

PHASE I ENVIRONMENTAL SITE ASSESSMENT

1 JULY 2016

OMAHA WAY SUBDIVISION
(APNs 519-1188-001
519-1188-002, and 519-1189-001)
Fremont, California

For:
Omaha Fremont, LLC

16307-00.02448



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TABLE OF CONTENTS

EXECUTIVE SUMMARY v

ENVIRONMENTAL PROFESSIONAL STATEMENT vi

1. INTRODUCTION 1

2. METHODOLOGY 1

3. REVIEW OF DATA SOURCES AND EVALUATION OF RECOGNIZED ENVIRONMENTAL
CONDITIONS..... 4

 3.1 Physical Setting..... 4

 3.2 Site Reconnaissance 4

 3.3 Property Owner Interview/Questionnaire..... 4

 3.4 Historical Land Use Records 5

 3.5 Standard Environmental Records 6

4. ASTM E1527-13 Data Gaps 10

 4.1 Historical Land Use Records Review 10

 4.2 Interviews with Government Regulatory Officials..... 10

5. ASTM E1527-13 DEVIATIONS..... 10

6. CONCLUSIONS..... 10

7. RECOMMENDATION 11

8. LIMITATIONS 11

9. REFERENCES 11

APPENDICES

- A: Photographs from Site Reconnaissance
- B: ASTM User Questionnaire
- C: Historical Land Use Records
- D: Environmental Database Report
- E: Qualifications of Preparers

FIGURES

1: Regional Location..... 2
2: Project Site 3
3: Sites on Regulatory Databases Within One-Half Mile of the Project Site 7

TABLE

1: Sites on Regulatory Databases Within One-Half Mile of the Project Site 8

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Omaha Way Subdivision (APNs 519-1188-001, 519-1188-002, and 519-1189-001)

EXECUTIVE SUMMARY

This Phase I ESA was performed for the Omaha Way Subdivision Project Site in Fremont, California (“Project site”) in accordance with ASTM International’s standard practice E1527-13 (“ASTM E1527-13”). In accordance with ASTM E1527-13, sources of environmental contamination at and near the Project site were evaluated as potential Recognized Environmental Conditions (“RECs”).

- The Project site consists of a vacant area located between the Interstate 680 (“I-680”) right-of-way to the east, East Warren Avenue to the north, and single-family residences to the west and south. No evidence of historic development of the site was identified in historical land use records or during a site reconnaissance in May 2016.
- Adjoining properties to the west were used for orchards from at least 1939 through the 1970s, and I-680 was constructed east of the site between 1968 and 1974. Based on the distance from the Project site and other factors, agricultural chemical residues from the adjoining orchards and aurally-deposited lead from I-680 were determined to be unlikely to significantly affect the Project site.
- An environmental database review identified four hazardous materials sites within a one-half mile radius of the Project site. Based on available information, none of these sites would be considered likely to affect the Project site.

Based on the activities of the Phase I ESA, no RECs were identified in connection with the Project site. Based on the findings of this Phase I ESA, no further investigation into known or potential RECs at the Project site is warranted.

ENVIRONMENTAL PROFESSIONAL STATEMENT

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



Bruce Abelli-Amen
Principal
Prof. Geologist No. 5593
Certified Hydrogeologist No. 96



Todd Taylor
Environmental Associate

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Omaha Way Subdivision

(APNs 519-1188-001, 519-1188-002, and 519-1189-001)

1. INTRODUCTION

The Project site consists of three parcels (APNs 519-1188-001, 519-1188-002, and 519-1189-001), totaling approximately 6 acres in area, located near the intersection of Omaha Way and Yucatan Drive in Fremont, California (Figures 1 and 2). The Project site is bounded by the Interstate 680 (“I-680”) right-of-way to the east, East Warren Avenue to the north, and single-family residences to the west and south (Figure 2).

BASELINE Environmental Consulting (“BASELINE”) has prepared this Phase I Environmental Site Assessment (“ESA”) for the Project site. This Phase I ESA was performed in accordance with ASTM International’s (2013) Standard Practice E1527-13 (“ASTM E1527-13”). In accordance with ASTM E1527-13, sources of environmental contamination in connection with the Project site were identified as Recognized Environmental Conditions¹ (“RECs”). The purpose of this Phase I ESA is to support development of the Project site with single-family residences.

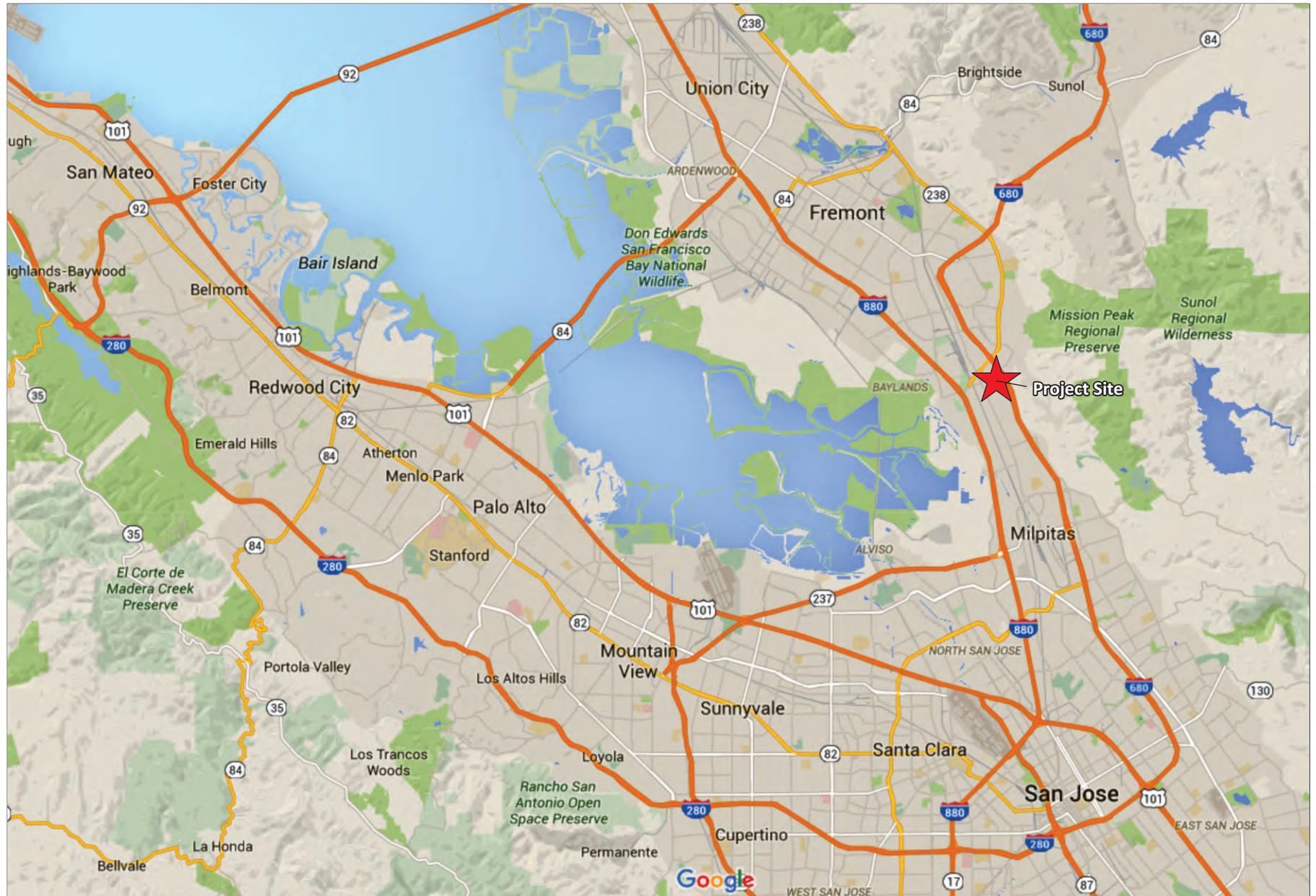
2. METHODOLOGY

In accordance with ASTM E1527-13, standard data sources were reviewed to identify sites associated with hazardous materials within one mile of the Project site. The data sources included a site reconnaissance, United States Geological Survey topographic maps, a Sanborn Fire Insurance Map search, historical aerial photographs, city directory information, an environmental lien search, environmental records derived from regulatory agency databases, and environmental investigation reports from online regulatory agency case files. Based on the review of data sources, potential sites of concern were further evaluated to identify releases of hazardous materials that could result in a REC in connection with the Project site.

¹ RECs are defined in ASTM E1527-13 as “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.” According to ASTM E1527-13, the term “REC” is not intended to include *de minimis* conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

REGIONAL LOCATION

Figure 1



OMAHA WAY SUBDIVISION PROJECT Omaha Way near Yucatan Drive, Fremont, California

16307-00.02448.cdr Fig 1 6/23/16





Legend

— Project Site Boundary

OMAHA WAY SUBDIVISION PROJECT
Omaha Way near Yucatan Drive, Fremont, California



3. REVIEW OF DATA SOURCES AND EVALUATION OF RECOGNIZED ENVIRONMENTAL CONDITIONS

3.1 Physical Setting

The Project site consists of sloping terrain at an elevation of about 140 to 180 feet above mean sea level² (United States Geological Survey, 2012), sloping upward from southwest to northeast, with the highest elevation along the eastern site boundary. The site and vicinity is underlain by Pleistocene-epoch alluvial fan deposits, consisting of tan to reddish-brown, dense, gravelly and clayey sand and sandy gravel (Helley and Wesling, 1989). The nearest surface water body is Agua Fria Creek, which flows through underground culverts and engineered channels approximately 1,500 feet north of the Project site. Based on regional topography, shallow groundwater at the Project site would be expected to flow to the southwest towards wetlands and sloughs along the margins of San Francisco Bay. Groundwater monitoring for hazardous material release sites in the Project vicinity confirm that groundwater flow direction and indicate that groundwater near the Project site is encountered at depths of approximately 29 to 60 feet below the ground surface (“bgs”) (ACWD, 2013; Geo-Logic, 2012; ACWD, 2010).

3.2 Site Reconnaissance

On 24 May 2016, Bill Scott, Professional Geologist from BASELINE, conducted a site reconnaissance to identify evidence of potential hazardous materials releases on the Project site and on adjoining properties. Evidence of potential hazardous materials releases could include on-site waste disposal, apparent odors, stained or discolored surfaces, and stressed or damaged vegetation. Photographs from the site reconnaissance are included in Appendix A.

The Project site was a fenced vacant lot, with no buildings, foundations, or other evidence of current or historic development. Vegetation consisted of recently-discarded grasses with a few trees along the eastern fenceline and near the northwest corner of the Project site. At a few locations, minor debris (yard clippings and old patio furniture), presumably from the Yucatan Drive residences, had been dumped near the western fenceline. However, no stressed vegetation, staining, or evidence of any contaminant release was identified.

Surrounding land uses included I-680 to the east, residences to the west and south, and the East Warren Avenue underpass of I-680 to the north. Evidence of potential hazardous materials releases adjacent to the Project site was not observed during the site reconnaissance.

3.3 Property Owner Interview/Questionnaire

Information from a representative of the property owner was solicited through an ASTM User Questionnaire completed by Mr. Hayes Shair of Omaha Fremont LLC on 23 May 2016. The questionnaire is included as Appendix B of this report. Mr. Shair was not aware of any environmental liens on the Project site, any historical hazardous materials spills, or any former

² Relative to the National Geodetic Vertical Datum of 1929.

cleanups at the property. His understanding was the Project site has always been vacant, with its slope precluding historic agricultural land uses.

3.4 Historical Land Use Records

Historical uses of the Project site and adjoining properties were identified using historical topographic maps from 1889 to 2012, historical aerial photographs from 1939 to 2012, and city directory information from 1920 through 2013. Sanborn fire insurance maps were not available for the Project site. The historical records reviewed and the results of the Sanborn map search are included as Appendix C.

3.4.1 Historical Land Uses at and Adjacent to the Project Site

The first available resources, the 1889, 1897, and 1899 topographic maps, shows the Project site as an undeveloped property. No structures were located at or adjacent to the Project site.

In 1939, the date of the first aerial photograph, the Project site was vacant, though orchards were present to the west. The Project site and areas to the east did not contain row crops or orchards but discing patterns to the east of the Project site suggest that the Project site vicinity may have been used for hay or pastureland.

No changes were noted at the Project site between 1939 and 1966, though by 1966 an orchard northwest of the site had been redeveloped as a residential subdivision. Between 1968 and 1974, I-680 was constructed to the east of the Project site in its current alignment. Between 1974 and 1979, the orchard to the west of the Project site was redeveloped as residences, including the adjoining properties along Yucatan Drive. No changes in land use at or adjacent to the Project site were noted after 1979.

City directory information included adjoining properties, 47025-47384 Yucatan Drive, which were identified in directory listings from 1979 to 2008. All listings were the names of individuals, suggesting that the adjoining properties were residences and not commercial or industrial land uses.

Two land uses potentially associated with hazardous materials were identified adjacent to the Project site in historical records: orchards to the west (potential source of agricultural chemical residues) and I-680 to the east (source of aerielly-deposited lead from vehicle exhaust). These issues are discussed in more detail below.

3.4.2 Agricultural Chemical Residues

The area west of the Project site was used for orchards from at least 1939, the date of the first aerial photograph, through the mid-1970s. Prior to around 1950, inorganic pesticides that contained elevated concentrations of heavy metals, such as arsenic, were commonly used in California agriculture. After 1950, organochlorine pesticides were commonly used in California agriculture until about the mid-1970s. Arsenic from inorganic pesticides and residues from organochlorine pesticides used in the past have the potential to persist for many decades in shallow soils and can affect human health and the environment (DTSC, 2008).

As no orchards or row crops were located on the Project site, it is unlikely that agricultural chemicals would have been applied directly to the site. No agricultural buildings, where pesticides may have been stored, mixed, or disposed of, were identified at the Project site in the historical records. Although some pesticides from non-specific application techniques such as aerial spraying could have migrated and affected the Project site during application on adjoining properties, it is likely that any pesticide residues in shallow soils at the Project site would be similar to those at other non-agricultural properties in the Project site vicinity. The potential for agricultural chemical residues to be present in soils would therefore not be considered a significant concern at the Project site.

3.4.3 Aerially-Deposited Lead

The paved shoulder of I-680, constructed between 1968 and 1974, is located approximately 25 to 40 feet east of the eastern Project site boundary (Figure 2). Beginning in 1973, the United States Environmental Protection Agency (“EPA”) ordered a gradual phase out of lead from gasoline that significantly reduced the prevalence of leaded gasoline by the mid-1980s. Prior to the 1970s, the EPA estimated that vehicles emitted approximately 75 percent of the lead consumed in leaded gasoline as particulate matter in the exhaust (DTSC, 2004). As a result, shallow soils within approximately 30 feet of the edge of pavement in highway corridors have the potential to be contaminated with aerially-deposited lead (“ADL”) from historical car emissions prior to the elimination of lead in gasoline (DTSC, 2009).

Based on its distance from the shoulder of I-680, only a very narrow strip of portions of the Project site, the five feet closest to I-680 along the eastern boundary, is potentially located in an area that could be affected by aerially-deposited lead from vehicle exhaust. Concentrations of ADL would typically be expected to be highest near the paved surface and decrease with distance from the highway, the source of the emissions. Therefore, aerially deposited lead would not be expected to be present in significant concentrations in Project site soils

3.5 Standard Environmental Records

BASELINE retained EDR to conduct a preliminary search of federal, state, tribal, and local regulatory agency records pertaining to past and present hazardous materials use, storage, generation, disposal, and releases on properties within a one-mile radius of the Project site. Based on our understanding of the Project vicinity and the records returned by the database search, our review focused on the four sites located within one-half mile of the Project site. These sites are shown on Table 1 and Figure 3 and are summarized below. The complete environmental database report is included as Appendix D. For hazardous materials release sites, available files were reviewed online from the State Water Resources Control Board

SITES ON REGULATORY DATABASES WITHIN ONE-HALF MILE OF THE PROJECT SITE

Figure 3



Legend

- One-Half Mile Radius
- Project Site

Note:
See Table 2 for site details.
Source: EDR, 2016.

OMAHA WAY SUBDIVISION PROJECT Omaha Way near Yucatan Drive, Fremont, California



TABLE 1: Site on Regulatory Records Within One-Half Mile of the Project Site

Site No.	Site Name and Address	Database	Status
1	Unlimited Actuator R P R 745 Covina Way	SQG	Address listed as generator of ignitable, benzene, and solvent waste. No hazardous waste violations reported.
2	Patterson Ranch 46670 Mohave Drive	SLIC	Dry cleaners site. Site is considered active but no evidence of investigation or remediation was noted after July 2012.
3	Exxon Service Station 46494 Mission Boulevard	LUST; UST	Release case closed in October 2013. Active UST site.
4	City of Fremont Fire Station 55 Hackamore Lane	LUST; UST	Release case closed in August 2010.

Source: EDR, 2016.

Note: See Figure 3 for site locations.
 Complete environmental database report is contained in Appendix D.
 LUST = State and County leaking underground storage tank database.
 SLIC = Regional Water Board Spills, Leaks, Investigations, and Cleanups database.
 SQG = Federally-registered small quantity hazardous waste generator.
 UST = State underground storage tank site database.

("SWRCB") Geotracker (SWRCB, 2016) and the Department of Toxic Substances Control ("DTSC") Envirostor (DTSC, 2016) databases.

3.5.1 Site 1: Unlimited Actuator, 745 Covina Way

This site was listed as a Resource Conservation and Recovery Act ("RCRA") small-quantity hazardous waste generator. Small-quantity generators are classified as those that generate less than 100 kilograms of non-acutely hazardous waste per month. The site is listed as a generator of ignitable, benzene, and solvent wastes. No hazardous waste violations were reported. During the site reconnaissance conducted in May 2016, this address contained a single-family residence, and no land uses associated with hazardous materials were noted.

3.5.2 Site 2: Patterson Ranch, 46670 Mohave Drive

This site is listed as an active Spills, Leaks, Investigations, and Cleanups (SLIC) program site. SLIC program sites are groundwater contamination sites that are not associated with underground storage tanks ("USTs"). The Patterson Ranch site is a commercial shopping center containing a dry cleaner. Volatile organic compounds ("VOCs") associated with dry-cleaning solvents were discovered during a soil investigation in May 2004 (Geo-Logic, 2012). In May 2005 a groundwater monitoring well was installed hydraulically downgradient of the dry cleaners and

was sampled from May 2005 through July 2012. During the last sampling, concentrations of VOCs in groundwater were below laboratory reporting limits, with the exception of tetrachloroethylene, which was identified at 4.6 micrograms per liter (“µg/L”), below the State drinking water standard of 5.0 µg/L (Geo-Logic, 2012).

No evidence of further investigation or remediation were identified in case files after July 2012. The most recent information in the file, from August 2014, indicates that the groundwater contamination is not considered a potential risk to human health, but that indoor air at the Patterson Ranch site needs to be evaluated to determine if contaminants from the solvent release has migrated via soil vapor into buildings and could affect commercial workers. The Alameda County Water District (“ACWD”) would consider the site for closure if a vapor intrusion investigation is performed and determines that indoor air quality at the site does not exceed health risk levels (SWRCB, 2016).

This site is hydraulically cross-gradient from the Project site. Based on the groundwater flow direction and identified contaminant concentrations in monitoring through July 2012, this site would not be considered likely to affect soil or groundwater at the Project site.

3.5.3 Site 3: Exxon Service Station, 46494 Mission Boulevard

Five single-walled USTs (including gasoline, diesel, and waste oil USTs) were removed from this gasoline station site in August 1988 and June 1996 and replaced with three double-walled fiberglass USTs (including gasoline and diesel USTs). Releases of gasoline and diesel were identified during tank removals. As part of investigation and remediation, 18 groundwater monitoring wells were installed at the site. A total of 384 cubic yards of petroleum-contaminated soil was removed in August 1988 and June-July 1996. A soil vapor extraction system was operated from 1997 to 1999. A pump and treat groundwater remediation system was operated from February 1997 to July 2004. In October 2013, ACWD determined that residual contamination at the site was limited to the immediate vicinity of the former USTs and issued a no further action letter. As investigation and remediation of this site has been completed, the site is over 2,000 feet away, and hydraulically cross-gradient, releases from the site would not be considered likely to affect soil or groundwater at the Project site.

3.5.4 Site 4: City of Fremont Fire Station, 55 Hackamore Lane

Gasoline and diesel were identified in soil and groundwater during investigations at this site from 1987 through 2008. The fuel dispensing island and associated piping at the site were removed and replaced in March 1991, along with visibly contaminated soil. Although the USTs were not suspected of leaking, ongoing groundwater monitoring suggested that additional contaminated soil was present near the USTs that was affecting groundwater quality. Accordingly, the two existing double-walled gasoline and diesel USTs were removed from this site in December 2008 and replaced with above-ground tanks. Contaminated soil from the tank excavation pit was removed and replaced with back fill. Following the UST removal, contaminant concentrations in groundwater were no longer detectable, and the ACWD closed the case in December 2010. As investigation and remediation of this site has been completed

and is hydraulically downgradient, releases from the site would not be considered likely to affect soil or groundwater at the Project site.

3.5.5 Summary of Standard Environmental Records

The Project site and adjoining properties are not listed on any of the regulatory agency databases reviewed for the Phase I ESA. Based on available information from the four hazardous materials sites in the Project site vicinity, none of the reported hazardous materials releases would be likely to have the potential to significantly affect the Project site.

4. ASTM E1527-13 DATA GAPS

The ASTM E1527-13 requires the identification of data gaps, along with actions taken to address these gaps, and an opinion as to whether these gaps are significant. A data gap may result from a lack of or inability to obtain information during any of the activities required by ASTM E1527-13. In particular, review of reasonably ascertainable historical land use information from the first developed land use to the present that does not provide sufficient detail to assess potential land use changes at five year intervals may be considered a data gap. Data gaps identified during the preparation of this Phase I ESA are described, below.

4.1 Historical Land Use Records Review

The time intervals between some of the historical land uses records exceeded 5 years in some cases. These data gaps are not considered significant because the land uses were relatively consistent between the extended time intervals.

4.2 Interviews with Government Regulatory Officials

ASTM E1527-13 requires interviews with state or local government regulatory agency officials regarding the potential for contamination on a Project site. These interviews were not conducted (see Section 5, below) because any information obtained would likely duplicate information already reviewed from other standard sources, including the environmental database report and online regulatory agency records.

5. ASTM E1527-13 DEVIATIONS

The following deviation from ASTM E1527-13 does not have a significant effect on the findings or conclusions of this Phase I ESA: Interviews with state or local government regulatory agency officials regarding the potential for contamination in the Project site vicinity were not conducted, because any information obtained would likely duplicate information already reviewed from federal, state, and local regulatory agency environmental records.

6. CONCLUSIONS

We have performed this Phase I ESA in conformance with the scope and limitations of ASTM E1527-13 for the Project site located Fremont, California. Any exceptions to, or deletions from,

this practice are described in Section 5 of this report. No RECs were identified in connection with the Project site.

7. RECOMMENDATION

Based on the findings of this Phase I ESA, no further investigation into known or potential RECs at the Project site is warranted.

8. LIMITATIONS

This Phase I ESA was performed to provide an understanding of the current environmental conditions at the Project site. BASELINE's interpretations and conclusions regarding this information and presented in this report are based on the expertise and experience of BASELINE in conducting similar assessments and current local, state, and federal regulations and standards.

BASELINE's objective is to perform our work with care, exercising the customary thoroughness and competence of earth science, environmental, and engineering consulting professionals, in accordance with the standard for professional services for a consulting firm at the time these services were provided. It is important to recognize that even the most comprehensive scope of services may fail to detect environmental conditions and potential liability at a particular site. Therefore, BASELINE cannot act as insurers and cannot "certify or underwrite" that a site is free of environmental contamination, and no expressed or implied representation or warranty is included or intended in this report except that the work was performed within the limits prescribed with the customary thoroughness and competence of our profession.

The passage of time, manifestation of latent conditions, or occurrence of future events may require further exploration at the Project site, analysis of the data, and re-evaluation of the findings, observations, conclusions, and recommendations expressed in this report.

The findings, observations, conclusions, and recommendations expressed by BASELINE in this report are limited by the scope of services and should not be considered an opinion concerning the compliance of any past or current owner or operator of the Project site with any federal, state, or local law or regulation. No warranty or guarantee, whether expressed or implied, is made with respect to the data reported or findings, observations, conclusions, and recommendations expressed in this report.

9. REFERENCES

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APPENDICES (IN PDF FORMAT)

A: PHOTOS FROM SITE RECONNAISSANCE

B: ASTM USER QUESTIONNAIRE

C: HISTORICAL LAND USE RECORDS

D: ENVIRONMENTAL DATABASE REPORT

E: QUALIFICATIONS OF PREPARERS