lateral extent of which is unknown. This detection would be considered an REC (REC No. 5).

Area 24 – Pump House: During completion of the 2001 FS, Area 24 was noted as an environmental concern due to elevated concentrations of VOCs in soil. This area was subsequently remediated using SVE under the direction and oversight of the LARWQCB. Following operation of the SVE, the LARWQCB agreed that no further in-situ remediation was warranted. Although a NFA letter is pending following completion of a RAP for groundwater remediation, this work is currently being completed by BP. Based on this information, Area 24 would be considered an HREC (HREC No. 3).

Boring B16: Elevated concentrations of PCE have been reported in shallow soil (boring B16, up to 5 feet bgs) that exceed the regulatory screening level for the protection of groundwater; the lateral extent of which is unknown. This detection would be considered an REC (**REC No. 6**).

Along 135th Street, West of Building 2 – According to historical documents, industrial wastewater discharges occurred in the area of the existing northern



parking lot, west of Building 2. There is no documentation as to the exact location of the discharges. This former activity would be considered an REC (**REC No. 7**).

Historical Outdoor Trenches - Outdoor trenches were historically located in specific areas of the site and used to convey wastewater. These former features were reportedly located between Buildings 10 and 21, south of Building 10, and south of Buildings 4 and 73. Since the exact location of these former features is unknown, no sampling was conducted. These former features would be considered an REC (**REC No. 8**).

- Based on the age of the on-site buildings, ACMs and LBP may be present (**De-Minimis Condition No. 1**). It should be noted that a previous asbestos survey conducted at the site in 1995 identified ACMs in Buildings 1, 2, 5, and 32.
- No other on- or off-site environmental concerns were noted.

10.2.Conclusions

Ardent has performed this Phase I ESA in general conformance with the scope and limitations of the American Society for Testing and Materials (ASTM) Practice E 1527-13, ASTM Standard E 2600-15, and the EPA Standards and Practices for All Appropriate Inquiries (AAI), Final Rule (40 CFR, Part 312), for the former HITCO Carbon Composites facility located at 1600 and 1606 West 135th Street in the city of Gardena, California. Any limitations or exceptions encountered during completion of this report are stated in Section 1.4. Based on the information received to date, no evidence or indication of RECs, HRECs, controlled-RECs (CRECs), or conditions indicative of releases or threatened releases of hazardous substances on, at, in, or to the subject property has been revealed, with the exception of the following.

RECs

- **REC No. 1:** Possible Vapor Intrusion
- **REC No. 2:** Historical Industrial Activities
- REC No. 3: Area 6 Former Acetone UST
- REC No. 4: Area 14b Adjacent East of "Not HITCO Property"
- REC No. 5: Area 14c Adjacent East of "Not HITCO Property"
- **REC No. 6:** Boring B16
- **REC No. 7:** Along 135th Street, West of Building 2
- **REC No. 8:** Historical Outdoor Trenches

HRECs

• HREC No. 1: Area 2 – Former Diesel UST



- HREC No. 2: Area 11 Surface Drainage Sump
- HREC No. 3: Area 24 Pump House

<u>CRECs</u>

• No CRECs have been identified during completion of this report.

De-Minimis Condition

• **De-Minimis Condition No. 1: ACMs and LBP** - Although not considered an environmental concern by ASTM, ACMs and LBP may be present.

11. RECOMMENDATIONS

Based on the results of this Phase I ESA, Ardent recommends the following:

- **REC No. 1: Possible Vapor Intrusion** An updated HHRA should be completed to verify that no mitigation measures are needed in existing buildings. The client may consider installing vapor intrusion mitigation systems in newly constructed buildings for precautionary measures.
- REC No. 2: Historical Industrial Activities A SMP should be prepared presenting the scope of work to monitor air emissions and manage unknown environmental concerns that might be encountered during redevelopment.
- REC No. 3: Area 6 Former Acetone UST Soil samples should be collected in the vicinity of previous soil boring B08 which indicated elevated concentrations of PCE in soil gas to determine whether elevated concentrations of VOCs are present in discrete soil samples. If elevated concentrations of VOCs are reported in soil exceeding the human health risk or protection of groundwater criteria, the volume of soil will need to be characterized in the upper 10 feet for remediation by excavation and off-site disposal prior to redevelopment.
- REC No. 4: Area 14b Adjacent East of "Not HITCO Property" Soil samples need to be collected in the vicinity of boring B22 to characterize the lateral extent of elevated PCE detected at 5 and 10 feet bgs. Prior to beginning work, a work plan should be submitted to the LARWQCB for approval. Once the extent has been determined, impacted soil should be excavated and removed from the site prior to redevelopment.
- REC No. 5: Area 14c Adjacent East of "Not HITCO Property" Soil samples need to be collected in the vicinity of boring B27 to characterize the lateral extent of elevated PCE detected at 5 feet bgs. Prior to beginning work, a work plan should be submitted to the LARWQCB for approval. Once the extent has been determined, impacted soil should be excavated and removed from the site prior to redevelopment.
- REC No. 6: Boring B16 Soil samples need to be collected in the vicinity of boring B16 to characterize the lateral extent of elevated PCE detected at 5 feet bgs. Prior to beginning work, a work plan should be submitted to the LARWQCB for approval. Once the extent has been determined, impacted soil should be excavated and removed from the site prior to redevelopment.



- REC No. 7: Along 135th Street, West of Building 2 Since the exact location of these reported discharges is unknown, additional sampling is not recommended at this time. Ardent recommends that this area be monitored for stains, odors, or elevated photoionization detector (PID) readings during soil disturbances in accordance with the SMP.
- **REC No. 8: Historical Outdoor Trenches** Since the exact location of these features is unknown, additional sampling is not recommended at this time. Ardent recommends that this area be monitored for stains, odors, or elevated PID readings during soil disturbances in accordance with the SMP.
- **De-Minimis Condition No. 1: ACMs and LBP** Prior to redevelopment, a comprehensive asbestos and LBP survey should be completed. If identified, ACMs should be removed, and LBP stabilized by a state-certified abatement contractor before demolition.
- Existing Groundwater Wells The existing groundwater monitoring wells should be removed and relocated under the direction of the LARWQCB or protected during redevelopment for use after construction activities.



12. REFERENCES

- AECOM, 2021, Second Semiannual 2020 Groundwater Monitoring Report, HITCO Gardena Facility, 1600 West 135th Street, Gardena, California: Report prepared for Gardena Holdings, Inc., Gardena, California, dated January 29.
- Alkov, Nicole, 2021, Case Handler with the California Regional Water Quality Control Board, Los Angeles Region (LARWQCB): Oral communications.
- ENVIRON International Corporation, 2014, Phase I Environmental Site Assessment, HITCO Carbon Composites, Inc. 1600, 1606, and 1720 West 135ths Street, Gardena, California: Report prepared for SGL Carbon, LLC, Charlotte, North Carolina, dated July.
- Environmental Data Resources, Inc. (EDR), 2021, Regulatory Database Report, dated May 28.
- Environmental Management Consultants, 1995, Asbestos Survey Report, BP HITCO, 1600 West 135th Street, Gardena, California: Report prepared for Piko and Associates, Woodland Hills, California, dated July 5.
- Hazard Management Consulting, Inc. 2018, Phase I Environmental Site Assessment, Former Hitco Facility, 1600 West 135th Street, Gardena, California: Report prepared for IDS Real Estate Group, San Diego California, and California Regional Water Quality Control Board, Los Angeles Region (LARWQCB), Los Angeles, California, dated January 16.
- McLaren-Hart/Jones, Inc., 2001, Feasibility Study Report, 1600 West 135th Street, Remediation Project, Gardena, California: Report prepared for BP, Cuyahoga Heights, Ohio.
- Parsons, 2010, Soil Gas Investigation Report, Former BP HITCO Facility, 1600 West 135th Street, Gardena, California: Report prepared for the California Regional Water Quality Control Board, Los Angeles Region (LARWQCB), Los Angeles, California, dated July 16 and revised on October 5.
- Ramboll Environ, 2016 Report of Shallow Phase II Subsurface Investigation, HITCO Carbon Composites, Inc., 1600 West 135th Street, Gardena, California: Report prepared for SGL Carbon, LLC, Charlotte, North Carolina, dated June 10.
- Ramboll Environ, 2016, Hitco Cost Memo: Memorandum prepared for SGL Carbon, LLC, Charlotte, North Carolina, dated June 24.
- Ramboll US Consulting, Inc., 2020, Phase I Environmental Site Assessment, Proposed Development Area, 1600 West 135th Street, Gardena, California: Report prepared for SGL Carbon, LLC, Charlotte, North Carolina, dated November.
- Taccini, Gerald, 2021, Director of Operations, SGL Carbon: Oral communications.
- Woodward-Clyde Consultants, 1997, Site Investigation Report for the Former HITCO Facility in Gardena, California: Report Prepared for BP Oil Company, Cleveland, Ohio, dated November.



13. QUALIFICATIONS STATEMENT AND SIGNATURE OF ENVIRONMENTAL PROFESSIONAL

Mr. Paul Roberts states that the Phase I ESA was performed under his direct supervision, and that he has reviewed and approved the report, and the methods and procedures employed in the development of the report conform to the minimum industry standards. Mr. Roberts certifies that Ardent project personnel and subcontractors are properly licensed and/or certified to do the work described herein.

Pursuant to Paragraph 12.13 of the ASTM Standard E1527-13:

I declare that, to the best of my professional knowledge and belief, I meet the definition of *Environmental professional* as defined in §312.10 of 40 CFR 312. I have the specific qualifications based on education, training, and experience to assess a *property* of the nature, history, and setting of the subject *property*. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Paul Roberts, P.G. Principal Geologist



	<u> </u>		VOCs (mg/kg)							
Date Date		Sample	cis-1,2-							
Sample ID	Sampled	Depth	Dichloro-	TCE	PCE					
	•	(feet bgs)	ethene	-	_					
DO4	E/E/0040	5	ND<0.004	ND<0.004	ND<0.004					
B01	5/5/2016	10	ND<0.004	ND<0.004	ND<0.004					
Doo	E/0/0040	5	ND<0.004	ND<0.004	ND<0.004					
B02	5/6/2016	10	ND<0.004	ND<0.004	ND<0.004					
Doo	E/E/0040	5	ND<0.004	ND<0.004	ND<0.004					
B03	5/5/2016	10	ND<0.004	ND<0.004	ND<0.004					
B 06	5/1/2016	5	ND<0.004	ND<0.004	ND<0.004					
B00	5/4/2010	10	ND<0.004	ND<0.004	ND<0.004					
P11	5/1/2016	5	ND<0.004	ND<0.004	ND<0.004					
БП	5/4/2010	10	ND<0.004	0.00493J	ND<0.004					
B13	5/4/2016	5	ND<0.004	ND<0.004	ND<0.004					
515	3/4/2010	10	ND<0.004	ND<0.004	0.00662					
B15	5/1/2016	5	0.00412	ND<0.004	ND<0.004					
ыз	3/4/2010	10	0.00633	ND<0.004	0.00444					
B16	5/3/2016	5	ND<0.004	0.0254J	0.145					
DIO	0/0/2010	10	ND<0.004	ND<0.004	0.00839					
B17	5/3/2016	5	ND<0.004	ND<0.004	ND<0.004					
ыл	5/5/2010	10	ND<0.004	ND<0.004	ND<0.004					
B18	5/6/2016	5	ND<0.004	ND<0.004	ND<0.004					
ыю	5/0/2010	10	ND<0.004	ND<0.004	ND<0.004					
B20	5/4/2016	5	ND<0.004	ND<0.004	ND<0.004					
820	0/ 1/2010	10	ND<0.004	ND<0.004	ND<0.004					
B21	5/3/2016	5	ND<0.004	ND<0.004	ND<0.004					
BET	0/0/2010	10	ND<0.004	ND<0.004	ND<0.004					
B22	5/3/2016	5	ND<0.004	ND<0.004	0.0814					
DEL	0/0/2010	10	ND<0.004	ND<0.004	0.11					
B24	5/3/2016	5	ND<0.004	ND<0.004	ND<0.004					
521	0,0,2010	10	ND<0.004	ND<0.004	ND<0.004					
B25	5/5/2016	5	ND<0.004	ND<0.004	ND<0.004					
	0,0,2010	10	ND<0.004	ND<0.004	0.0073					
B27	5/5/2016	5	ND<0.004	ND<0.004	0.2					
	0,0,2010	10	ND<0.004	ND<0.004	ND<0.004					
		Regulatory Gu	idelines							
Protection	of Human Health	DTSC-SLi	84,000	NA	2,700					
1 101601101		EPA-RSLi	2,300,000	6,000	100,000					
Protection	n of Groundwater	SFRWQCB- ESL	-RWQCB- 0.19 0.085 ESL 0.19							
Notes:										

Table 1 - Summary of VOCs in Soil During Ramboll/Environ's 2016 Phase II Investigation

Samples analyzed for VOCs in general accordance with EPA Method No. 8260B

feet bgs - feet below the ground surface

mg/kg - milligrams per kilogram

VOCs- volatile organic compounds

PCE - tetrachloroethene

TCE - trichloroethene

ND - not detected above laboratory reporting limit

Only compounds with at least one detection are listed.

J - results estimated

DTSC-SLi - California Department of Toxic Substances Control (DTSC), Human and Ecological Risk Office, Human Health Risk Assessment Note 3, screening levels for industrial/commercial soil, dated June 2020

EPA-RSLr - Environmental Protection Agency, Region 9, Regional Screening Levels for industrial/commercial soil, dated November 2020

SFRWQCB-ESL - Regional Water Quality Control Board, San Francisco Bay Region, Environmental Screening Levels for soil based on leechability to groundwater, dated July 25, 2019.

Yellow highlighted cell indicates a concentration which exceeds a regulatory screening level.

		VOCs																										
Sample ID	Date Sampled	Sample Depth							Dichloro-			cis-1 2-	trans_1 2		ju)	g/l)					111-		Trichloro-	124-	135-			
		(feet bgs)	Benzene	n-Butyl-	sec-Butyl-	Chloro-	Chloroform	1,2-Dichloro-	difloro-	1,1-Dichloro-	1,1-Dichloro-	Dichloro-	Dichloro-	Ethyl-	Isopropyl-	4-Isopropyl-	Methylene	n-Propyl-	PCE	Toluene	Trichloro-	TCE	floro-	Trimethyl-	Trimethyl-	Vinyl	Total	Other Vocs
				benzene	benzene	benzene		benzene	methane	ethane	ethene	ethene	ethene	benzene	benzene	tolene	Chloride	benzene			ethane		methane	benzene	benzene	Chloride	Xylenes	
B01-SV	5/10/2016	5	0.021	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.137J	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.033	ND<0.02	ND<0.02	4.26	ND<0.02	ND<0.02	0.065	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02-1
B02-SV	5/10/2016	5	0.083	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.021	ND<0.02	0.071	ND<0.02	ND<0.02	0.06	0.028	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02-1
B03-SV	5/10/2016	5	0.095	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.025	0.033	0.1	ND<0.02	ND<0.02	0.929	0.095	ND<0.02	ND<0.02	ND<0.02	0.046	0.02	ND<0.02	0.143	ND<0.02-1
B04-SV	5/9/2016	5	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	1.14	ND<0.02	ND<0.02	0.286	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02-1
B05-SV	5/9/2016	5	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.032	ND<0.02	ND<0.02	1.39	ND<0.02	ND<0.02	0.388	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02-1
B06-SV	5/9/2016	5	0.05	ND<0.02	ND<0.02	ND<0.02	0.022	ND<0.02	ND<0.02	ND<0.02	0.104J	0.122	ND<0.02	ND<0.02	ND<0.02	0.273	ND<0.02	ND<0.02	3.99	0.07	ND<0.02	10.5	ND<0.02	0.018	ND<0.02	ND<0.02	ND<0.02	ND<0.02-1
B07-SV	5/9/2016	5	0.085	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.626	ND<0.02	ND<0.02	8.46	0.136	ND<0.02	0.87	ND<0.02	0.022	ND<0.02	ND<0.02	0.02	ND<0.02-1
B08-SV	5/9/2016	5	0.147	ND<0.1	ND<0.1	ND<0.1	0.28	ND<0.1	0.232	0.032	0.044J	3.58	0.236	ND<0.1	ND<0.1	0.234	ND<0.1	ND<0.1	45.5	0.069	ND<0.1	94.6	0.104	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1-5
B00-SV-DUP	5/9/2016	5	0.15	ND<0.1	ND<0.1	ND<0.1	0.274	ND<0.1	0.214	0.03	0.05J	3.03	0.24	ND<0.1	ND<0.1	0.228	ND<0.1	ND<0.1	20.0	0.064	0.028	37.6	2 15	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1-5
B10-SV	5/9/2016	5	0.020	ND<0.02	ND<0.02	ND<0.02	0.113	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.08	ND<0.02	ND<0.02	ND<0.02	0.052	ND<0.02	ND<0.02	29.9	0.077	ND<0.02	37.0	0.354	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02-1
B11-SV	5/9/2016	5	0.102	ND<0.02	ND<0.02	ND<0.02	0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.134	0.051	0.036	ND<0.02	0.107	ND<0.02	ND<0.02	2 47	0.034	ND<0.02	1.10	0.55	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02-1
B12-SV	5/9/2016	5	0.038	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.938	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.483	ND<0.02	ND<0.02	0.552	0.032	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02-1
B13-SV	5/9/2016	5	0.086	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.111	0.026	ND<0.02	ND<0.02	1.03	ND<0.02	ND<0.02	30.7	0.121	ND<0.02	3.65	0.082	0.038	ND<0.02	ND<0.02	ND<0.02	ND<0.02-1
B14-SV	5/9/2016	5	0.164	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.03	0.814J	45.11	27.5	ND<0.02	ND<0.02	0.31	ND<0.02	ND<0.02	20.6	0.086	ND<0.02	32.3	ND<0.02	ND<0.02	ND<0.02	0.443	ND<0.02	ND<0.02-1
B15-SV	5/9/2016	5	0.083	ND<0.02	ND<0.02	ND<0.02	0.036	ND<0.02	ND<0.02	ND<0.02	ND<0.02	4.87	0.691	ND<0.02	ND<0.02	0.744	ND<0.02	ND<0.02	4.77	0.144	0.029	6.81	0.421	0.058	ND<0.02	0.036	0.057	ND<0.02-1
B16-SV	5/9/2016	5	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.194	0.196	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	32.2	0.035	ND<0.02	3.86	0.28	0.04	0.063	ND<0.02	0.056	ND<0.02-1
B17-SV	5/9/2016	5	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.716	ND<0.02	ND<0.02	0.102	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02-1
B18-SV	5/9/2016	5	ND<0.02	ND<0.02	0.026	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.03	0.408	0.106	ND<0.02	0.086	12.9	ND<0.02	ND<0.02	0.241	0.1	0.141	ND<0.02	ND<0.02	0.05	ND<0.02-1
B19-SV	5/9/2016	5	0.096	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.57	0.328	ND<0.02	0.084	0.022	0.028	ND<0.02	0.214	0.044	ND<0.02	1.39	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02-1
B20-SV	5/9/2016	5	0.118	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.047	0.026	ND<0.02	ND<0.02	0.382	ND<0.02	ND<0.02	0.656	0.037	ND<0.02	0.148	0.086	ND<0.02	ND<0.02	0.245	ND<0.02	ND<0.02-1
B21-SV	5/9/2016	5	0.028	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.057	ND<0.02	ND<0.02	0.868	ND<0.02	ND<0.02	0.055	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02-1
B22-SV	5/10/2016	5	0.092	0.055	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	0.244J	ND<1	ND<1	0.023	0.05	0.44	ND<1	ND<1	236	0.077	ND<1	1.48	ND<1	0.022	ND<1	ND<1	0.048	ND<0.02-1
B23-SV	5/9/2016	5	0.054	ND<0.02	0.041	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.026	ND<0.02	0.059	ND<0.02	ND<0.02	5.84	0.068	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.056	0.067	ND<1-50
B24-SV	5/10/2016	5	0.068	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.072	ND<0.02	0.054	ND<0.02	0.023	ND<0.02	ND<0.02	0.758	0.046	ND<0.02	0.627	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.094	ND<0.02-1
B25-SV	5/9/2016	5	0.089	0.058	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	51.9	0.067	ND<0.1	5.23	ND<0.1	0.048	ND<0.1	ND<0.1	0.092	ND<0.1-5
B26-SV	5/9/2016	5	0.13	0.068	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.132	0.253	0.238	0.028	ND<0.02	0.092	0.085	ND<0.02	ND<0.02	ND<0.02	0.022	ND<0.02	0.074	0.163	ND<0.02-1
B27-SV	5/9/2016	5	0.025	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1		ND<0.1	ND<0.1	0.521	ND<0.1	ND<0.1	ND<0.1	0.091	ND<0.1	ND<0.1	112	ND<0.1	ND<0.1	2.4	ND<0.1	0.025	ND<0.1	ND<0.1	0.026	ND<0.1-5
DZ7-SV-IKLF	5/5/2010	5	0.034	NDC0.1	ND<0.1	ND<0.1	ND<0.1	NDC0.1	NDC0.1	NDC0.1	NDC0.1	0.035	Regulato			0.100	NDC0.1	NDC0.1	115	NDC0.1	NDC0.1	3.01	NDC0.1	0.030	NDC0.1	NDC0.1	0.020	ND<0.1-5
	DTSC-SLi (0.03)	0.014	29.3	60	NA	NA	NA	NA	0.057	10.3	1 17	11.7	NA	NA	NA	0.04	NA	0.067	43	147	NA	177	NA	NA	0.0053	NA	Various
	EPA-RSLI (0.03)	0.053	NA	NA	7.3	0.018	29	14.7	0.257	29	NA	6	0.163	60	NA	40	147	1.57	733	733	0.1	NA	87	87	0.0000	14 700	Various
Protection of	DTSC-SLi (0	0.001)	0.42	880	1.800	NA	NA	NA	NA	1.7	310	35	350	NA	NA	NA	12	NA	2	1,300	4,400	NA	5.300	NA	NA	0.16	NA	Various
Human Health	EPA-RSLi (0	0.001)	1.6	NA	NA	220	0.53	880	440	7.7	880	NA	180	4.9	1.800	NA	1.200	4.400	47	22.000	22.000	3	NA	260	260	2.8	440.0	Various
(10E-6)	DTSC-SLi (0.	.0005)	0.84	1,760	3,600	NA	NA	NA	NA	3.4	620	70	700	NA	NA	NA	24	NA	4	2,600	8,800	NA	10,600	NA	NA	0.32	NA	Various
	EPA-RSLi (0.	.0005)	3.2	NA	NA	440	1.06	1,760	880	15.4	1,760	NA	360	9.8	3,600	NA	2,400	8,800	94	44,000	44,000	6	NA	520	520	5.6	880.0	Various
	DTSC-SLi (0.03)	0.14	293	600	NA	NA	NA	NA	0.57	103	11.7	117	NA	NA	NA	0.4	NA	0.67	433	1,467	NA	1,767	NA	NA	0.05	NA	Various
Drotoction of	EPA-RSLI (0.03)	0.53	NA	NA	73	0.18	293	147	2.57	293	NA	60	1.63	600	NA	400	1,467	15.7	7,333	7,333	1	NA	87	87	0.93	146.67	Various
Frotection of	DTSC-SLi (0	0.001)	4.2	8,800	18,000	NA	NA	NA	NA	17	3,100	350	3,500	NA	NA	NA	120	NA	20	13,000	44,000	NA	53,000	NA	NA	1.60	NA	Various
(10E-5)	EPA-RSLi (0	0.001)	16	NA	NA	2,200	5.3	8,800	4,400	77	8,800	NA	1,800	49	18,000	NA	12,000	44,000	470	220,000	220,000	30	NA	2,600	2,600	28	4,400	Various
(102-3)	DTSC-SLi (0.	.0005)	8.4	17,600	36,000	NA	NA	NA	NA	34	6,200	700	7,000	NA	NA	NA	240	NA	40	26,000	88,000	NA	106,000	NA	NA	3.2	NA	Various
	EPA-RSLi (0.	.0005)	32	NA	NA	4,400	10.6	17,600	8,800	154	17,600	NA	3,600	98	36,000	NA	24,000	88,000	940	440,000	440,000	60	NA	5,200	5,200	56	8,800	Various

Table 2 - Summary of VOCs in Soil Gas Collected During Ramboll's 2016 Investigation

Notes: Sample ID - sample identification VOCs - volatile organic componds, analyzed in general accordance with EPA Method No. 8260B

feet bgs - feet below the grond surface

μg/l - micrograms per liter PCE - tetrachloroethene

TCE - trichloroethene

REP/DUP - duplicate sample

ND - no detectable concentrations above laboratory reporting limit

J - estimated concentration

10E-5 and 10E-6 - cancer risk factors of 1 in 100,000 and 1 in 1,000,000, respectively

DSTC-SLi - California Department of Toxic Substances Control (DTSC) Human and Ecological Risk Office (HERO) Note 3, Screening Levels for industrial/commercial ambient air, dated June 2020, modified for soil gas using the defalt EPA attenation factor of 0.03 and the DTSC-approved attentuation factors of 0.001 for exisiting buildings and of 0.0005 for future buildings. EPA-RSLi - Environmental Protection Agency, Region 9, Regional Screening Levels for industrial/commercial ambient air, dated November 2020, modified for soil gas using the defalt EPA attenuation factor of 0.03 and the DTSC-approved attentuation factors of 0.001 for existing buildings and of 0.0005 for future buildings.

NA - not applicable/not available

Yellow highlighted cell indicates a soil gas concentration above reglatory screening levels (i.e. protection of human health, using an attenation factor of 0.0005).

Table 3 - Areas of Concern, Previous Investigations, and Recommendations for Further Work

Areas of Concern	Description of Concern and Summary of Previous Investigations	Redevelopment Concern(s)	Reco
Possible Vapor Intrusion	Twenty-seven soil gas samples were collected throughout the site during the Ramboll/Environ 2016 Phase II investigation, and following the completion of SVE remediation in Areas 11, 13, 14b, 14c, and 24. With the exception of four sample points (B08, B22, B25, and B27), the remaining 23 sample points indicated no detectable to low concentrations of VOCs, well below the conservative screening levels for the protection of human health through vapor intrusion. Three of the four sample points indicating elevated concentrations of PCE above the state screening levels were collected in areas where previous SVE remediation took place (Areas 14b, 14c, and 24) and the LARWQCB has agreed that no further soil remediation is necessary. The remaining point (B08, in Area 6) appears to be anomalas, with concentrations of PCE and TCE immediately above the screening levels. Laboratory results of soil gas samples collected in this area in 2001 indicated concentrations of PCE and TCE immediately below the screening levels. Human health risk assessment previously completed at the site by others have indicated no vapor intrusion issue at the site.	Possible vapor intrusion (REC No. 1)	Since the majority no the sampling complete "elevated concentrations" of PCE are only undergone soil remediation to the approval of Assessment (HHRA) to verify that existin precautionary measures, the client
Historical Industrial Activities	Due to more than 70 years of industrial/manufacturing activities being completed on the site, there is a high likelihood that other unknown environmental concerns are present.	Possible residual contaminants due to historical industrial/manufacturing activities (REC No. 2)	Ardent recommends the preparation and i environmental concerns th
Area 2 - Former Diesel UST	A 20,000 gallon underground storage tank (UST) was removed from the site on behalf of HITCO in August 1992. Following site investigation activities, a total of approximately 2,400 cubic yards of total petroleum hydrocarbons as diesel (TPHd) impacted soil was removed. Laboratory results of confirmation soil samples indicated relatively low concentrations of TPHd. The California Regional Water Quality Control Board, Los Angeles Region (LARWQCB) granted regulatory closure for this UST in its letter dated May 15, 1996. McLaren/Hart concluded that this feature would not be considered an environmental concern in its 2001 Feasibility Study (FS). No sampling was conducted at this location during the Ramboll/Environ's 2016 Phase II effort. Environ concurred with the LARWQCB and McLaren/Hart and recommended no additional work or remediation. Environ noted this feature as a historical recognized environmental concern (HREC) in its 2014 Phase I Environmental Site Assessment (ESA).	None (HREC No. 1)	Ardent Environmental Group, Inc. (Ardent) con investigations or remediation is necessary. S direction of a regulatory a
Area 3 - Former Gasoline UST	This UST was removed in 1985. Although no detectable concentrations of benzene, toluene, ethylbenzene, and xylenes (BTEX) were reported in five soil gas and soil samples, tetrachloroethylene (PCE) and/or trichloroethene (TCE) were detected in soil gas samples at concentrations up to 10 micrograms per liter (ug/l). No source of these chemicals was identified. A groundwater well located downgradient from this former UST indicated concentrations of benzene slightly exceeding the Maximum Contaminant Level (MCL). Regulatory closure had not been received. This feature was not considered an environmental concern in the 2001 FS. Although Environ reported this feature as a recognized environmental condition (REC) in its 2014 Phase I ESA, no further work was completed during the Ramboll/Environ 2016 Phase II investigation.	None	Although this feature has not obtained regu concludes that this feature would not be c
Area 4 - Former Resin/Solvent Waste UST	Following removal of this UST in 1985, laboratory results of soil samples were described by others as presenting a possible pathway through soil to groundwater. Laboratory results of soil gas samples indicated concentrations of PCE and/or TCE up to 10 micrograms per liter (ug/l). Regulatory closure had not yet been obtained. In the 2001 FS, this feature was considered potential pathway through soil to groundwater. Identified as potential on-site source. No action was recommended as the remedial alternative for Area 4. A soil gas sample collected during Ramboll/Enviro's 2016 Phase II investigation did not detect VOCs above screening levels. Ramboll/Environ concluded based on sampling conducted in this area there does not appear to be a significant source of volatile organic compounds (VOCs) contributing to groundwater and/or vapor intrusion under a commercial/industrial development scenario. No additional near-term investigation was recommended following the Ramboll/Environ Phase II investigation.	None	Ardent concurs with Ramboll/Er
Area 5 - Former Solvent UST	No soil or soil gas testing appears to have been conducted at the time of the UST removal in 1985. Limited soil and soil gas sampling was conducted in Area 5 during the site investigation activities. BTEX were not detected in the three soil gas samples collected; no potential sources of other VOCs were identified. Based on the results of subsurface investigations conducted following the UST removal, Area 5 was not further investigated or considered for remediation in the 2001 FS. A soil gas sample collected during the Ramboll/Environ 2016 investigation did not detect VOCs above screening levels in this general area. Ramboll/Environ concluded that Area 5 does not appear to be a significant source of VOCs contributing to groundwater and/or vapor intrusion under a commercial/industrial development scenario. No additional near-term investigation recommended following the Ramboll/Environ Phase II investigation.	None	Ardent concurs with Ramboll/Er
Area 6 - Former Acetone UST	Limited soil and soil gas sampling was conducted in Area 6 during the site investigation activities. Soil gas samples were collected from four soil gas probes. PCE and TCE were detected in soil gas samples at concentrations up to 34 ug/l and 74 ug/l, respectively. VOCs were not detected in soil matrix samples (advanced in 1995 to 20 feet) and the area was not considered further in the 2001 FS. A soil gas sample was collected during the Ramboll/Environ 2016 Phase II investigation (B08) indicated PCE and TCE were detected at 45.5 and 94.6 ug/l, respectively, exceeding the regulatory screening levels for possible vapor intrusion. No soil samples were collected from boring B08 for VOC analysis. Previous human health risk assessment (HHRAs) have been completed and indicated no vapor intrusion issues are present. Ramboll/Environ recommended that some soil remediation through excavation and off-site disposal is warranted prior to grading.	Lack of VOC analysis in soil samples (REC No. 3)	Due to the relatively elevated concentratio collected in the vicinity of boring B08 to asso compared to regulatory screening levels for elevated concentrations are detected, these s ga
Area 11 - Surface Drainage Sump	During completion of the 2001 FS, Area 11 was identified as an area with VOC concentrations that were indicative of a long-term source. Soil and groundwater extraction systems were installed and operated in 2004 for approximately one year in this area, after which time closure was requested. The LARWQCB agreed to the shutdown of the extraction systems but did not grant closure., The LARWQCB subsequently required a remedial action plan (RAP) be implemented for groundwater that remains outstanding and which is being remediated by others. Soil and soil gas sampling was conducted during the Ramboll/Environ 2016 Phase II investigation. VOCs in soil gas samples collected from borings B15 and B19 indicated low concentrations of VOCs, well below the screening levels suggesting a possible vapor intrusion issue.	None (HREC No. 2)	Ardent recommends no further investigation remediated under the direction of a

ommendations for Further Work

ed throughout the site have shown low concentrations, and since the remaining slightly above screening levels, or are located within areas that have already of regulatory agencies, Ardent recommends completion of a Human Health Risk ing buildings to remain do not need vapor intrusion mitigation systems. For t may consider installing vapor control systems in proposed buildings.

implementation of a Soil Management Plan (SMP) to help manage unknown nat might be encountered during grading and redevelopment.

ncurs with the LARWQCB, McLaren/Hart, and Ramboll/Environ that no additional Since this feature and former REC has been successfully remediated under the agency, this former feature would be considered an HREC.

ulatory closure, there is no evidence of a significant release. Therefore, Ardent considered an environmental concern to the site and recommends no further investigations.

nviron that no additional investigation or remediation is necessary.

nviron that no additional investigation or remediation is warranted.

ons of soil gas noted in boring B08, Ardent recommends that soil samples be sess concentrations of VOCs in discrete soil samples. These results should be in the protection of drinking water and human health through dermal contact. If soils should be excavated and removed prior to grading. Elevated VOCs in soil as will be mitigated by vapor barriers.

ons or remediation.. Since this feature and former REC has been successfully regulatory agency, this former feature would be considered an HREC.

Table 3 - Areas of Concern, Previous Investigations, and Recommendations for Further Work

Areas of Concern	Description of Concern and Summary of Previous Investigations	Redevelopment Concern(s)	Rec
Area 13 - East of Hydraulic Presses Building	During completion of the 2001 FS, Area 13 was identified as an area with VOC concentrations that were indicative of a long-term source. Soil and groundwater extraction systems were installed and operated in 2004 for approximately one year in this area, after which time closure was requested. The LARWQCB agreed to the shutdown of the extraction systems but did not grant closure. The LARWQCB subsequently required a RAP for remediation of impacted groundwater that remains outstanding and which is being completed by others. No soil or soil gas samples were collected in the vicinity of Area 13 during Ramboll/Environ 2016 Phase II investigation. Subsequent consultants raised the possible concern that hydraulic oils associated with the hydraulic presses may have contained PCBs; these chemical constituents were not previously analyzed by others. During completion of this Phase I ESA, no evidence of hydraulic presses was noted in this area. According to site contacts, the presses formerly utilized aboveground piping and were located on concrete. The presses were recently removed and the area was redeveloped with an autoclave which included a subterranean basement. Based on this information, there is a low likelihood that residual PCBs, if any, are present, and therefore, the lack of PCB analysis would not be considered an environmental concern.	None	No furthe
Area 14a - Adjacent east of "Not HITCO property"	During completion of the 2001 FS, VOCs in soil suggests a potential pathway to shallow groundwater but did not present significant adverse health risks based on regulatory criteria. Soil and soil gas samples were collected during the Ramboll/Environ 2016 Phase II investigation. Laboratory results of soil and soil gas samples collected in this area indicated no detectable to low concentrations of VOCs. Ramboll concluded that no significant source of VOCs contributing to groundwater and/or vapor intrusion under a commercial/industrial development scenario are present. No additional near-term investigation recommended following the Ramboll/Environ 2016 Phase II investigation.	None	Ardent concurs with Ramboll/
Area 14b - Adjacent east of "Not HITCO property"	During completion of the 2001 FS, Area 14b was identified as an area with VOC concentrations that were indicative of a long-term source. Soil and groundwater extraction systems were installed and operated in 2004 for approximately one year in this area, after which time closure was requested. The LARWQCB agreed to the shutdown of the extraction systems but did not grant closure, The LARWQCB subsequently required a RAP for impacted groundwater that remains outstanding, although is being completed by others. Soil and soil gas sampling were conducted during the Ramboll/Environ 2016 Phase II investigation. Laboratory results of soil and soil gas samples (boring B22) indicated elevated concentrations of PCE exceeding the regulatory screening levels for the protection of groundwater and human health through possible vapor intrusion. PCE was detected in samples collected in boring B22 of 236 ug/l in soil gas and up to 0.11 mg/kg in soil. Some soil remediation through excavation and off-site disposal will be required prior to grading.	Elevated concentrations of PCE in soil that exceed the guidelines for the protection of drinking water (REC No. 4)	Since the shallow soils are planned to be rew is recommended to assess the extent of eleva soils should be excavated and disposed of c regulatory agency, the elevated PCI
Areas 14c - Adjacent east of "Not HITCO property"	During completion of the 2001 FS, Area 14c was identified as an area with VOC concentrations that were indicative of a long-term source. Soil and groundwater extraction systems were installed and operated in 2004 for approximately one year in this area, after which time closure was requested. The LARWQCB agreed to the shutdown of the extraction systems but did not grant closure, The LARWQCB subsequently required a RAP to remediate impacted groundwater that remains outstanding, although is being completed by others. Soil and soil gas sampling were conducted during the Ramboll/Environ 2016 Phase II investigation. Laboratory results of soil gas samples collected from boring B27 indicated elevated concentrations of PCE up to 113 ug/l, exceeding the regulatory screening values for possible vapor intrusion. Laboratory results of soil samples indicated elevated concentrations of PCE at 0.2 mg/kg, exceeding the protection of drinking water. Based on these results, some additional soil characterization and soil remediation will be necessary prior to grading.	Elevated concentrations of PCE in soil that exceed the guidelines for the protection of drinking water (REC No. 5)	Since the shallow soils are planned to be rew is recommended to assess the extent of eleva soils should be excavated and disposed of c regulatory agency, the elevated PCI
Area 15 - Former Drum Storage Area	During completion of the 2001 FS, limited soil gas sampling was conducted during site investigation activities. TCE was detected in one soil gas sample at 4.7 ug/l at 5 feet. VOC concentrations in soil gas were not considered a possible human health risk. A soil gas sample was collected during the completion of the Ramboll/Environ 2016 Phase II investigation. Laboratory results of VOCs in soil gas in B04 indicated no detectable to low concentrations. Ramboll/Environ concluded that this area does not appear to be a significant source of VOCs contributing to groundwater and/or vapor intrusion under a commercial/industrial development scenario. No additional near-term investigation recommended following Phase II evaluation.	None	Ardent concurs with Ramboll/
Area 16 - Former Degreaser and Hydraulic Presses	Laboratory results of soi samples collected during the 2001 FS indicated no detectable concentrations of VOCs. PCE and TCE were detected in soil gas samples at concentrations up to 47 ug/l and 21 ug/l, respectively. Based on these results, Area 16 was described as an area with minimal potential to impact to groundwater. No action was recommended as the remedial alternative. No soil or soil gas samples were collected during the Ramboll/Environ 2016 Phase II investigation. Subsequent consultants raised the possible concern that hydraulic oils associated with the hydraulic presses may have contained PCBs; these chemical constituents were not previously analyzed by others. During completion of this Phase I ESA, no evidence of hydraulic presses was noted in this area. According to site contacts, the presses formerly utilized aboveground piping and were located on concrete associated with a historical building. The new building was reportedly constructed in 2008 which included the excavation and/or the reworking of soils for geotechnical purposes. Based on this information, there is a low likelihood that residual PCBs, if any, are present, and therefore, the lack of PCB analysis would not be considered an environmental concern.	None	No furthe
Area 17 - Solvent Usage and Hydraulic Presses	Laboratory results of soil samples collected during the 2001 FS indicated no detectable concentrations of VOCs. PCE and TCE were detected in soil gas samples at concentrations up to 25.6 ug/L and 17.4 ug/L, respectively. Area 17 was described as an area with minimal potential to impact to groundwater. No action was recommended as the remedial alternative. No soil or soil gas samples were collected during Ramboll/Environ 2016 Phase II investigation. Subsequent consultants raised the possible concern that hydraulic oils associated with the hydraulic presses may have contained PCBs; these chemical constituents were not previously analyzed by others. During completion of this Phase I ESA, no evidence of hydraulic presses was noted in this area. According to site contacts, the presses formerly utilized aboveground piping and were located on concrete associated with a historical building. The new building was reportedly constructed in 2008 which included the excavation and/or the reworking of soils for geotechnical purposes. Based on this information, there is a low likelihood that residual PCBs, if any, are present, and therefore, the lack of PCB analysis would not be considered an environmental concern.	None	No furthe
Area 19 - Solvent Usage	During completion of the 2001 FS, PCE was detected in soil gas up to 52 ug/l. VOCs were not detected in soil matrix samples above regulatory criteria. Area 19 was described as an area with minimal potential to impact groundwater. No action was recommended as the remedial alternative. During the Ramboll/Environ 2016 Phase II investigation, Ramboll drilled one boring (B18) in the general location of Area 19. Laboratory results of soil samples indicated no detectable concentrations of VOCs, and TPH, and no detectable to low concentrations of metals. Laboratory results of VOCs in soil gas indicated low concentrations of PCE (12.9 ug/l) and TCE (0.241 ug/l). No additional investigations were recommended.	None	Ardent concurs with Ramboll/

July 20, 2021 Project No. 101251001

ommendations for Further Work
er investigation or remediation is warranted.
Environ that no further investigation or remediation is warranted.
vorked for geotechnical purposes during redevelopment, additional soil sampling ted concentrations of PCE in soil. Once the extent has been characterized, these off-site prior to grading. Since soil remediation has been deemed complete by a E in soil gas can be mitigated through the installation of vapor barriers.
vorked for geotechnical purposes during redevelopment, additional soil sampling ted concentrations of PCE in soil. Once the extent has been characterized, these off-site prior to grading. Since soil remediation has been deemed complete by a E in soil gas can be mitigated through the installation of vapor barriers.
Environ that no further investigation or remediation is warranted.
er investigation or remediation is warranted.
er investigation or remediation is warranted.
Environ that no further investigation or remediation is warranted.

Table 3 - Areas of Concern, Previous Investigations, and Recommendations for Further Work

Areas of Concern	Description of Concern and Summary of Previous Investigations	Redevelopment Concern(s)	Reco
Area 20 - Hydraulic Press	During completion of the 2001 FS, VOCs in soil matrix samples and soil gas were below regulatory criteria. Area 20 was described as an area with minimal potential to impact groundwater. During the Ramboll/Environ 2016 Phase II investigation, no additional sampling was completed. Subsequent consultants raised the possible concern that hydraulic oils associated with the hydraulic presses may have contained PCBs; these chemical constituents were not previously analyzed by others. During completion of this Phase I ESA, no evidence of hydraulic presses was noted in this area. According to site contacts, the presses formerly utilized aboveground piping and were located on concrete associated with a historical building. The new building was reportedly constructed in 2008 which included the excavation and/or the reworking of soils for geotechnical purposes. Based on this information, there is a low likelihood that residual PCBs, if any, are present, and therefore, the lack of PCB analysis would not be considered an environmental concern.	None	No furthe
Area 21 - Drum Storage Area	During completion of the 2001 FS, PCE and TCE were detected in soil gas samples at concentrations up to 5.2 ug/l and 16.8 ug/l, respectively. This area was described as an area with minimal potential to impact groundwater. During completion of the Ramboll/Environ 2016 Phase II investigation, laboratory results of soil samples collected from one soil boring (B21) indicated no detectable concentrations of VOCs and TPH, and no detectable to low concentrations of metals. Laboratory results of soil gas samples indicated low concentrations of PCE (0.868 ug/l) and TCE (0.055 ug/l). Ramboll/Environ concluded that this area did not appear to be a significant source of VOCs to groundwater. No additional investigations were recommended.	None	Ardent concurs with Ramboll/E
Area 24 - Pump House	Soil gas samples collected during the 2001 FS indicated PCE and TCE at concentrations up to 28.7 ug/l and 11.7 ug/l, respectively. VOCs in soil matrix samples were below regulatory criteria. Area 24 was described as a potential pathway of contaminants to groundwater. Soil and groundwater extraction systems operated in 2004 for approximately one year in this area, after which time closure was requested. The LARWQCB agreed to the shutdown of the extraction systems but did not grant closure and instead required a RAP for groundwater remediation that is still outstanding, although being completed by others. No sampling was conducted at this location during the Ramboll/Environ 2016 Phase II investigation. Ramboll/Environ recommended no further investigations.	None (HREC No. 3)	Ardent concurs with Ramboll/Environ that no REC has been successfully remediated under
Area 25 - Septic system between Bldgs. 4 and 44	Soil gas sampling completed prior to the 2001 FS indicated no detectable concentrations of VOCs. Based on this information, Environ indicated that no further work was necessary in its 2014 Phase I ESA. No additional sampling was conducted at this location during the Ramboll/Environ 2016 investigation. Ramboll/Environ indicated no further work was necessary.	None	Ardent concurs with Ramboll/E
Area 26 - Wastewater Sump South of Building 32	During completion of the 2001 FS, PCE was detected in soil gas at concentrations up to 7 ug/l. VOCs and TPH were not detected in soil matrix samples. Area 26 was not considered a potential environmental concern in the 2001 FS. A soil gas sample was collected during the Ramboll/Environ 2016 Phase II investigation (boring B12). PCE and TCE were reported at low concentrations. Ramboll/Environ concluded that the area did not pose a threat to groundwater. and recommended no further wok.	None	Ardent concurs with Ramboll/E
Area 27 - Septic Tank west of Bldg. 13	Soil gas samples collected during the 2001 FS. indicated PCE and TCE concentrations up to 6.7 ug/l and 16.4 ug/l, respectively. Detected VOC concentrations in soil gas were not considered further in the 2001 FS. Soil and soil gas sampling was conducted in the vicinity of Area 27 during the Ramboll /Environ 2016 Phase II investigation. Laboratory results of soil samples (boring B06) indicated no detectable concentrations of VOCs and TPH, and no detectable to low concentrations of metals. Soil gas indicated low concentrations of PCE and TCE in borings B06 and B07. Ramboll/Environ concluded that this area does not appear to be a significant source of VOCs contributing to groundwater. No additional investigations were recommended.	None	Ardent concurs with Ramboll/E
Boring B16	Laboratory results of soil samples collected at 5 feet from boring B16 drilled during the Ramboll/Environ 2016 Phase II investigation indicated concentrations of PCE exceeding the SFRWQCB-ESLs for the protection of drinking water. The soil sample collected at 10 feet indicated low concentrations	Elevated concentrations of PCE in soil that exceed the guidelines for the protection of drinking water (REC No. 6)	Ardent recommends completion additional soil in soil. Once characterized, these s
Silver Recovery Unit, Building 8	According to Environ's 2014 Phase I ESA, a Silver Recovery Unit was located in an unused room in Building 8. Several historical agency documents listed the Silver Recovery Unit waste streams as "silver bearing sludge from photo recovery wastes." A record of spill cleanup included "debris contaminated with mercury and solver spill." This room was noted to contain floor drains. No soil samples were collected in this area during the Ramboll/Environ 2016 Phase II Investigation. During completion of Ardent's Phase I ESA, no Silver Recovery Unit or evidence of a floor drain was noted. The concrete appeared in good condition. Based on this information and type of chemical (i.e., metals), there is a low likelihood that a possible release may have affected the soil. Ardent, therefore, does not consider the former Silver Recovery Unit a possible environmental concern.	None	No furthe
Paint Booth, Building 12	According to Ramboll/Environ, a paint booth is located in Building 12. Signage on paint booth states the use of hexavalent chromium. No sampling has been completed in the vicinity of this feature. Since no soil samples had been collected or analyzed for hexavalent chromium in the vicinity of the paint booth, other consultants raised this feature as a possible environmental concern. During Ardent's site visit, the paint booth was still present, however, hexavalent chromium containing paint was no longer used. The paint booth was located on concrete and contained an air handling and ventilation system which controlled overspray and filtered the air prior to emitting to the atmosphere. Based on this information, very little overspray would contact the ground surface. Based on the condition of the concrete and implementation of the overspray management unit, there is a low likelihood that hexavalent chromium containing paint would have impacted the soil. Based on this information, Ardent does not considered the paint booth an environmental concern to the site.	None	No furthe
Along 135th Street, West of Building 2	Historical agency documents dated from the late 1940s through the 1960s reference industrial wastewater discharges from cooling towers and other processes to multiple sewers, open ditches, sumps, cesspools, and septic systems, whose locations cannot be confirmed based on the information provided. According to Ramboll/Environ, this area of wastewater discharge is located in the Northern Parking Lot west of Building 2. Soil and soil gas samples were collected from three borings (B01, B02, and B03) in this area during Ramboll/Environ's 2016 investigation. Laboratory results of soil gas samples indicated no detectable to low concentrations of VOCs. VOCs and TPH were not detected in the soil matrix samples. Metals were not detected above screening levels in the soil matrix sample. Based on these results, Ramboll/Environ concluded that this area does not appear to be a significant source of VOCs contributing to groundwater and/or vapor intrusion under a commercial/industrial development scenario. Although sampling was completed in this area which did not show evidence of a release, Ramboll/Environ recommended completing additional soil sampling. Ramboll/Environ proposed to drill up to six additional soil borings and analyzing soil samples for VOCs, SVOCs, Title 22 metals, and hexavalent chromium.	Possible residual contaminants associated with the historical wastewater discharge (REC No. 7)	Since the locations of the wastewater dischard sampling is warranted. Ardent recommends th disturb
Historical Outdoor Trenches	According to Ramboll/Environ, outdoor trenches were historically located in specific areas of the site and used to convey wastewater. These former features were reportedly located between Buildings 10 and 21, south of Building 10, and south of Buildings 4 and 73. No sampling was conducted in these locations. Ramboll/Environ recommended drilling at least four soil borings in these general locations and collecting soil samples for Title 22 metals and hexavalent chromium analyses.	Possible residual contaminants associated with the historical outdoor trenches used to convey wastewater (REC No. 8)	Since the locations of the Historical Outdoor Tr soil sampling is warranted. Ardent recomme during soil d

ommendations for Further Work
er investigation or remediation is warranted.
/Environ that no further investigation or remediation is warranted.
o further investigation or remediation is warranted. Since this feature and former r the direction of a regulatory agency, this former feature would be considered an HREC.
Environ that no further investigation or remediation is warranted.
/Environ that no further investigation or remediation is warranted.
/Environ that no further investigation or remediation is warranted.
il sampling in the vicinity of boring B16 to further assess the lateral extent of PCE soils should be excavated and removed from the site prior to grading.
er investigation or remediation is warranted.
er investigation or remediation is warranted.
rge is unknown, Ardent does not agree with Ramboll/Environ that additional soil hat this area be monitored for stains, odors, or elevated PID readings during soil bances and in accordance with the SMP.
Trenches is unknown, Ardent does not agree with Ramboll/Environ that additional ends that these areas be monitored for stains, odors, or elevated PID readings disturbances and in accordance with the SMP.






















Source : Base map obtained from AECOM Figure 3-1, dated January 2021

Approximate Scale, Feet		PROJECT NO. 101251001	GROUNDWATER ELEVATION CONTOUR MAP - ZONE A	FIGURE
0 150 300 600 Dimensions, Directions, and Locations are Approximate	ENVIRONMENTAL GROUP, INC.	DATE 07/21	1600 AND 1606 WEST 135TH STREET GARDENA, CALIFORNIA	













