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November 20, 2015

Job No. 1-410-0761

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**Subject: AAI PHASE I ENVIRONMENTAL SITE ASSESSMENT**  
Hahn Property  
NEC West Grand Avenue and Myrtle Street  
Oakland, CA

Dear Mr. Hahn:

At your request and authorization, SALEM Engineering Group, Inc. (SALEM) has conducted this Phase I Environmental Site Assessment (ESA) of your property located on the northeast corner of West Grand Avenue and Myrtle Street in Oakland, California (subject property). During the course of this assessment, SALEM identified no evidence of a Recognized Environmental Condition (REC) in connection with the subject property as defined by ASTM E1527-13. However, the following Historical RECs (HRECs) were identified in connection with the subject property as defined by ASTM E1527-13:

- Based upon SALEM's review of Haines Criss-Cross Directories (HCCDs) and Polk Guide Directories (PGDs) included in the Environmental Data Resources, Inc (EDR) provided City Directory Abstract, as well as SALEM's review of Sanborn Fire Insurance Maps (SFIMs) of the subject property and vicinity, Leon's Mohawk Service gasoline service station at 914 West Grand Avenue formerly occupied the southern one-third of the subject property from at least 1963 until at least 1970. Additionally, several vehicle maintenance businesses have historically occupied the subject property including JAC Truck Repair at 2236 Myrtle Street from at least 2000 until the present, 3A Tire Service at 2271 Market Street from at least 1992 until at least 2000. Neither the Alameda County Environmental Health Division (ACEHD) nor the City of Oakland Fire Department (OFD) maintained any documentation regarding the removal of the underground storage tanks (USTs) suspected to have historically been located on-site and associated with the historical occupancy of the southern portion of the subject property by a gasoline service station. Aqua Science, Inc. (Aqua Science) performed a Phase II investigation at the subject property in 2005 that included the collection of soil samples from 2 feet below ground surface (bgs) in seven borings. Total petroleum hydrocarbons as gasoline, diesel, and motor oil (TPH-G/D/O), volatile organic compounds (VOCs), and polychlorinated biphenyls (PCBs) were not detected in these soil samples. Two additional soil borings were advanced along the southern property boundary to 16 feet bgs. The 11.5-foot bgs soil sample collected from the boring advanced south of the West Oakland Tire Repair facility (BH-A) did not contain detectable concentrations of TPH-G/D/O, VOCs, or PCBs. The 11.5-foot bgs soil sample collected from the southwest corner of the subject property (BH-B, near the former gasoline service station) contained ethylbenzene, total xylenes, naphthalene, and TPH-G/D above Environmental Screening Levels (ESLs) established by the California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB-SF). The grab groundwater sample collected from BH-A exceeded ESLs for TPH-O and the grab groundwater sample collected from BH-B exceeded ESLs for TPH-G/D, dissolved lead, ethylbenzene, total xylenes, and naphthalene. The source(s) and extent of petroleum hydrocarbons was not identified. SALEM conducted a limited geophysical survey of the subject property in

February 2012 which identified three sub-grade anomalies including several areas of “disturbed soil” that were suspected former UST locations and/or potential sub-grade structures of environmental concern. An additional geophysical survey of the subject property and a pothole investigation of the previously identified sub-grade anomalies were conducted in May 2012. The May 2012 geophysical survey did not identify the presence of any additional sub-grade structures of environmental concern. Excavation of the three sub-grade anomalies and areas of “disturbed soil” identified during the February 2012 geophysical survey did not reveal the presence of USTs or other sub-grade structures of environmental concern. However, excavated fill material generated during the pothole investigation was reported to have been stained and had odors similar to degraded petroleum hydrocarbons. SALEM conducted a Phase II ESA in February 2012 involving the collection of soil and soil vapor samples. Aromatic hydrocarbons were detected in a majority of soil vapor samples, the source of which is suspected to have been the former on-site gasoline service station, as well as off-gassing from petroleum hydrocarbon-impacted groundwater originating from the up-gradient Arco gasoline station leaking underground storage tank (LUST) site at 889 West Grand Avenue, located approximately 140 feet southeast of the subject property. Detected soil vapor concentrations at the subject property did not exceed commercial/industrial California Human Health Screening Levels (CHHSLs) with the exception of benzene in one sample. SALEM’s analysis for best estimate of indoor air risk using the USEPA Screening Level Johnson & Ettinger vapor intrusion model resulted in a cancer risk value that was significantly less than the  $10^{-5}$  value applied to commercial settings and determined that the likelihood of vapor intrusion of benzene into the existing or proposed structures at concentrations that may present an unacceptable health risk appeared to be low. In May 2012 three groundwater monitoring wells (MW-1, MW-2 and MW-3) were installed on the subject property. During the June 4, 2012 groundwater monitoring event, depth to groundwater was reported to be approximately 11 feet bgs with a general flow direction towards the northwest. TPH-D was not detected above laboratory method detection limits in MW-1, MW-2, or MW-3. TPH-G was not detected above laboratory method detection limits in MW-2 and MW-3. TPH-G was detected in MW-1 at a concentration of 3,300 micrograms per liter ( $\mu\text{g/L}$ ). Benzene (1.2  $\mu\text{g/L}$ ), sec-butylbenzene (3.7  $\mu\text{g/L}$ ), ethylbenzene (79  $\mu\text{g/L}$ ), isopropylbenzene (10  $\mu\text{g/L}$ ), p-isopropyltoluene (3.0  $\mu\text{g/L}$ ), naphthalene (37  $\mu\text{g/L}$ ), n-propylbenzene (29  $\mu\text{g/L}$ ), toluene (1.5  $\mu\text{g/L}$ ), 1,2,4-trimethylbenzene (110  $\mu\text{g/L}$ ), 1,3,5-trimethylbenzene (59  $\mu\text{g/L}$ ), and total xylenes (188  $\mu\text{g/L}$ ) were detected in the groundwater sample collected from MW-1. No other VOCs were detected above laboratory method detection limits in this sample. The results of laboratory analyses of the groundwater sample collected from MW-3 indicated the presence of 1,1-dichloroethane (1,1-DCA) at a concentration of 3.8  $\mu\text{g/L}$ , cis-1,2-dichloroethene (cis-1,2-DCE) at 110  $\mu\text{g/L}$ , trans-1,2-dichloroethene (t-1,2-DCE) at 14  $\mu\text{g/L}$ , methyl tert-butyl ether (MTBE) at 3.6  $\mu\text{g/L}$ , and trichloroethene (TCE) at 11  $\mu\text{g/L}$ . No other VOCs were detected above laboratory method detection limits. VOCs were not detected in the groundwater sample collected from MW-2. The groundwater sample collected from MW-1 had a TPH-G concentration of 3,300  $\mu\text{g/L}$ . This well (MW-1) is located in close proximity to the suspected former UST locations at the subject property. Based on the presence of hydrocarbon-affected soils identified during the pothole excavation investigation in this area, data suggests that the former USTs are likely the source of hydrocarbons identified in soil and groundwater proximate to this location. Regulatory drinking water standards for TPH and petroleum in general have not been developed. The RWQCB-SF has assigned the TPH-diesel taste and odor threshold of 100  $\mu\text{g/L}$  referenced in *A Compilation of Water Quality Goals* (RWQCBCV 2003) as the drinking water screening level for all categories of TPH, meaning that the screening level for TPH-G would be 100  $\mu\text{g/L}$  for the Hahn Property site as well. Screening levels for benzene and related light-weight hydrocarbon compounds are considered to provide adequate additional protection of drinking water concerns for gasoline-contaminated groundwater when used in conjunction with the TPH screening level of 100  $\mu\text{g/L}$ . In general, sites may exceed the TPH screening level if carcinogenic compounds detected in the groundwater sample (primarily benzene) are low. Detectable concentrations of aromatic volatiles (benzene, ethylbenzene, naphthalene, and total xylenes) in the groundwater



sample collected from MW-1 did not exceed ESLs under the existing land use and exposure scenario (groundwater is not a current or potential source of drinking water). Although the TPH-G concentration in MW-1 exceeds the ESL, aromatic volatiles are present at concentrations below the ESL. Given the proposed future use of the property as a parking lot, and presence of carcinogenic VOCs at concentrations below ESLs, data suggests that remediation of this area is unnecessary and unlikely to be required. TPH-G, TPH-D, and VOCs were not detected in MW-2, suggesting that the plume of hydrocarbon-affected groundwater near the former on-site gasoline service station has not migrated beneath the JAC Truck Repair property. TPH-G, TPH-D, and aromatic hydrocarbons typically associated with gasoline (other than MTBE) were not detected in the groundwater sample collected from MW-3, located to the east of the former on-site gasoline service station. A trace MTBE concentration was detected in this well; however, the concentration was below ESL's and likely originated from an off-site source (Arco LUST site) to the southeast of the subject property. Chlorinated solvents commonly associated with dry cleaning facilities were detected in the groundwater sample collected from MW-3; however, the concentrations were all below ESL's. Chlorinated solvents identified in MW-3 are suspected to originate from the Burke/Kim Property, a former dry cleaner at 949 West Grand Avenue with known chlorinated solvent impacts in soil and groundwater, located approximately 80 feet south of the subject property. Because the concentrations are below ESL's, are not suspected to originate from on-site, and because chlorinated solvents were not detected in soil vapor samples collected from this location during SALEM's February 2012 site investigation, it is unlikely that the presence of chlorinated solvents in groundwater will negatively impact the proposed development of the subject property as a parking lot. No further sampling or assessment is recommended for the subject property. On-site impacts and off-site sources have been adequately defined and are not anticipated to require further actions.

- SALEM's review of SFIMs and historical aerial photographs indicates that a railroad spur was located on the southern one-half of the subject property from at least 1939 until approximately 1959. Herbicides historically applied to railroad spur properties often contained arsenic. Additionally, on-site soils may have been impacted by lead due to the operation of trains over the course of time. Therefore, during SALEM's February 2012 Phase II ESA shallow soil samples were collected from the area of the former railroad spur. Trace to low concentrations of total arsenic and lead were detected in the five analyzed soil samples collected during SALEM's February 2012 investigation; however, concentrations did not exceed ESLs. Based on a review of soil analytical results, the former railroad spur is not suspected to have significantly impacted soil at the subject property and does not require further investigation.

We appreciate the opportunity to assist you with this project. If you have any questions, or if we may be of further assistance, please do not hesitate to contact our office at (408) 577-1090.

Respectfully submitted,

**SALEM Engineering Group, Inc.**



Shannon Lodge, PG  
Senior Project Manager





# SALEM

engineering group, inc.

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## PHASE I ENVIRONMENTAL SITE ASSESSMENT

HAHN PROPERTY  
NEC WEST GRAND AVENUE AND MYRTLE STREET  
OAKLAND, CALIFORNIA

SALEM PROJECT NO. 1-410-0761  
NOVEMBER 20, 2015

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November 20, 2015

Job No. 1-410-0761

## PHASE I ENVIRONMENTAL SITE ASSESSMENT

### HAHN PROPERTY NEC WEST GRAND AVENUE AND MYRTLE STREET OAKLAND, CALIFORNIA

#### 1.0 EXECUTIVE SUMMARY

SALEM Engineering Group, Inc. (SALEM) has conducted a Phase I Environmental Site Assessment (ESA) of the property located on the northeast corner of West Grand Avenue and Myrtle Street in Oakland, California (subject property). The subject property comprises an approximately 1.06-acre irregular-shaped parcel located on the north side of West Grand Avenue between Myrtle Street and Market Street. SALEM conducted this Phase I ESA of the subject property in conformance with the American Society for Testing and Materials (ASTM) E1527-13 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. The U.S. Environmental Protection Agency (USEPA) has determined that the ASTM E1527-13 Standard is consistent with the requirements for conducting an "All Appropriate Inquiry" under 40 C.F.R. Part 312. Thus, this Phase I ESA constitutes All Appropriate Inquiry (AAI) designed to identify Recognized Environmental Conditions (RECs) in connection with the previous ownership and uses of the subject property as defined by ASTM E1527-13 and 40 C.F.R. Part 312.

ASTM E1527-13 Section 1.1.1 *Recognized Environmental Conditions* – The term *recognized environmental conditions* is defined 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." The term as further defined by ASTM "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." Conditions determined to be *de minimis* are not *recognized environmental conditions*.

SALEM identified no evidence of a Recognized Environmental Condition (REC) in connection with the subject property as defined by ASTM E1527-13. However, the following Historical RECs (HRECs) were identified in connection with the subject property as defined by ASTM E1527-13:

- Based upon SALEM's review of Haines Criss-Cross Directories (HCCDs) and Polk Guide Directories (PGDs) included in the Environmental Data Resources, Inc (EDR) provided City Directory Abstract, as well as SALEM's review of Sanborn Fire Insurance Maps (SFIMs) of the subject property and vicinity, Leon's Mohawk Service gasoline service station at 914 West Grand Avenue formerly occupied the southern one-third of the subject property from at least 1963 until at least 1970. Additionally, several vehicle maintenance businesses have historically occupied the subject property including JAC Truck Repair at 2236 Myrtle Street from at least 2000 until the present, 3A Tire Service at 2271 Market Street from at least 1992 until at least 2000. Neither the Alameda County Environmental Health Division (ACEHD) nor the City of Oakland Fire Department (OFD) maintained any documentation regarding the removal of the underground storage tanks (USTs) suspected to have historically been located on-site and associated with the historical occupancy of the southern portion of the subject property by a gasoline service station. Aqua Science, Inc. (Aqua Science) performed a Phase II investigation at the subject property in



2005 that included the collection of soil samples from 2 feet below ground surface (bgs) in seven borings. Total petroleum hydrocarbons as gasoline, diesel, and motor oil (TPH-G/D/O), volatile organic compounds (VOCs), and polychlorinated biphenyls (PCBs) were not detected in these soil samples. Two additional soil borings were advanced along the southern property boundary to 16 feet bgs. The 11.5-foot bgs soil sample collected from the boring advanced south of the West Oakland Tire Repair facility (BH-A) did not contain detectable concentrations of TPH-G/D/O, VOCs, or PCBs. The 11.5-foot bgs soil sample collected from the southwest corner of the subject property (BH-B, near the former gasoline service station) contained ethylbenzene, total xylenes, naphthalene, and TPH-G/D above Environmental Screening Levels (ESLs) established by the California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB-SF). The grab groundwater sample collected from BH-A exceeded ESLs for TPH-O and the grab groundwater sample collected from BH-B exceeded ESLs for TPH-G/D, dissolved lead, ethylbenzene, total xylenes, and naphthalene. The source(s) and extent of petroleum hydrocarbons was not identified. SALEM conducted a limited geophysical survey of the subject property in February 2012 which identified three sub-grade anomalies including several areas of "disturbed soil" that were suspected former UST locations and/or potential sub-grade structures of environmental concern. An additional geophysical survey of the subject property and a pothole investigation of the previously identified sub-grade anomalies were conducted in May 2012. The May 2012 geophysical survey did not identify the presence of any additional sub-grade structures of environmental concern. Excavation of the three sub-grade anomalies and areas of "disturbed soil" identified during the February 2012 geophysical survey did not reveal the presence of USTs or other sub-grade structures of environmental concern. However, excavated fill material generated during the pothole investigation was reported to have been stained and had odors similar to degraded petroleum hydrocarbons. SALEM conducted a Phase II ESA in February 2012 involving the collection of soil and soil vapor samples. Aromatic hydrocarbons were detected in a majority of soil vapor samples, the source of which is suspected to have been the former on-site gasoline service station, as well as off-gassing from petroleum hydrocarbon-impacted groundwater originating from the up-gradient Arco gasoline station leaking underground storage tank (LUST) site at 889 West Grand Avenue, located approximately 140 feet southeast of the subject property. Detected soil vapor concentrations at the subject property did not exceed commercial/industrial California Human Health Screening Levels (CHHSLs) with the exception of benzene in one sample. SALEM's analysis for best estimate of indoor air risk using the USEPA Screening Level Johnson & Ettinger vapor intrusion model resulted in a cancer risk value that was significantly less than the  $10^{-5}$  value applied to commercial settings and determined that the likelihood of vapor intrusion of benzene into the existing or proposed structures at concentrations that may present an unacceptable health risk appeared to be low. In May 2012 three groundwater monitoring wells (MW-1, MW-2 and MW-3) were installed on the subject property. During the June 4, 2012 groundwater monitoring event, depth to groundwater was reported to be approximately 11 feet bgs with a general flow direction towards the northwest. TPH-D was not detected above laboratory method detection limits in MW-1, MW-2, or MW-3. TPH-G was not detected above laboratory method detection limits in MW-2 and MW-3. TPH-G was detected in MW-1 at a concentration of 3,300 micrograms per liter ( $\mu\text{g/L}$ ). Benzene (1.2  $\mu\text{g/L}$ ), sec-butylbenzene (3.7  $\mu\text{g/L}$ ), ethylbenzene (79  $\mu\text{g/L}$ ), isopropylbenzene (10  $\mu\text{g/L}$ ), p-isopropyltoluene (3.0  $\mu\text{g/L}$ ), naphthalene (37  $\mu\text{g/L}$ ), n-propylbenzene (29  $\mu\text{g/L}$ ), toluene (1.5  $\mu\text{g/L}$ ), 1,2,4-trimethylbenzene (110  $\mu\text{g/L}$ ), 1,3,5-trimethylbenzene (59  $\mu\text{g/L}$ ), and total xylenes (188  $\mu\text{g/L}$ ) were detected in the groundwater sample collected from MW-1. No other VOCs were detected above laboratory method detection limits in this sample. The results of laboratory analyses of the groundwater sample collected from MW-3 indicated the presence of 1,1-dichloroethane (1,1-DCA) at a concentration of 3.8  $\mu\text{g/L}$ , cis-1,2-dichloroethene (cis-1,2-DCE) at 110  $\mu\text{g/L}$ , trans-1,2-dichloroethene (t-1,2-DCE) at 14  $\mu\text{g/L}$ , methyl tert-butyl ether (MTBE) at 3.6  $\mu\text{g/L}$ , and trichloroethene (TCE) at 11  $\mu\text{g/L}$ . No other VOCs were detected above laboratory method detection limits. VOCs were not detected in the groundwater sample collected from MW-2. The groundwater sample collected from MW-1 had a TPH-G concentration of 3,300  $\mu\text{g/L}$ . This well (MW-1) is located in close proximity to the





suspected former UST locations at the subject property. Based on the presence of hydrocarbon-affected soils identified during the pothole excavation investigation in this area, data suggests that the former USTs are likely the source of hydrocarbons identified in soil and groundwater proximate to this location. Regulatory drinking water standards for TPH and petroleum in general have not been developed. The RWQCB-SF has assigned the TPH-diesel taste and odor threshold of 100 µg/L referenced in *A Compilation of Water Quality Goals* (RWQCBCV 2003) as the drinking water screening level for all categories of TPH, meaning that the screening level for TPH-G would be 100 µg/L for the Hahn Property site as well. Screening levels for benzene and related light-weight hydrocarbon compounds are considered to provide adequate additional protection of drinking water concerns for gasoline-contaminated groundwater when used in conjunction with the TPH screening level of 100 µg/L. In general, sites may exceed the TPH screening level if carcinogenic compounds detected in the groundwater sample (primarily benzene) are low. Detectable concentrations of aromatic volatiles (benzene, ethylbenzene, naphthalene, and total xylenes) in the groundwater sample collected from MW-1 did not exceed ESLs under the existing land use and exposure scenario (groundwater is not a current or potential source of drinking water). Although the TPH-G concentration in MW-1 exceeds the ESL, aromatic volatiles are present at concentrations below the ESL. Given the proposed future use of the property as a parking lot, and presence of carcinogenic VOCs at concentrations below ESLs, data suggests that remediation of this area is unnecessary and unlikely to be required. TPH-G, TPH-D, and VOCs were not detected in MW-2, suggesting that the plume of hydrocarbon-affected groundwater near the former on-site gasoline service station has not migrated beneath the JAC Truck Repair property. TPH-G, TPH-D, and aromatic hydrocarbons typically associated with gasoline (other than MTBE) were not detected in the groundwater sample collected from MW-3, located to the east of the former on-site gasoline service station. A trace MTBE concentration was detected in this well; however, the concentration was below ESL's and likely originated from an off-site source (Arco LUST site) to the southeast of the subject property. Chlorinated solvents commonly associated with dry cleaning facilities were detected in the groundwater sample collected from MW-3; however, the concentrations were all below ESL's. Chlorinated solvents identified in MW-3 are suspected to originate from the Burke/Kim Property, a former dry cleaner at 949 West Grand Avenue with known chlorinated solvent impacts in soil and groundwater, located approximately 80 feet south of the subject property. Because the concentrations are below ESL's, are not suspected to originate from on-site, and because chlorinated solvents were not detected in soil vapor samples collected from this location during SALEM's February 2012 site investigation, it is unlikely that the presence of chlorinated solvents in groundwater will negatively impact the proposed development of the subject property as a parking lot. No further sampling or assessment is recommended for the subject property. On-site impacts and off-site sources have been adequately defined and are not anticipated to require further actions.

- SALEM's review of SFIMs and historical aerial photographs indicates that a railroad spur was located on the southern one-half of the subject property from at least 1939 until approximately 1959. Herbicides historically applied to railroad spur properties often contained arsenic. Additionally, on-site soils may have been impacted by lead due to the operation of trains over the course of time. Therefore, during SALEM's February 2012 Phase II ESA shallow soil samples were collected from the area of the former railroad spur. Trace to low concentrations of total arsenic and lead were detected in the five analyzed soil samples collected during SALEM's February 2012 investigation; however, concentrations did not exceed ESLs. Based on a review of soil analytical results, the former railroad spur is not suspected to have significantly impacted soil at the subject property and does not require further investigation.



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## 2.0 PURPOSE AND SCOPE OF ASSESSMENT

### 2.1 Purpose

According to ASTM E1527-13, the purpose of this practice is to define good commercial and customary practice in the United States of America for conducting an *environmental site assessment* of a parcel of *commercial real estate* with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C. §9601) and *petroleum products*. As such, this practice is intended to permit a *user* to satisfy one of the requirements to qualify for the *innocent landowner, contiguous property owner, or bona fide prospective purchaser* limitation on CERCLA liability (hereinafter, the "*landowner liability protections*," or "*LLPs*"); that is, the practice that constitutes "*all appropriate inquiry* into the previous ownership and uses of the *property* consistent with good commercial or customary practice" as defined at 42 U.S.C. §9601(35) (B).

The Phase I ESA was conducted to identify 'Recognized Environmental Conditions' (RECs), 'Controlled Recognized Environmental Conditions' (CRECs) and 'Historical RECs' (HRECs) as defined by the American Society for Testing and Materials (ASTM) *Designation E1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. Section 1.1.1 of the ASTM *Designation E1527-13* defines an REC 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." The term as further defined by ASTM "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." Section 3.2.18 defines a CREC as a "recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (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)." Section 3.2.42 defines HREC as a "past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and land use limitations, institutional controls, or engineering controls)."

### 2.2 Scope of Work

The objective of the SALEM Phase I ESA scope of work is to provide an evaluation of RECs at the subject property and potential off-site sources. The scope of work for this Phase I ESA conforms to ASTM E1527-13. SALEM was provided verbal authorization to conduct the Phase I ESA by Mr. Sunny Hahn with on November 11, 2015 in accordance with the scope of work outlined in SALEM's Proposal No. P5-415-1475r. In fulfillment of the SALEM scope of work for this Phase I ESA, SALEM was retained to perform the following tasks:

- Acquire readily available information regarding land-use history and property development by reviewing historical aerial photographs, pertinent building permit records, historic city directories, as well as reviewing recent and historic topographic land-use maps of the subject property and surrounding area.
- Reviewing readily available local, state and federal regulatory agency databases listed in ASTM E1527-13 and compiled by Environmental Data Resources, Inc. (EDR), including but not limited to CERCLA and NPL lists for sites within one mile of the subject property. State databases, including but not limited to CALSITES, Hazardous Substance Account Act, Cortese, SWIS, SWAT, Well Investigation Program (AB1803), and LUFT, were reviewed for sites within one mile of the subject property.



- Performing a reconnaissance of the subject property and surrounding areas (up to one-half mile beyond site boundary), with regard to potential off-site sources of degradation to the subject property, which included photograph documentation of subject property conditions, and identification of potential environmental concerns. Interviews with persons knowledgeable of the previous and current ownership and uses of the subject property.
- Identifying aboveground storage tanks and/or indications of underground storage tanks on-site.
- In addition to ASTM E1527-13, SALEM recognizes ASTM *Standard Guide for Vapor Encroachment Screening (VES) on Property Involved in Real Estate Transactions* (ASTM E2600-10) as an industry-accepted guideline to determine if a Vapor Encroachment Condition (VEC) exists at the target property. A VES consists of reviewing the Phase I ESA data combined with the application of professional judgment. SALEM evaluates the regulatory agency databases to determine if there are known or suspect contaminated sites within a minimum search distance of the target property. In addition, SALEM attempted to determine whether soil and/or groundwater have been impacted within the critical distances outlined in ASTM E2600-10. A full Tier 1 VES, however, was outside the scope of this Phase I ESA.
- Preparing this report of SALEM's findings and recommendations if warranted.

### 3.0 SITE DESCRIPTION

The subject property comprises an approximately 1.06-acre irregular-shaped parcel located on the northeast corner of West Grand Avenue and Myrtle Street in Oakland, California (Alameda County Assessor's Parcel Numbers [APNS] 005-0431-023; 005-0431-021-04; 005-0431-015-04; 005-0431-017-01; 005-0431-018-03; and 005-0431-019-02). At the time of SALEM's November 16, 2015 site reconnaissance, the northwest quadrant of the subject property was occupied by JAC Truck Repair at 2236 Myrtle Street (APNs 005-0431-023; 005-0431-021-04; and 005-0431-019-02). The southern portion of the subject property was occupied by Enrique's Auto Repair and West Oakland Tire Repair at 714 West Grand Avenue (APN 005-0431-018-03). The northeast quadrant of the subject property was occupied by Mo-jointeriors general contractor and a parking lot at 2271 Market Street (APNs 005-0431-015-04 and 005-0431-017-01). The commercial building at 902 West Grand Avenue, located on the hard northwest corner of West Grand Avenue and Market Street was not included within the subject property boundaries. The subject property is located within Section 36, Township 1 North, Range 7 West, Mount Diablo Baseline and Meridian, U.S. Geological Survey 7.5 Minute Topographic Map, Oakland West, California Quadrangle, 1959, photorevised 1980.

### 4.0 PHYSIOGRAPHY AND HYDROGEOLOGIC CONDITIONS

The subject property is located within the Coast Ranges Geomorphic Province. The province includes many separate mountain ranges and several major structural valleys. A peculiar distinction to this province is the presence of two entirely different core complexes: one being a disordered Jurassic-Cretaceous (205 to 60 million years before present) sequence of volcanic, metamorphic, and deep marine clastic sedimentary rocks, commonly known as the Franciscan Assemblage; and the other consisting of Early Cretaceous (138 to 96 million years before present) granitic intrusives and older metamorphic rocks. The two unrelated core complexes lie side by side separated by faults.

A thick blanket of Late Cretaceous and Cenozoic (less than 100 million years old) clastic sedimentary rocks covers large portions of the province. Folds, thrust faults, steep reverse faults, and strike-slip faults developed as a consequence of Cenozoic deformation. Some deformation is continuing today. More specifically, the site is located within a region of pre-volcanic rocks. The site vicinity is generally underlain



by alluvial deposits. The sources of the alluvium are primarily marine sedimentary and metasedimentary formations. This alluvium is highly discontinuous and is composed of sands, silts, clays, and gravels in various combinations.

According to RWQCB records, for the ARCO # 02169 Service Station leaking underground storage tank (LUST) site at 889 West Grand Avenue, located approximately 275 feet southeast of the subject property, groundwater was first encountered at approximately 10 feet bgs with a general direction of flow to the north during the February 2014 monitoring event.

## 5.0 SITE RECONNAISSANCE

A site reconnaissance, which included a visual observation of the subject property and properties within the subject area, was conducted by SALEM's environmental assessor on November 16, 2015. The objective of the site reconnaissance is to identify RECs, including the storage and handling of hazardous substances and petroleum products on or in the vicinity of the subject property which have the potential to environmentally impact on-site soils, surface water and groundwater.

### 5.1 Observations

Table I summarizes the visual observations made during our site reconnaissance. A discussion of the physical observations follows Table I. Refer to the Site Map (Figure 1) and color photographs following the text for the locations of the features discussed in this section of the report.

**TABLE I**  
**Summary of Observations during Site Reconnaissance**

FEATURE	OBSERVED	NOT OBSERVED
Structures (existing)	X	
Evidence of past uses		X
Hazardous substances and/or petroleum products (including containers)	X	
Aboveground storage tanks (ASTs)	X	
Underground storage tanks (USTs) or evidence of USTs	X	
Strong, pungent, or noxious odors		X
Pools of liquid likely to be hazardous materials or petroleum products		X
Drums	X	
Unidentified substance containers		X
Pad-mounted/Pole-mounted transformers/capacitors/other PCB-containing equipment		X
<b>Subsurface hydraulic equipment</b>	X	
Heating/ventilation/air conditioning (HVAC)	X	
Stains or corrosion on floors, walls, or ceilings		X
Floor drains and sumps	X	
Pits, ponds, or lagoons		X
Stained soil and/or pavement	X	
Stressed vegetation		X
Waste or wastewater discharges to surface or surface waters on subject property (including stormwater)		X
Wells (irrigation, domestic, dry, injection, abandoned, monitoring wells)	X	
Septic Systems		X

The subject property comprises an approximately 1.06-acre irregular-shaped parcel located on the northeast corner of West Grand Avenue and Myrtle Street in Oakland, California (Alameda County APNS 005-0431-023; 005-0431-021-04; 005-0431-015-04; 005-0431-017-01; 005-0431-018-03; and 005-0431-019-02). At the time of SALEM's site reconnaissance, the northwest quadrant of the subject property was occupied by JAC Truck Repair at 2236 Myrtle Street (APNs 005-0431-023; 005-0431-021-04; and 005-0431-019-02). The southern portion of the subject property was occupied by Enrique's Auto Repair and West Oakland Tire Repair at 714 West Grand Avenue (APN 005-0431-018-03). The northeast quadrant of the subject



property was occupied by Mo-jointeriors general contractor and a parking lot at 2271 Market Street (APNs 005-0431-015-04 and 005-0431-017-01).

- Hazardous materials observed to be stored and handled on the subject property included moderate quantities of motor oil, antifreeze, gear lube, lubricants, brake cleaner, solvents, gasoline and household cleaners. Hazardous materials were observed to typically be stored in containers ranging in capacity from one-quart to five-gallons. Moderate staining of the concrete and asphalt surfaces beneath the hazardous material storage areas was observed. Multiple five-gallon plastic containers of motor oil and refrigerant were observed to be stored in a metal shipping container located near the southwest corner of the subject property. Several floor drains were observed in the vicinities of the various areas on the subject property where hazardous materials were stored and handled. Dismantled engines and other vehicle components were observed to be scattered throughout both the JAC Truck Repair (2236 Myrtle Street) and Enrique's Auto Repair and West Oakland Tire Repair (914 West Grand Avenue) facilities. Leakage of vehicle maintenance fluids from dismantled engines and other vehicle components was observed. General hazardous material storage and handling procedures were observed to be best characterized as poor.
- Hazardous wastes observed to be stored and handled on the subject property included moderate quantities of waste oil, spent antifreeze and used oil filters. Two approximately 400-gallon steel ASTs containing waste oil were observed at JAC Truck Repair at 2236 Myrtle Street, as well as Enrique's Auto Repair and West Oakland Tire Repair at 914 West Grand Avenue. Additionally, one approximately 100-gallon steel waste oil AST was observed adjacent to the 400-gallon waste oil AST at the Enrique's Auto Repair and West Oakland Tire Repair facility. Significant staining of the asphalt surfaces beneath the ASTs was observed. Visual evidence of spillage and associated absorbent was observed in the vicinity of the ASTs. Several 55-gallon drums containing used oil filters, spent anti-freeze, and used oil filters were observed. Numerous five-gallon plastic buckets containing waste oil were observed to be scattered throughout both facilities. Hazardous waste was reported to be collected on an "as needed basis." However, no manifests or load tickets for the off-site disposal/recycling of material generated were provided for SALEM's review during the course of this investigation.
- Several floor drains and exterior storm drains were observed. Surficial staining of the concrete and asphalt surfaces around the drains was observed. Hazardous materials and hazardous wastes were observed to be stored and handled in the vicinity of the drains.
- Three sub-grade hydraulic hoists are located at the subject property. No significant staining around the perimeter of the sub-grade hydraulic hoist stems was observed. No repairs or know hydraulic fluid leaks were reported. Based on various influencing factors including the maintenance history of the sub-grade hydraulic hoists (no repairs or known leaks) and the results of previous environmental investigations of the subject property which did not reveal significant impacts to the subject property's shallow soil or groundwater from petroleum hydrocarbons, the sub-grade hydraulic hoists are not suspected to have significantly impacted soil at the subject property and do not require further investigation. The sub-grade hydraulic hoists represent a *de minimis* condition.
- Three groundwater monitoring wells (MW-1, MW-2 and MW-3) installed by SALEM in May 2012 are located on the subject property. MW-1 was advanced in the Enrique's Auto Repair and West Oakland Tire Repair parking lot, located along the southwest corner of the subject property. MW-2 is located in the JAC Truck Repair driveway and MW-3 is located in the West Oakland Tire Repair's parking lot (along the southern/central portion of the subject property).

## 5.2 Adjacent Streets and Property Usage

Table II summarizes the adjacent streets and properties uses observed during the SALEM's site reconnaissance.



**TABLE II**  
**Adjacent Streets and Property Use**

DIRECTION	ADJACENT STREET	ADJACENT PROPERTY USE
North	None	Asphalt-Paved Parking Areas
East	Market Street	Vacant Lot and All Star Chinese Food Restaurant (898 West Grand Avenue)
South	West Grand Avenue	Vacant Land and West Grand Shopping Center (913 West Grand Avenue)
West	Myrtle Street	Graded Land Undergoing Construction

Based on the observed uses of the properties located immediately adjacent to the subject property, it is unlikely that significant quantities of hazardous materials are stored or handled at the adjacent properties with the exception of the Arco gasoline station at 889 West Grand Avenue, adjoining the subject property to the southeast on the southeast corner of West Grand Avenue and Market Street, approximately 140 feet southeast of the subject property. The Arco gasoline station is a LUST site with an unauthorized release of gasoline reported in 1991 which impacted soil and groundwater beneath the facility, the site was granted “case closure” on October 9, 2014. Refer to Section 8.0 *Regulatory Agency Records Review* for a detailed discussion of regulatory agency records associated with the Arco gasoline station LUST site.

### 5.3 Potable Water Source

The water purveyor for the subject property is the City of Oakland (City). The City’s water quality monitoring is an on-going program with water samples obtained on a regular basis. It is the responsibility of the City to provide customers with potable water in compliance with the California State Maximum Contaminant Levels (MCLs) for primary drinking water constituents in water supplied to the public. Water sampling was not conducted to verify water quality.

### 5.4 Sewage Disposal System

Oakland Public Works Department (OPWD) was contacted regarding sewer service for the subject property. According to OPWD records, sewer service has been provided to the subject property vicinity since the early 1900s. No sewer violations or records of septic systems are on file for the subject property addresses.

### 5.5 Heating and Cooling Source

The subject property is developed or undeveloped with four buildings. SALEM was unable to determine the heat source for the current or former commercial buildings on the subject property. No documentation of fuel oil use was identified during review of reasonably ascertainable records and no visual evidence of fuel oil use was identified during the site reconnaissance. Based upon SALEM’s experience, contamination which could be associated with a release fuel oil would likely present a de minimis condition. If a fuel oil UST is discovered in the future and/or evidence of a release of historical fuel oil is identified, further evaluation may be necessary.

## 6.0 USER-PROVIDED INFORMATION

A review of the user-provided Title report and a Phase I ESA User Questionnaire was conducted in order to help identify pertinent information regarding potential environmental impacts associated with the subject property.

### 6.1 Preliminary Title Report

A Preliminary Title Report for the subject property prepared by Chicago Title Company, dated November 5, 2015 was provided for SALEM’s review. The Preliminary Title Report was reviewed to identify potential deed restrictions, environmental liens or activity and use limitations (AULs) which may have occurred on or exist in connection with the subject property. SALEM’s review of the Preliminary Title Report indicated no deed restrictions, environmental liens or AULs in connection with the subject property. Please refer to Appendix A for a copy of the Preliminary Title Report.



## 6.2 Phase I Environmental Site Assessment User Questionnaire

As of the date of issuance of this report, a completed Phase I ESA User Questionnaire had not been received by SALEM. Upon receipt of a completed Phase I ESA User Questionnaire, SALEM will issue an addendum to this report summarizing the Phase I ESA User Questionnaire responses. Please refer to Appendix B for a copy of the Phase I ESA User Questionnaire.

In order to qualify for one of the *Landowner Liability Protections (LLPs)* offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "*Brownfields Amendments*"), the *user* must provide the following information (if available) to the *environmental professional*. Failure to provide this information could result in a determination that "*all appropriate inquiry*" is not complete. The user is asked to provide information or knowledge of the following:

- Environmental cleanup liens that are filed or recorded against the *property*.
- Activity and land use limitations that are in place on the site or that have been filed or recorded in a registry.
- Specialized knowledge or experience of the person seeking to qualify for the LLPs.
- Relationship of the purchase price to the fair market value of the *property* if it were not contaminated.
- Commonly known or *reasonably ascertainable* information about the *property*.
- The degree of obviousness of the presence or likely presence of contamination at the *property*, and the ability to detect the contamination by appropriate investigation.

## 7.0 SITE USAGE SURVEY

In order to assess the subject property's history, SALEM conducted a review of a Phase I ESA Owner Questionnaire, historical aerial photographs, building department records, city directories, planning department records and SFIMs.

### 7.1 Phase I Environmental Site Assessment Owner Questionnaire

On November 11, 2015, a Phase I ESA Owner Questionnaire was received from Mr. Sang Eui (Sunny) Hahn, the current owner of the subject property. The Phase I ESA Owner Questionnaire is designed to provide pertinent information regarding potential environmental and historical impacts associated with the subject property. Mr. Hahn reported that he had been familiar with the subject property for approximately 11 years and that the subject property is currently developed with commercial buildings. Mr. Hahn indicated that USTs have currently/historically been located on the subject property and that there are currently groundwater monitoring wells located on the subject property associated with historical contamination.

According to Mr. Hahn, to the best of his knowledge, no on-site treatment or discharge of waste; no on-site leach fields, dry wells, sumps, or disposal ponds; no use, storage or disposal of hazardous materials, with the exception of the on-site gasoline; no existing or former ASTs; no hazardous material spills; no buried materials; no domestic or irrigation wells; or any additional items of environmental concern were associated with the subject property. Please refer to Appendix C for a copy of the Phase I ESA Owner Questionnaire.

### 7.2 Historical Aerial Photograph Review

Historical aerial photographs of the subject property and vicinity, dated 1939, 1946, 1958, 1968, 1974, 1982, 1993, 2005, 2009, 2010 and 2012 were reviewed to evaluate changes in land-use for the subject property. The historical aerial photographs were supplied by EDR. Refer to Appendix D for a copy of the EDR-provided aerial photographs. A summary of the aerial photographs is provided below:

#### ➤ 1939 Aerial Photograph

The northern portion of the subject property appears to be occupied by at least three single-family dwellings facing Myrtle Street and Market Street. The southern and central portions of the subject



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property appear to be occupied by several commercial buildings facing West Grand Avenue and Market Street. What appears to be a railroad spur enters the subject property's southwest corner from Myrtle Street and transects the southern portion of the subject property from west to east. The subject buildings appear to surround the railroad spur to the north, south and east. What appears to be dense residential development adjoins the subject property to the north, beyond which is 24<sup>th</sup> Street. Market Street adjoins the subject property to the east, beyond which is mixed commercial and residential development. West Grand Avenue adjoins the subject property to the south, beyond which is what appears to be an industrial building. Myrtle Street adjoins the subject property to the west, beyond which are several single-family dwellings and two large commercial buildings.

➤ **1946 Aerial Photograph**

The conditions on the subject property and adjoining properties are similar to those observed in the 1939 aerial photograph with the exception of the adjoining property to the west, which appears to be occupied by a large commercial building and associated loading dock area. Additionally, what appears to be a gasoline service station adjoins the subject property to the east, on the southeast corner of Market Street and Athens Avenue.

➤ **1958 Aerial Photograph**

The conditions on the subject property and adjoining properties are similar to those observed in the 1946 aerial photograph with the exception of the construction of an additional subject building located adjoining the railroad spur to the north.

➤ **1963 Aerial Photograph**

The subject property appears to be occupied by a commercial structure (possible office building). The conditions on the adjoining properties are similar to the 1953 aerial photograph with the exception of undeveloped land is located to the north and west of the subject property.

➤ **1965 Aerial Photograph**

The southern portion of the subject property appears to be occupied by a gasoline service station building and associated canopy. The railroad spur is no longer visible and appears to have been abandoned. The central portion of the subject property is occupied by a large rectangular-shaped commercial building which appears to face Myrtle Street and a larger rectangular-shaped commercial building which appears to face Market Street. The northern portion of the subject property appears to be occupied by three single-family dwellings facing Myrtle Street and Market Street. What appear to be single-family dwellings adjoin the subject property to the north, beyond which is dense single-family residential development. Market Street adjoins the subject property to the east, beyond which is what appears to be a gasoline service station on the southeast corner of Market Street and Athens Avenue. West Grand Avenue adjoins the subject property to the south, beyond which is what appears to be a gasoline service station on the southwest corner of West Grand Avenue and Market Street, and an associated strip-shopping center building to the southwest. Myrtle Street adjoins the subject property to the west, beyond which are several large commercial warehouse buildings.

➤ **1974 Aerial Photograph**

The conditions on the subject property and adjoining properties are indiscernible in the 1975 aerial photograph with the exception of what appears to be a gasoline service station on the southeast corner of West Grand Avenue and Market Street, adjoining the subject property to the southeast.

➤ **1982 Aerial Photograph**

The northern portion of the subject property appears to be occupied primarily by asphalt-paved parking areas. The single-family dwellings formerly occupying the northern portion of the subject property have been demolished. The central portion of the subject property is occupied by a small square-shaped commercial building facing Myrtle Street and a larger rectangular-shaped





commercial building facing Market Street. The southwest corner of the subject property appears to be occupied by two structures similar in size and configuration to the former gasoline service station building and associated canopy. The southeastern corner of the subject property appears to be vacant. What appear to be parking lots adjoin the subject property to the north, beyond which is dense single-family residential development. Market Street adjoins the subject property to the east, beyond which is what appears to be a vacant graded lot. The former gasoline service station on the southeast corner of Market Street and Athens Avenue appears to have been demolished. West Grand Avenue adjoins the subject property to the south, beyond which is what appears to be a gasoline service station on the southwest corner of West Grand Avenue and Market Street, and an associated strip-shopping center building to the southwest. What appears to be a gasoline service station is located adjoining the subject property to the southeast, on the southeast corner of West Grand Avenue and Market Street. Myrtle Street adjoins the subject property to the west, beyond which are several large commercial warehouse buildings.

➤ **1993 Aerial Photograph**

The conditions on the subject property and adjoining properties are similar to the 1982 aerial photograph with the exception of what appears to be a commercial building adjoining the subject property to the east across Market Street.

➤ **2005 Aerial Photograph**

The subject property appears to be occupied by four commercial buildings similar in size and configuration to the buildings observed during SALEM's field reconnaissance. Parking lots adjoin the subject property to the north. Market Street adjoins the subject property to the east, beyond which is mixed commercial and residential development. West Grand Avenue adjoins the subject property to the south, beyond which is what appears to be a gasoline service station on the southwest corner of West Grand Avenue and Market Street, and an associated strip-shopping center building to the southwest. What appears to be a gasoline service station is located adjoining the subject property to the southeast, on the southeast corner of West Grand Avenue and Market Street. Myrtle Street adjoins the subject property to the west, beyond which are several large commercial warehouse buildings.

➤ **2009 Aerial Photograph**

The conditions on the subject property and adjoining properties are similar to the 2005 aerial photograph.

➤ **2010 Aerial Photograph**

The conditions on the subject property and adjoining properties are similar to the 2009 aerial photograph.

➤ **2012 Aerial Photograph**

The conditions on the subject property and adjoining properties are similar to the 2010 aerial photograph.

### **7.3 Building Department Records Review**

As part of SALEM's January 2011 Phase I ESA, a records request was made to the City of Oakland Building Department (OBD) for the current and historical subject property addresses of 902 and 914 West Grand Avenue; 2220, 2226, 2228 and 2236 Myrtle Street; and 2257, 2271, 2277, 2281 and 2285 Market Street. OBD records indicated that the only building permit on file for 902 West Grand Avenue was for the "installation of new partitions and ceiling for office space," dated July 25, 1942. The earliest building permit on file for 914 West Grand Avenue was for the "construction of a new service station," dated October 25, 1963. The owner of the service station was identified as Callen Oil Company. A building permit to "enclose the canopy for storage space" was dated June 13, 1988. The earliest building permit on file for 2220 Myrtle Street was for a "seismic retrofit at commercial building," dated April 9, 1999. The earliest



building permit on file for 2226-2228 Myrtle Street was for the “alteration of existing apartment building,” dated March 20, 1922. A building permit was on file to conduct “auto body work on lot with existing auto repair facility,” dated November 22, 2004 and a zoning clearance “for a truck repair facility,” dated November 24, 2008. The only building permit on file for 2236 Myrtle Street was for the “demolition of a single-family dwelling,” dated June 22, 1984. The earliest building permit on file for 2257 Market Street was for the “construction of a shed to store terra cota products,” and “one-story/two-room brick building,” dated March 30, 1923. A building permit to “demolish the existing warehouse-store buildings,” was dated February 10, 1960. The earliest building permit on file for 2271 Market Street was “alter/repair,” dated July 27, 1944. A building permit to “repair damage caused by fire” at the “machine shop” was dated August 12, 1957. The earliest building permit on file for the addresses of 2277, 2281 and 2285 Market Street were for the “alteration/repair” of various building components, each dated 1929. A building permit for the demolition of the existing “vacant office” was dated November 12, 1969. No permits for items of environmental concern such as USTs or septic systems were on file with the OBD for the subject property. No additional building permits of environmental concern have been issued by OBD since SALEM’s initial review of OBD building permit records in January 2011. Refer to Appendix E for copies of pertinent OBD records.

#### 7.4 City Directories

On November 12, 2015, SALEM contracted with EDR to provide a City Directory Abstract dated 1920 through 2013 for the subject property as well as the subject property vicinity. Refer to Appendix F for copies of the City Directory Abstract. A summary of City Directory Abstract is presented in Table IV:

**TABLE IV**  
**City Directory Abstract Summary**

ADDRESS	OWNER/OCCUPANT	YEARS
902 West Grand Avenue	Address Not Listed	1920-1949
	Gridd Stone Company	1950-1955
914 West Grand Avenue	Address Not Listed	1920-1966
	Leon’s Mohawk Service	1967-1970
	LJ Auto Service	1980-1986
	3A Tire Service	1980-1986
	Courtesy Auto Clinic	1996-2000
	Enriques Complete Auto Repair	2013
	GAC Tire & Repair	
2220 Myrtle Street	Address Not Listed	1920-1927
	Residential Listings	1928-1933
2226 Myrtle Street	Address Not Listed	1920-1932
	Imperial Electrical Sign Company	1933
	Residential Listings	1950-1967
	A&C Truck Repair	2000
	Residential Listings	1925-1955
	TFS Trucking	2013
2228 Myrtle Street	Residential Listing	1920
	Imperial Electrical Sign Company	1925-1938
	Bay Cities Venetian Blind Company	1950
	Address Not Listed	1920-2006
2236 Myrtle Street	Address Not Listed	1920-1954
2257 Market Street	Address Not Listed	1920-1954
	Lorentzen Co. Linoleum and Carpet	1955
	Loralite Company	1955
2271 Market Street	Address Not Listed	1920-1954
	Bell Sheet Metal Company	1955
	Tony Capers Co.	1962
	Courtesy Auto Clinic	1992-2000
	Address Not Listed	1920-2006
2277 Market Street	Address Not Listed	1920-2006
2281 Market Street	Address Not Listed	1920-1961
	Residential Listing	1962
2285 Market Street	Address Not Listed	1920-1949
	Oakland Terrazzo Company	1955-1962

#### 7.5 Sanborn Fire Insurance Maps

SALEM reviews SFIMs to evaluate prior land use at the subject property and adjacent properties. SFIMs typically exist for cities with populations of 2,000 or more, the coverage dependent on the location of the



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property. On November 12, 2015, SALEM contracted with EDR to provide a Fire Insurance Map Abstract indicating the availability of historic SFIMs for the subject property and adjacent properties as far back as 1867. EDR's search of collections at the Library of Congress, University Publications of America, and various public and local sources revealed coverage for the subject property and adjacent properties. Refer to Appendix G for a copy of the EDR-provided SFIMs. The SFIM interpretation is provided below:

➤ **1902 SFIM**

Five buildings are depicted on the subject property, building use is not defined though they appear to be residential structures and detached garages/sheds. Single-family dwellings are depicted adjoining the subject property to the north. Market Street is depicted adjoining the subject property to the east, beyond which is vacant. West Grand Avenue is depicted adjoining the subject property to the south, beyond which is a large lot with two small buildings. Myrtle Street is depicted adjoining the subject property to the west, beyond which is residential development.

➤ **1912 SFIM**

The subject property and all adjoining properties are depicted as they were on the 1902 SFIM.

➤ **1951 SFIM**

Two single-family dwellings are depicted occupying the northwest corner of the subject property along Myrtle Street. An L-shaped commercial building occupies the central and eastern portions of the subject property. The commercial building is depicted as being occupied by "sheet metal works and welding." A commercial building depicted as being utilized as a "linoleum warehouse" is located near the southeast corner of the subject property. The linoleum warehouse building is adjoined to the east by a rectangular-shaped commercial building depicted as being utilized for "carpet sewing." A railroad spur is depicted entering the subject property's southwest corner from Myrtle Street and transecting the southern portion of the subject property from west to east. A commercial building is depicted adjoining the railroad spur to the south, along West Grand Avenue. "Paints and oils" are depicted as being stored within the east side of the commercial building along West Grand Avenue. The remainder of the subject property not occupied by commercial buildings is depicted as being utilized for storage. Single-family dwellings are depicted adjoining the subject property to the north. Market Street is depicted adjoining the subject property to the east, beyond which is a gasoline service station and the Scott Butzner Electric Company. West Grand Avenue is depicted adjoining the subject property to the south, beyond which is the Foster & Kleinner Co. facility which is depicted as storing "advertising sign paints," and conducting auto repair operations on-site. Myrtle Street is depicted adjoining the subject property to the west, beyond which is the Union Ice Company facility.

➤ **1952 SFIM**

The subject property and all adjoining properties are depicted as they were on the 1951 SFIM.

➤ **1954 SFIM**

The subject property and all adjoining properties are depicted as they were on the 1952 SFIM.

➤ **1962 SFIM**

Two single-family dwellings are depicted occupying the northwest corner of the subject property along Myrtle Street. A single-family dwelling is depicted as occupying the northeast corner of the subject property along Market Street. The central portion of the subject property is depicted as being occupied by three rectangular-shaped commercial buildings. The commercial buildings are depicted as being utilized by "Terrazzo for contractor's storage," and for "vending machine repair and parts storage." The southern portion of the subject property is depicted as vacant land. Single-family dwellings are depicted adjoining the subject property to the north. Market Street is depicted adjoining the subject property to the east, beyond which is a gasoline service station and a vacant lot. West Grand Avenue is depicted adjoining the subject property to the south, the properties south



of West Grand Avenue are not depicted on the SFIM. Myrtle Street is depicted adjoining the subject property to the west, beyond which is the Union Ice Cream Company and Safeway Stores, Inc. facility.

➤ **1967 SFIM**

Two single-family dwellings are depicted occupying the northwest corner of the subject property along Myrtle Street. A single-family dwelling is depicted as occupying the northeast corner of the subject property along Market Street. The central portion of the subject property is depicted as being occupied by three rectangular-shaped commercial buildings. The commercial buildings are depicted as being utilized for “contractor’s storage,” and for “vending machine repair and parts storage.” The westernmost commercial building is depicted as being utilized for “auto repair activities.” The southern portion of the subject property is depicted as being occupied by a gasoline service station. Single-family dwellings are depicted adjoining the subject property to the north. Market Street is depicted adjoining the subject property to the east, beyond which is a gasoline service station and a vacant lot. West Grand Avenue is depicted adjoining the subject property to the south, beyond which are a gasoline service station and associated strip-shopping center building to the southwest. Myrtle Street is depicted adjoining the subject property to the west, beyond which is the Union Ice Cream Company and Safeway Stores, Inc. facility.

➤ **1970 SFIM**

The subject property and all adjoining properties are depicted as they were depicted on the 1967 SFIM with the exception of the west-central and northeastern portions of the subject property which are depicted as being occupied by a parking lot.

#### **7.6 Agricultural Chemicals**

Review of historical aerial photographs and SFIMs reveal that the subject property has not been utilized for agricultural purposes. Therefore, the use, storage and application of agricultural chemicals at the subject site are not considered an environmental concern.

#### **7.7 Phase I Environmental Site Assessment Interview - Previous Owner**

A Phase I ESA interview with the previous owner of the subject property was not reasonable ascertainable.

#### **7.8 Previous Environmental Reports**

According to SALEM’s two previous environmental reports titled, *Phase II Environmental Site Assessment Proposed FoodsCo Supermarket #536 “Hahn Property” Northeast Corner West Grand Avenue and Myrtle Street, Oakland, California*, dated February 29, 2012 and *Site Assessment Report Proposed FoodsCo Supermarket #536 “Hahn Property” Northeast Corner West Grand Avenue and Myrtle Street, Oakland, California*, dated June 11, 2012, as well as Aqua Science’s 2005 Phase II investigation soil and groundwater beneath the subject property have been impacted by petroleum hydrocarbons. Aqua Science’s 2005 Phase II investigation included the collection of soil samples from 2 feet bgs in seven borings located on the subject property. Concentrations of TPH-G/D/O, VOCs, and PCBs were reported to have not been detected above laboratory reporting limits. Two additional soil borings were advanced along the southern subject property boundary to a depth of approximately 16 feet bgs. The 11.5-foot bgs soil sample collected from the boring advanced south of the West Oakland Tire Repair facility (BH-A) did not contain detectable concentrations of TPH-G/D/O, VOCs, or PCBs. The 11.5-foot bgs soil sample collected from the southwest corner of the subject property (BH-B, near the former gasoline service station) contained ethylbenzene, total xylenes, naphthalene, and TPH-G/D above ESLs established by the RWQCB-SF. The grab groundwater sample collected from BH-A exceeded ESLs for TPH-O and the grab groundwater sample collected from BH-B exceeded ESLs for TPH-G/D, dissolved lead, ethylbenzene, total xylenes, and naphthalene. The source(s) and extent of petroleum hydrocarbons was not identified. SALEM conducted a limited geophysical survey of the subject property in February 2012 which identified three sub-grade anomalies including several areas of “disturbed soil” that were suspected former UST locations and/or potential sub-grade structures of environmental concern. An additional geophysical survey of the subject



property and a pothole investigation of the previously identified sub-grade anomalies were conducted in May 2012. May 2012 geophysical survey did not identify the presence of any additional sub-grade structures of environmental concern. Excavation of the three sub-grade anomalies and areas of "disturbed soil" identified during the February 2012 geophysical survey did not reveal the presence of USTs or other sub-grade structures of environmental concern. However, excavated fill material generated during the pothole investigation was reported to have been stained and had odors similar to degraded petroleum hydrocarbons. SALEM conducted a Phase II ESA in February 2012 involving the collection of soil and soil vapor samples. Aromatic hydrocarbons were detected in a majority of soil vapor samples, the source of which is suspected to have been the former on-site gasoline service station, as well as off-gassing from petroleum hydrocarbon-impacted groundwater originating from the up-gradient Arco gasoline station LUST site at 889 West Grand Avenue, located approximately 140 feet southeast of the subject property. Detected soil vapor concentrations at the subject property did not exceed commercial/industrial CHHSLs with the exception of benzene in one sample. SALEM's analysis for best estimate of indoor air risk using the USEPA Screening Level Johnson & Ettinger vapor intrusion model resulted in a cancer risk value that was significantly less than the  $10^{-5}$  value applied to commercial settings and determined that the likelihood of vapor intrusion of benzene into the existing or proposed structures at concentrations that may present an unacceptable health risk appeared to be low. In May 2012 three groundwater monitoring wells (MW-1, MW-2 and MW-3) were installed on the subject property. During the June 4, 2012 groundwater monitoring event, depth to groundwater was reported to be approximately 11 feet bgs with a general flow direction towards the northwest. TPH-D was not detected above laboratory method detection limits in MW-1, MW-2, or MW-3. TPH-G was not detected above laboratory method detection limits in MW-2 and MW-3. TPH-G was detected in MW-1 at a concentration of 3,300 µg/L. Benzene (1.2 µg/L), sec-butylbenzene (3.7 µg/L), ethylbenzene (79 µg/L), isopropylbenzene (10 µg/L), p-isopropyltoluene (3.0 µg/L), naphthalene (37 µg/L), n-propylbenzene (29 µg/L), toluene (1.5 µg/L), 1,2,4-trimethylbenzene (110 µg/L), 1,3,5-trimethylbenzene (59 µg/L), and total xylenes (188 µg/L) were detected in the groundwater sample collected from MW-1. No other VOCs were detected above laboratory method detection limits in this sample. The results of laboratory analyses of the groundwater sample collected from MW-3 indicated the presence of 1,1-DCA at a concentration of 3.8 µg/L, cis-1,2-DCE at 110 µg/L, t-1,2-DCE at 14 µg/L, MTBE at 3.6 µg/L, and TCE at 11 µg/L. No other VOCs were detected above laboratory method detection limits. VOCs were not detected in the groundwater sample collected from MW-2. The groundwater sample collected from MW-1 had a TPH-G concentration of 3,300 µg/L. This well (MW-1) is located in close proximity to the suspected former UST locations at the subject property. Based on the presence of hydrocarbon-affected soils identified during the pothole excavation investigation in this area, data suggests that the former USTs are likely the source of hydrocarbons identified in soil and groundwater proximate to this location. Regulatory drinking water standards for TPH and petroleum in general have not been developed. The RWQCB-SF has assigned the TPH-diesel taste and odor threshold of 100 µg/L referenced in *A Compilation of Water Quality Goals* (RWQCBCV 2003) as the drinking water screening level for all categories of TPH, meaning that the screening level for TPH-G would be 100 µg/L for the Hahn Property site as well. Screening levels for benzene and related light-weight hydrocarbon compounds are considered to provide adequate additional protection of drinking water concerns for gasoline-contaminated groundwater when used in conjunction with the TPH screening level of 100 µg/L. In general, sites may exceed the TPH screening level if carcinogenic compounds detected in the groundwater sample (primarily benzene) are low. Detectable concentrations of aromatic volatiles (benzene, ethylbenzene, naphthalene, and total xylenes) in the groundwater sample collected from MW-1 did not exceed ESLs under the existing land use and exposure scenario (groundwater is not a current or potential source of drinking water). Although the TPH-G concentration in MW-1 exceeds the ESL, aromatic volatiles are present at concentrations below the ESL. Given the proposed future use of the property as a parking lot, and presence of carcinogenic VOCs at concentrations below ESLs, data suggests that remediation of this area is unnecessary and unlikely to be required. TPH-G, TPH-D, and VOCs were not detected in MW-2, suggesting that the plume of hydrocarbon-affected groundwater near the former on-site gasoline service station has not migrated beneath the JAC Truck Repair property. TPH-G, TPH-D, and aromatic hydrocarbons typically associated with gasoline (other than MTBE) were not detected in the groundwater sample collected from MW-3, located to the east of the former on-site gasoline service station. A trace MTBE concentration was detected in this



well; however, the concentration was below ESL's and likely originated from an off-site source (Arco LUST site) to the southeast of the subject property. Chlorinated solvents commonly associated with dry cleaning facilities were detected in the groundwater sample collected from MW-3; however, the concentrations were all below ESL's. Chlorinated solvents identified in MW-3 are suspected to originate from the Burke Property, a former dry cleaner at 949 West Grand Avenue with known chlorinated solvent impacts in soil and groundwater, located approximately 80 feet south of the subject property. Because the concentrations are below ESL's, are not suspected to originate from on-site, and because chlorinated solvents were not detected in soil vapor samples collected from this location during SALEM's February 2012 site investigation, it is unlikely that the presence of chlorinated solvents in groundwater will negatively impact the proposed development of the subject property as a parking lot. No further sampling or assessment is recommended for the subject property. On-site impacts and off-site sources have been adequately defined and are not anticipated to require further actions.

SALEM's review of SFIMs and historical aerial photographs indicates that a railroad spur was located on the southern one-half of the subject property from at least 1939 until approximately 1959. Herbicides historically applied to railroad spur properties often contained arsenic. Additionally, on-site soils may have been impacted by lead due to the operation of trains over the course of time. Therefore, during SALEM's February 2012 Phase II ESA shallow soil samples were collected from the area of the former railroad spur. Trace to low concentrations of total arsenic and lead were detected in the five analyzed soil samples collected during SALEM's February 2012 investigation; however, concentrations did not exceed ESLs. Based on a review of soil analytical results, the former railroad spur is not suspected to have significantly impacted soil at the subject property and does not require further investigation. Refer to Appendix H for copies of available previous environmental reports.

## **8.0 REGULATORY AGENCY RECORDS REVIEW**

SALEM conducted a review of regulatory agency records for the purpose of determining if hazardous materials/hazardous wastes have been stored or handled on the subject property and area properties of environmental concern. The most current records available were reviewed.

### **California Environmental Protection Agency, Department of Toxic Substances Control**

SALEM's November 17, 2015 review of the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) Envirostor California cleanup sites database available via the DTSC Internet Website which tracks federal superfund sites, state response sites, voluntary cleanup sites, and school cleanup sites, indicated that no records of cleanup sites are on file with the DTSC for the subject property or adjacent properties.

### **California Regional Water Quality Control Board**

SALEM's November 17, 2015 review of the RWQCB Geotracker leaking underground fuel tank (LUFT) database available via the RWQCB Internet Website indicated the following records of LUFTs are on file with the RWQCB for the subject property:

The Burke/Kim Property at 925-949 West Grand Avenue, located on the southwest corner of the intersection of West Grand Avenue and Market Street, adjoins the subject property to the south. According to RWQCB-SF records, A dry cleaner operated at 941 West Grand Avenue for approximately 10 years and was issued a Notice of Violation (NOV) for the improper disposal of waste in 1986. The site was reported to have historically been occupied by the Foster & Kleiser Company and previously contained an auto wrecking yard, truck storage area, auto repair shop, gas, oil and paint storage areas. Quarterly groundwater monitoring, last conducted in August 2005 indicates that groundwater beneath the Burke/Kim Property has been impacted by petroleum hydrocarbons and VOCs exceeding ESLs. Groundwater beneath the site is reported to have contained concentrations of up to 140,000 µg/L TPH-g, 380 µg/L TPH-d, 810 µg/L benzene, 550 µg/L c-1,2-DCE and 60 µg/L vinyl chloride. The lateral and vertical extent of soil and



groundwater contamination beneath the site is undefined and is suspected to extend off-site. Depth to groundwater was last reported to be approximately 10 feet bgs with a general direction of flow to the southwest, away from the subject property. The LUFT site is currently out of compliance with the RWQCB-SF and it appears that no environmental assessment work has been conducted at the Burke/Kim Property since 2005. A soil and groundwater investigation work plan addendum requested by the ACEHD in April 2005 and again in July 2006 was not submitted by the Responsible Party (RP). Notices to Comply and a NOV were issued by the ACEHD in 2009, 2010 and 2011 for non-submittal of reports and non-compliance with established regulations. The ACEHD referred the LUST case to the RWQCB-SF on April 6, 2012.

The former Mac Auto Repair facility at 905 West Grand Avenue, located on the southwest corner of the intersection of West Grand Avenue and Market Street also adjoins the subject property to the south. The former Mac Auto Repair site, which is presently a vacant lot, was identified on the LUFT database as having had an unauthorized release of gasoline in 1999 which impacted soil and groundwater beneath the site. Petroleum hydrocarbon-impacted soil and groundwater was discovered during the removal of three gasoline and one waste oil USTs from the site in February 1999. The petroleum hydrocarbon-impacted soil and groundwater was remediated under the regulatory agency supervision of the ACEHD and a "case closed" designation was granted on March 6, 2000.

The existing Arco gasoline station at 889 West Grand Avenue, located on the southeast corner of the intersection of West Grand Avenue and Market Street, adjoins the subject property to the southeast. The Arco gasoline station was identified on the LUFT database as having had an unauthorized release of gasoline in 1988 which impacted soil and groundwater beneath the site. Four USTs were removed from the site in 1992. Several environmental assessments were conducted between February 1992 and September 1994. A soil vapor extraction (SVE) system was installed and operated from 1994 until 1998, followed by a biosparge system which ceased operation in 2001. According to the First Quarter 2012 Semi-Annual Groundwater Monitoring Report for the site, gasoline range organics were detected in five groundwater monitoring wells up to 4,700 µg/L. Benzene was detected in three groundwater monitoring wells up to 350 µg/L. MTBE was detected in four groundwater monitoring wells up to 11 µg/L. Toluene, ethylbenzene and xylenes were also detected in various groundwater monitoring wells. The most recent groundwater monitoring event indicated that the direction of subsurface groundwater flow was to the northeast at a gradient of 0.003 foot per foot (ft/ft); however, groundwater flow directions have historically been to the northwest toward the subject property. Arco is reportedly in the process of continuing assessment of the down-gradient (off-site) extent of impacts to the northwest of their site. However, according the RWQCB-SF records, the presence of utilities in the public right-of-ways and an inability to gain access to off-site private properties has thus far precluded Arco from continuing the off-site investigation. Based upon the previous assessments, the RWQCB-SF issued a "case closed" designation for the site on October 9, 2014. Refer to Appendix I for copies of pertinent RWQCB records.

#### **California Division of Oil, Gas, and Geothermal Resources**

SALEM reviewed the California Division of Oil, Gas, and Geothermal Resources (DOGGR) website (<http://maps.conservation.ca.gov/doms/index.html>) to evaluate the potential for existing/former oil, gas, or geothermal wells on the subject property or adjoining properties. The subject property is located within DOGGR District 6. The subject property vicinity is not located within an oil, gas, or geothermal field. The review of DOGGR information does not indicate that an oil, gas, or geothermal well has been drilled on the subject or adjacent properties.

#### **Alameda County Environmental Health Division**

On November 17, 2015, the Alameda County Environmental Health Division (ACEHD) was contacted regarding records of USTs, historical hazardous/flammable permits, hazardous materials handling, and unauthorized releases of hazardous materials for the of subject property addresses. Since SALEM's last Phase I ESA of the subject property conducted in June 2012, no new records were on file. As part of SALEM's previous Phase I ESA, the ACEHD was contacted regarding potential records associated with



USTs, hazardous material business plans (HMBPs), or hazardous materials incident reports for the current and historical subject property addresses of 902 and 914 West Grand Avenue; 2220, 2226, 2228 and 2236 Myrtle Street; and 2257, 2271, 2277, 2281 and 2285 Market Street, as well as adjoining properties of environmental concern.

According to ACEHD records, the adjoining property to the west was historically occupied by the Union Ice Company (from approximately 1914 to approximately 1980) and by a Safeway Foods, Inc. ice cream plant (from at least 1959 until approximately 1993). At least four former USTs including one suspected 550-gallon used oil, one suspected 10,000-gallon gasoline and two suspected 10,000-gallon fuel oil USTs have been closed in-place at four locations on the subject property. ACEHD records indicate that at least four former groundwater monitoring wells associated with the previous environmental investigations of the subject USTs conducted between 1994 and 1996 have been properly abandoned under the regulatory agency supervision of the ACEHD. Based upon the results of the previous environmental investigations, the ACEHD issued a Final Case Closure Letter for the former Safeway Ice Cream Plant, (West Grand Refrigeration facility) at 2240 Filbert Street on January 30, 1997. The Final Case Closure Letter states that "if a change in land use (currently industrial/commercial) is proposed, the owner must promptly notify the ACEHD as well as the ODPW. On May 2, 2012 the ACEHD LOP web site was again reviewed by SALEM and no new records posted since May 2010 regarding registered USTs, HMBPs, or hazardous materials incident reports were available for the current or historical subject property addresses.

According to ACEHD records, soil and groundwater beneath the adjoining property to the north identified as the Orton and Libitzky Holdings property at 2242-2310 Myrtle Street and 2303-2317 Market Street, had been impacted by petroleum hydrocarbons and heavy metals. According to Gribi Associates, Inc.'s (GAI's) report titled, *Report of Phase II Environmental Site Assessment 2303-2317 Market Street and 2242-2310 Myrtle Street, Oakland, California*, dated, March 18, 2005, the site was historically utilized for residential purposes and later converted to a parking lot for the former adjoining Safeway Ice Cream Plant, with no significant commercial or industrial use since at least the early 1900s. GAI reported that a 1994 Phase I ESA conducted by MFG for the subject property parking lot and the western adjacent Safeway Ice Cream Plant identified at least two potential up-gradient (southeast) UST sites (Elliott & Elliot Co. at 2336 Market Street and a Chevron Station, no address give). Two groundwater monitoring wells, MW-1 and MW-2, were installed in September 1994. Soil and groundwater samples collected from MW-1, located southwest of the subject parking lot across Myrtle Street, showed low to non-detectable concentrations of gasoline to motor oil range hydrocarbons. Well MW-2 was located near the southeast corner of the subject parking lot. A soil sample collected for the MW-2 boring at 14 feet bgs showed detectable hydrocarbon constituents. Groundwater samples collected from MW-2 in 1994 and 1996 showed concentrations of TPH-g ranging from 840 µg/L to 2,400 µg/L and benzene concentrations ranging from 7.5 µg/L to 10 µg/L.

On February 28, 2005, GAI advanced seven borings at the parking lot parcel to depths ranging from 16 to 26 feet bgs. Five of the seven borings were advanced below the groundwater table for the purpose of determining and delineating possible westward migration of a gasoline hydrocarbon plume, extending from the subject parking lot to the southeast. The remaining two borings were shallow borings for the purpose of assessing shallow soils for possible lead impacts. A total of eight soil samples and five grab groundwater samples were analyzed for TPH-g; BTEX; and MTBE. A total of seven soil samples were analyzed for lead. Depth to groundwater was reported to be 9.6 feet bgs. GAI reported that gasoline-range hydrocarbons were detected in the deepest soil sample collected at 13 feet bgs and grab groundwater samples in borings located near the southeast corner of the site. Additionally, a slightly elevated concentration of lead (310 milligrams per kilogram [mg/kg]) was detected in one soil sample collected at two feet bgs near the northeast corner of the site. GAI concluded that the gasoline hydrocarbon impacts encountered in the southeast corner of the site did not extend significantly onto the site, did not exceed residential land use ESLs, and had obviously originated from an off-site source or sources, and therefore recommended no additional investigation or remediation of the hydrocarbon-impacted soil and groundwater. The single detection of lead above the residential ESL was reported to not preclude residential land use, and may have been a false positive. If warranted, GAI recommended additional shallow soil sampling in the southeast





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corner of the parking lot, and based upon the results of the additional sampling, limited excavation of off-site disposal of lead-impacted shallow soils.

SALEM conducted a Phase II ESA at the site between August 9 and 11, 2010 for the purpose of establishing baseline environmental conditions due to the proposed construction of a fuel center associated with the proposed FoodsCo No. 536 Supermarket. The Phase II ESA was conducted to assess concentrations of petroleum hydrocarbons and (VOCs) in soil and groundwater within the area of the proposed fuel center. The Phase II ESA scope of work also included a limited investigation of elevated concentrations of lead in shallow soil beneath the parking lot site reported by GAI. The results of the Phase II ESA are documented in SALEM's report titled, *Phase II Environmental Site Assessment Proposed FoodsCo Supermarket No. 536 Northwest Corner of Grand Avenue and Myrtle Street, Oakland, California*, dated September 30, 2010, some of which and are reiterated below:

The following conclusions are based on field and laboratory data obtained during SALEM's Phase II ESA investigation of the northern adjoining property that included a limited soil and groundwater quality assessment. They are also supported by review of available site investigation reports and regulatory file review.

- A soil sample from the northern adjoining parking lot site returned a total lead (Pb) concentration of 1,300 mg/kg. This material would be considered (if disturbed during proposed construction) a hazardous waste under California Code of Regulations, Title 22, due to total Pb exceeding the 1,000 milligrams per kilogram (mg/kg) standard.
- Two additional soil samples with total Pb concentrations exceeding 50 or 100 mg/kg were deemed to have had the theoretical potential to exceed State or Federal hazardous waste classification due to possible soluble Pb concentrations. SALEM did not conduct testing for soluble Pb in these soil samples because the soil sample discussed above currently would be classified as hazardous waste without further testing, based on its total Pb concentration of 1,300 mg/kg.
- SALEM noted that high total Pb detections in shallow soil beneath the site appeared to correlate with the amount of foundry slag material incorporated into the aggregate base material used in the pavement section. As such, SALEM recommended that the aggregate material beneath the eastern parking lot be handled under two scenarios, either construct new pavement over the existing pavement section so as not to disturb the material and generate a hazardous waste by exposing and moving the material during construction, or segregate the existing parking lot aggregate base and its incorporated foundry slag and transport off-site as a hazardous waste.

Refer to Appendix J for copies of pertinent ACEHD records available on the ACEHD LOP web site.

#### **City of Oakland Fire Department**

On November 17, 2015 the City of Oakland Fire Department (OFD) was contacted regarding records of historical hazardous/flammable permits, hazardous materials handling, hazardous/flammable incidents, and/or USTs for the subject property addresses 902 and 914 West Grand Avenue; 2220, 2226, 2228 and 2236 Myrtle Street; and 2257, 2271, 2277, 2281 and 2285 Market Street. According to the OFD, no records of USTs or unauthorized releases of hazardous materials were on file for the subject property.

#### **Local Area Tribal Records**

According to the EDR Radius Map Report, no tribal records are listed for the subject property or the adjacent properties.



### 8.1 Standard Environmental Record Sources

EDR performed a search of Federal, State and local regulatory agency databases for the subject property and surrounding area. The various search distances as required by ASTM E1527-13 extended up to one mile from the subject property. Several agencies have published documents that list businesses or properties which have handled hazardous materials or hazardous waste, or may have had a documented release of hazardous materials or petroleum products. The databases consulted in the course of this assessment were compiled by EDR on November 12, 2015 and represent reasonably ascertainable current listings. SALEM did not verify the locations and distances of every site listed by EDR. SALEM verified locations and distances of the sites SALEM deemed as having a potential to environmentally impact the subject property. The actual location of the off-site properties identified may differ from the EDR listing. Table III summarizes the listed properties located within the specified ASTM Search Radii. The EDR Radius Map report is included in Appendix K.

**TABLE III  
EDR Radius Map Summary**

DATABASE	TYPE OF RECORDS	Subject Property	<1/8 Mile	1/8 - 1/4 Mile	1/4 - 1/2 Mile	1/2 - 1 Mile
<b>STANDARD ENVIRONMENTAL RECORDS</b>						
<i>Federal NPL Site List</i>						
NPL	National Priorities List	0	0	0	0	0
Proposed NPL	Proposed National Priorities List	0	0	0	0	0
NPL LIENS	Federal Superfund Liens	---	---	---	---	---
<i>Federal Delisted NPL Site List</i>						
Delisted NPL	National Priority List Deletions	0	0	0	0	0
<i>Federal CERCLIS List</i>						
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information	0	0	0	2	---
Federal Facility	Federal Facility	0	0	0	0	0
<i>Federal CERCLIS NFRAP Site List</i>						
CERC-NFRAP	CERCLIS – No Further Remedial Action Planned	0	0	0	1	---
<i>Federal RCRA CORRACTS Facilities List</i>						
CORRACTS	Corrective Action Report	0	0	0	0	1
<i>Federal RCRA non-CORRACTS TSD Facilities List</i>						
RCRA-TSDF	Transporters, Storage, and Disposal	0	0	0	0	---
<i>Federal RCRA Generators List</i>						
RCRA – LQG	RCRA – Large Quantity Generators	0	0	0	---	---
RCRA – SQG	RCRA – Small Quantity Generators	0	2	7	---	---
RCRA – CESQG	Conditionally Exempt SQG	0	0	1	---	---
<i>Federal Institutional Controls/Engineering Controls Registries</i>						
US ENG CONTROLS	Engineering Controls Sites List	0	0	0	0	---
US INST CONTROL	Sites with Institutional Controls	0	0	0	0	---
<i>Federal ERNS List</i>						
ERNS	Emergency Response Notification System	0	---	---	---	---
<i>State and Tribal Equivalent NPL</i>						
RESPONSE	State Response Sites	0	0	0	5	3
<i>State and Tribal Equivalent CERCLIS</i>						
ENVIROSTOR	Envirostor Database	0	0	2	11	34
<i>State and Tribal Landfill and/or Solid Waste Disposal Site List</i>						
SWF/LF	Solid Waste Information System	0	0	0	0	---
<i>State and Tribal Leaking Storage Tank Lists</i>						
LUST	Leaking Underground Storage Tanks	0	7	12	36	---
SLIC	Statewide SLIC Cases	0	1	2	10	---
Alameda County CS	Contaminated Sites Database	0	8	10	39	---
INDIAN LUST	LUST on Indian Land	0	0	0	0	---
<i>State and Tribal Registered Storage Tank Lists</i>						
UST	Active UST Facilities	0	1	0	---	---
AST	Aboveground Storage Tank Facilities	0	0	0	0	0
INDIAN UST	USTS on Indian Land	0	0	0	0	0
<i>State and Tribal Voluntary Cleanup Sites</i>						
INDIAN VCP	Voluntary Cleanup on Indian Land	0	0	0	0	---
VCP	Voluntary Cleanup Program Properties	0	0	0	1	---



**TABLE III (cont'd)**  
**EDR Radius Map Summary**

DATABASE	TYPE OF RECORDS	Subject Property	<1/8 Mile	1/8 - 1/4 Mile	1/4 - 1/2 Mile	1/2 - 1 Mile
<b>State and Tribal Brownfields Sites</b>						
BROWNFIELDS	Brownfield Site	0	0	1	0	---
<b>ADDITIONAL ENVIRONMENTAL RECORDS</b>						
<b>Local Brownfield Lists</b>						
US BROWNFIELDS	Brownfield Sites	0	0	0	9	---
<b>Local Lists of Landfill/Solid Waste Disposal Sites</b>						
ODI	Open Dump Inventory	0	0	0	0	---
DEBRIS REGION 9	Illegal Dump Site Locations	0	0	0	0	---
WMUDS/SWAT	Waste Management Unit Database	0	0	0	0	---
SWRCY	Recycler Database	0	0	0	0	---
HAULERS	Registered Waste Tire Haulers Lists	0	---	---	---	---
INDIAN ODI	Report on Open Dumps on Indian Land	0	0	0	0	---
<b>Local Lists of Hazardous Waste/Contaminated Sites</b>						
US CDL	Clandestine Drug Labs	0	---	---	---	---
HIST Cal-Sites	Cal sites Database	0	0	0	3	2
SCH	School Property Evaluation Program	0	0	0	---	---
Toxic Pits	Toxic Pits Cleanup Act Sites	0	0	0	0	2
CDL	Clandestine Drug Labs	0	---	---	---	---
<b>Local Lists of Registered Storage Tanks</b>						
CA FID UST	Facility Inventory Database	0	7	7	---	---
HIST UST	Historical UST	0	6	7	---	---
SWEEPS UST	SWEEPS UST Lists	0	6	8	---	---
<b>Local Land Records</b>						
LIENS 2	CERCLA Lien Information	0	---	---	---	---
LIENS	Environmental Liens Listing	0	---	---	---	---
DEED	Deed Restriction Listing	0	0	0	2	---
<b>Records of Emergency Release Reports</b>						
HMIRS	Hazardous Materials Information System	0	---	---	---	---
CHMIRS	CA Hazardous Material Information System	0	---	---	---	---
LDS	Land Disposal Sites Listing	0	---	---	---	---
MCS	Military Cleanup Sites Listing	0	---	---	---	---
<b>Other Ascertainable Records</b>						
RCRA Non-Gen	Non-Generators	0	0	0	---	---
DOT OPS	Incident and Accident Data	0	---	---	---	---
DOD	Department of Defense Sites	0	0	0	0	0
FUDS	Formerly Used Defense Sites	0	0	0	0	2
CONSENT	Superfund Consent Decrees	0	0	0	0	0
ROD	Records of Decision	0	0	0	0	0
UMTRA	Uranium Mill Tailings Sites	0	0	0	0	---
MINES	Mines Master Index File	0	0	0	---	---
TRIS	Toxic Chemical Release Inventory System	0	---	---	---	---
TSCA	Toxic Substances Control Act	0	---	---	---	---
FTTS	FIFRA/TSCA Tracking System	0	---	---	---	---
HIST FTTS	FIFRA/TSCA Tracking System	0	---	---	---	---
SSTS	Section 7 Tracking Systems	0	---	---	---	---
ICIS	Integrated Compliance Information System	0	---	---	---	---
PADS	PCB Activity Database System	0	---	---	---	---
MLTS	Material Licensing Tracking System	0	---	---	---	---
RADINFO	Radiation Information Database	0	---	---	---	---
FINDS	Facility Index System	0	---	---	---	---
RAATS	RCRA Administrative Action Tracking	0	---	---	---	---
CA BOND EXP. PLAN	Bond Expenditure Plan	0	0	0	0	1
CA WDS	Waste Discharge System	0	---	---	---	---
Cortese	Cortese Hazardous Waste & Substance Sites	0	0	0	5	---
HIST CORTESE	Historical Cortese sites.	0	5	6	32	---
Notify 65	Proposition 65 Records	0	0	1	3	13
DRYCLEANERS	Cleaner Facilities	0	0	0	---	---
WIP	Well Investigation Program Case List	0	0	0	---	---
HAZNET	Facility and Manifest Data	X	---	---	---	---
EMI	Emissions Inventory Data	0	---	---	---	---
INDIAN RESERV	Indian Reservations	0	0	0	0	0
SCRD DRYCLEANER	State Coalition for Remediation of Cleaners	0	0	0	0	---



**TABLE III (cont'd)**  
**EDR Radius Map Summary**

DATABASE	TYPE OF RECORDS	Subject Property	<1/8 Mile	1/8 - 1/4 Mile	1/4 - 1/2 Mile	1/2 - 1 Mile
FINANCIAL ASSURANCE	Financial Assurance	0	---	---	---	---
HWP	Envirostor Permitted Facilities Listing	0	0	0	1	2
HWT	Registered Hazardous Waste Transporter	0	0	0	---	---
COAL ASH AREA	Coal Combustion Residues Surface List	0	0	0	0	---
PCD TRANSFORMER	PCB Transformer	0	---	---	---	---
COAL ASH DOE	Steam-Electric Plan Operation Data	0	---	---	---	---
MWMP	Medical Waste Management Program	0	0	0	---	---
PROC	Certified Processors Database	0	0	0	0	---
<b>EDR PROPRIETARY RECORDS</b>						
<i>EDR Proprietary Records</i>						
Manufactured Gas Plants	Manufactured Gas Plants	0	0	0	0	0
EDR Historical Auto Stations	EDR Historical Auto Stations	X	11	---	---	---
EDR Historical Cleaners	EDR Historical Cleaners	0	13	---	---	---
<i>EDR Proprietary Recovered Government Archives</i>						
RGA LF	Land Fill Sites	0	---	---	---	---
RGA LUST	Leaky UST Sites	0	---	---	---	---

0 = No sites in radius identified  
 --- = Not Searched

The subject property address of 2271 Market Street was listed in the EDR-provided government database report on the HAZNET database. The subject property addresses of 2271 Market Street, and 914 West Grand Avenue were listed in the EDR-provided government database report on the EDR US Hist Auto Stat database. Seven sites with reported release of hazardous materials to the subsurface were reported within a one-eighth-mile radius of the subject property.

- The Mac Auto Repair facility at 905 West Grand Avenue, identified in the EDR Radius Map Report as being located 218 feet south-southeast of the subject property was observed during SALEM's site reconnaissance to actually be located adjoining the subject property to the south. The former Mac Auto Repair site, which now appears to be a vacant lot, was listed on the LUST and Alameda County CS databases as having had an unauthorized release of gasoline in 1999 which impacted soil and groundwater beneath the site. The petroleum hydrocarbon soil and groundwater was remediated under the regulatory agency supervision of the ACEHD and a "case closed" status was granted on March 6, 2000.
- The Burke/Kim Property at 949 West Grand Avenue, identified in the EDR Radius Map Report as being located 222 feet southwest of the subject property was observed during SALEM's site reconnaissance to actually be located adjoining the subject property to the south. The Burke/Kim Property was listed on the LUST and Alameda County CS databases as having had an unauthorized release of PCE and gasoline which impacted soil and groundwater beneath the site. The LUST site is currently out of compliance with the RWQCB-SF and it appears that no environmental assessment work has been conducted at the Burke/Kim Property since 2005. Refer to Section 8.0 *Local Agency Record Review* for a detailed discussion of RWQCB-SF records for the LUST site investigation.
- The Cal West Periodicals facility at 2400 Filbert Street identified in the EDR Radius Map Report as being located 327 feet north of the subject property was observed during SALEM's site reconnaissance to actually be located adjoining the subject property to the north. The Cal West Periodicals facility was listed on the LUST, Alameda County CS and HIST CORTESES databases as having had an unauthorized release of gasoline reported in July 1991 during the removal of one 5,000-gallon and one 2,000-gallon gasoline USTs. Petroleum hydrocarbon-impacted groundwater



was allowed to naturally attenuate by the ACEHD and a “case closed” status was granted on October 2, 1995.

- The former Safeway Stores, Inc. Ice Cream Plant at 2240 Filbert Street identified in the EDR Radius Map Report as being located 339 feet northwest of the subject property was observed during SALEM’s field reconnaissance to actually be located adjoining the subject property to the west. The former Safeway Stores, Inc. Ice Cream Plant was listed on the HIST CORTESE, CA FID UST, SLIC, Alameda County CS, HIST UST, SWEEPS UST, HAZNET and EMI databases as having had an unauthorized release which had the potential to impact groundwater beneath the site. The status of the SLIC file was listed as “Completed-Case Closed” as of January 30, 1997. The ACEHD was listed as the Local Oversight Program (LOP). Refer to Section 8.0 *Regulatory Agency Record Review* for a detailed discussion of ACEHD records for the western adjoining SLIC site investigation.
- The Arco gasoline station #02169 at 889 West Grand Avenue, identified in the EDR Radius map Report as being located 431 feet southeast of the subject property was observed during SALEM’s site reconnaissance to actually be located adjoining the subject property to the southeast. The Arco gasoline station was listed on the HIST CORTESE, LUST, CA FID UST, SWEEPS UST, HAZNET, NPDES, Alameda County CS, HIST UST and UST databases as having had an unauthorized release of gasoline in 1988 which impacted soil and groundwater beneath the site. Four USTs were removed from the site in 1992. Several environmental assessments were conducted between February 1992 and September 1994. A soil vapor extraction (SVE) system was installed and operated from 1994 until 1998, followed by a biosparge system which ceased operation in 2001. The LUST site was listed as “Completed-Case Closed” as of October 9, 2014. The RWQCB-SF was listed as the LOP. Refer to Section 8.0 *Regulatory Agency Record Review* for a detailed discussion of RWQCB-SF records.
- The Commercial Property (Langendorf United Bakeries, Inc.) at 1000 West Grand Avenue identified in the EDR Radius Map Report as being located 499 feet west of the subject property was listed on the HIST CORTESE, LUST, CA FID UST, Alameda County CS, SWEEPS UST, RCRA-SQG, FINDS and HIST UST as having had an unauthorized release of gasoline which impacted soil and groundwater beneath the site. The petroleum hydrocarbon-impacted soil and groundwater were remediated under the regulatory agency supervision of the ACEHD which issued a “case closed” designation on June 3, 1996.
- The former Chevron gasoline station #9-1853 at 850 West Grand Avenue identified in the EDR Radius Map Report as being located 581 feet southeast of the subject property was listed on the LUST, HIST CORTESE, CA FID UST, SWEEPS UST, Alameda County CS and HIST UST as having had an unauthorized release of gasoline which impacted soil and groundwater beneath the site. The petroleum hydrocarbon-impacted soil and groundwater were remediated under the regulatory agency supervision of the ACEHD which issued a “case closed” designation on November 26, 1997.
- The Cal West Periodicals facility at 2400 Filbert Street identified in the EDR Radius Map Report as being located 622 feet north-northwest of the subject property was listed on the LUST, Alameda County CS and HIST CORTESE databases as having had an unauthorized release of gasoline reported in July 1991 during the removal of one 5,000-gallon and one 2,000-gallon gasoline USTs. Petroleum hydrocarbon-impacted groundwater was allowed to naturally attenuate by the ACEHD and a “case closed” status was granted on October 2, 1995.

In general, only potentially hazardous materials released from facilities located approximately up-gradient and within a few hundred feet of the site, or in a cross-gradient direction close to the site, are judged to have a reasonable potential of migrating to the site. This opinion is based on the assumption that materials



generally do not migrate large distances laterally within the soil, but rather tend to migrate with groundwater in the general direction of groundwater flow.

Seventeen orphan sites were identified in the EDR-provided government database report. Based upon SALEM's visual observations made during our site reconnaissance, as well as various influencing factors including approximate distance from the subject property, the orphan sites are deemed to have a low potential to environmentally impact the subject property.

No engineering control sites, sites with institutional controls, or sites with deed restrictions were listed for the subject property, adjacent sites or vicinity properties in the EDR-provided government database report.

No Indian reservations or LUSTs on Indian land were reported on the subject property, adjacent sites or vicinity properties in the EDR-provided government database report.

The remaining properties identified by EDR within the specified search radius of the subject property, which appeared on local, state, or federally published lists of sites that use of have had releases of hazardous materials, were determined through SALEM's field observations to be of sufficient distance and/or situated hydraulically cross/downgradient of the subject property, such that impacts to the subject property are not likely.

## 9.0 POTENTIAL VAPOR ENCROACHMENT CONDITION

Vapor intrusion is a way by which chemicals in soil and groundwater can migrate into indoor air. Chemical vapors moving up through soil and into a building are a potential source of indoor air contamination and may pose a risk to human health. In evaluating the potential for a vapor encroachment condition (VEC) on the subject property, SALEM attempted to determine if there was information indicating that chemicals of concern were located within the "critical distance", defined as the lineal distance between the nearest edge of a contaminated plume and the nearest target property boundary. Based on ASTM E 2600-10 *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions*, the "critical distance" is equal to 100 feet, with the exception of dissolved petroleum hydrocarbons, which have a "critical distance" of 30 feet. If non-aqueous phase petroleum hydrocarbons are present, the 100-foot "critical distance" is utilized.

### 9.1 Vapor Encroachment Screening

SALEM has performed a Vapor Encroachment Screening (Tier 1) in general accordance with the scope and limitations of ASTM Standard Practice E2600-10 for the subject property. The purpose of this Vapor Encroachment Screening (Tier 1) is to identify the existing or potential Vapor Encroachment Conditions (VEC), (as defined by ASTM E2600-10) affecting the subject property. As part of the screening, SALEM has completed the following questionnaire, as duplicated from Section X3 of ASTM E2600-10.

**TABLE IV**  
**Vapor Encroachment Questionnaire**

QUESTION	RESPONSE	COMMENTS
1. Property Type?	Commercial/Industrial	
2. Are there buildings/structures on the subject property?	Yes	
3. Will buildings/structures be constructed on the subject property in the future?	Yes	
4. If buildings exist or are proposed, do/will they have elevators?	No	
5. Type of level below grade (existing or proposed)?	Slab on Grade	
6. Is there ventilation below grade?	No	
7. Sump pumps, floor drains, or trenches (existing or proposed)?	Yes	
8. Radon or methane mitigation system installed?	No	
9. Heating system type (existing or proposed)?	HVAC	



10. Type of fuel energy (existing or proposed)?	Unknown	
11. Have there ever been any environmental problems at the subject property?	Yes	<i>Refer to Section 8.0</i>
12. Does/will a gas station operate anywhere on the subject property?	No	
13. Do any tenants use hazardous chemicals in relatively large quantities on the subject property?	No	
14. Have any tenants ever complained about odors in the building or experience health-related problems that may have been associated with the building?	Unknown	
15. Are the operations (or proposed operations to be performed) on the subject property OSHA regulated?	Yes	
16. Are there any existing or proposed under-ground storage tanks (USTs) or above-ground storage tanks (ASTs) located on the subject property?	Yes	
17. Are there any sensitive receptors (children, elderly, people in poor health, etc.) that occupy or will occupy the subject property?	No	

**TABLE V**  
**Additional VEC Criteria**

QUESTION	RESPONSE	COMMENTS
1. Is the subject property known to have current or past contamination?	Yes	<i>Refer to Section 8.0</i>
2. Is contamination of the subject property suspected?	No	
3. Is an <u>adjacent</u> property known to have current or past contamination which may have impacted the subject property?	Yes	<i>Refer to Section 8.0</i>
4. Is a <u>nearby</u> property known to have current or past contamination which may have impacted the subject property?	No	
5. Is regional groundwater contamination known to exist beneath the subject property?	No	
6. Are you aware of other conditions which may result in vapor intrusion at the subject property?	No	

Based on the findings of the Tier 1 screen, and previous Phase II ESA investigations conducted at the subject property, vapor intrusion is unlikely to be an issue of concern in connection with the existing structures on the subject property. As such, no further assessment is recommended.

## 10.0 BUSINESS ENVIRONMENTAL RISKS

### 10.1 Asbestos-Containing Building Materials

Asbestos is the name given to a number of naturally occurring, fibrous silicate minerals mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. Asbestos is commonly used as an acoustic insulator, thermal insulation, fire proofing and in other building materials. Friable asbestos-containing material (ACM), when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. Non-friable ACM can be crumbled, pulverized, or reduced to powder during machining, cutting, drilling, or other abrasive procedures. Friable ACM is more likely to release fibers when disturbed or damaged than non-friable ACM. Exposure to airborne friable asbestos may result in a potential health risk because persons breathing the air may breathe in asbestos fibers. Continued exposure can increase the amount of fibers that remain in the lung. Fibers embedded in lung tissue over time may cause serious lung diseases including: asbestosis, lung cancer, or mesothelioma. The Occupational Safety and Health Administration (OSHA) regulation 29 CFR 1926.1101 requires certain construction materials to be *presumed* to contain asbestos, for purposes of this regulation. All thermal system insulation (TSI), surfacing material, and asphalt/vinyl flooring that are present in a building constructed prior to 1981 and have not been appropriately tested are “presumed asbestos-containing material” (PACM).





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An Asbestos Survey of the subject building was conducted by SALEM, the results of which have been provided in the report *Asbestos-Containing Material and Lead Based Paint Survey* dated June 15, 2012. The report stated that none of the 24 samples of suspect asbestos-containing material were found to contain greater than one percent asbestos.

### **10.2 Lead-Based Paint**

Lead is a highly toxic metal that affects virtually every system of the body. While adults can suffer from excessive lead exposures, the groups most at risk are fetuses, infants and children under 6. The Consumer Product Safety Commission banned the use of lead in paint in 1978. Most manufactures, however, had ceased using lead well before this time. Paint applied after 1978 is not considered suspect LBP. Congress passed the Residential Lead-Based Paint Hazard Reduction Act of 1992, also known as "Title X," to protect families from exposure to lead from paint, dust, and soil. Section 1018 of this law directed the Housing and Urban Development (HUD) and the US EPA to require the disclosure of known information on lead-based paint (LBP) and LBP hazards before the sale or lease of most housing built before 1978. Sellers, landlords, and their agents are responsible for providing this information to the buyer or renter before sale or lease.

According to Section 1017 of Title X, "LBP hazard is any condition that causes exposure to lead from lead-contaminated dust; bare, lead-contaminated soil; or LBP that is deteriorated or intact LBP present on accessible surfaces, friction surfaces, or impact surfaces that would result in adverse human health effects." Therefore, under Title X intact lead-based paint on most walls and ceilings is not considered a "hazard," although the condition of the paint should be monitored and maintained to ensure that it does not become deteriorated. LBP is defined as any paint, varnish, stain, or other applied coating that has 1.0 mg/cm<sup>2</sup> (or 5,000 µg/g by weight) or more of lead. During SALEM's site reconnaissance, a visual observation of the painted surfaces within the subject building was conducted. The paint appeared in good condition with no evidence of significant peeling or damage.

A Lead-Based Paint (LBP) Survey of the subject building was conducted by SALEM, the results of which have been provided in the report *Asbestos-Containing Material and Lead Based Paint Survey* dated June 15, 2012. The report stated that none of the paint sampled was found to contain concentrations of lead greater than 0.5% lead by weight or 5,000 mg/Kg and therefore, according to HUD and DHS regulations would not be considered LBP. Three of the four types of paint sampled were found to contain concentrations of lead above the reporting limit and therefore, meet the standard by which Cal-OSHA regulates worker exposures ("whenever lead is present"). Therefore, proposed demolition activities which involve the disturbance of the gray interior LBP and/or paint containing lead could trigger OSHA and Cal-OSHA regulations regarding construction worker exposures to airborne lead. The results of this LBP Survey should be provided to contractors and subcontractors performing work in the subject building that may disturb any LBP and/or lead-containing materials.

### **10.3 Radon**

Radon is a naturally occurring gaseous substance resulting from the radioactive decay of uranium to radium and then to radon. Uranium is a common element found in many geologic formations and substrates, particularly igneous and metamorphic rocks. Radon has a half-life of only 3.8 days and decays to its daughter elements (polonium 218, polonium 214, bismuth 214, and lead 214). It is these daughter elements that represent the health hazard commonly associated with radon. Radon gas can enter a building through cracks in the foundation and walls and become attached to dust particles and inhaled which could cause damage to human lung tissue. Radon is measured in picocuries per liter of air (pCi/L). The EPA has an established safe radon level of 4 pCi/L. Based on the EPA Radon Zone Map of California, the subject Property is located within EPA Zone 2, which has a predicted indoor radon screening between 2 and 4 pCi/L. The EDR-provided radon data cites Alameda County has having 100% of 1<sup>st</sup> floor spaces with <4 pCi/L. However, radon levels may vary from one area to another and the only way to accurately assess radon gas levels on the subject property is to conduct a radon gas survey.





#### 10.4 Mold

Molds are microscopic organisms found virtually everywhere, indoors and outdoors. Mold will grow and multiply under the right conditions, needing only sufficient moisture (e.g. in the form of very high humidity, condensation, or water from a leaking pipe, etc.) and organic material (e.g., ceiling tile, drywall, paper, or natural fiber carpet padding). Mold growths often appear as discoloration, staining, or fuzzy growth on building materials or furnishings and are varied colors of white, gray, brown, black, yellow, and green. In large quantities, molds can cause allergic symptoms when inhaled or through the toxins the molds emit.

SALEM observed accessible, interior areas of the subject property building for significant evidence of mold growth. However, this ESA should not be used as a mold survey or inspection. Additionally, this evaluation was not designed to assess all areas of potential mold growth that may be affected by mold growth on the subject property. Rather, it is intended to give the client an indication as to whether or not conspicuous (based on observed areas) mold growth is present at the subject property. This evaluation did not include a review of pipe chases, mechanical systems, or areas behind enclosed walls and ceilings.

No visual evidence of mold or water intrusion that could affect human health or that could create or exacerbate a mold problem were observed in accessible areas of the subject building observed during SALEM's site reconnaissance.

### 11.0 DISCUSSION OF FINDINGS

#### Historical Uses

The subject property comprises an approximately 1.06-acre irregular-shaped parcel located on the northeast corner of West Grand Avenue and Myrtle Street in Oakland, California (Alameda County APNS 005-0431-023; 005-0431-021-04; 005-0431-015-04; 005-0431-017-01; 005-0431-018-03; and 005-0431-019-02). SALEM's review of historical aerial photographs, historical city directories and building department records indicates that the northern portion of the subject property was historically occupied by single-family dwellings from approximately 1920 to approximately the late-1960s. The central portion of the subject property has been occupied by various commercial businesses since approximately 1925 including the Imperial Electrical Sign Company (circa 1925); Gridd Stone Company (circa 1950); Bay Cities Venetian Blind Company (circa 1950); Lorentzen Co. Linoleum and Carpet (circa 1955); Loralite Company (circa 1955); Bell Sheet Metal Company (circa 1955); the Oakland Terrazzo Company (circa 1955); and A&C Truck Repair (circa 2000). The southern portion of the subject property was historically occupied by Leon's Mohawk Service gasoline station (circa 1963-1970); LJ Auto Service (circa 1980); 3A Tire Service (circa 1980); and Courtesy Auto Clinic (circa 1992). SALEM's review of SFIMs and historical aerial photographs indicates that a railroad spur was located on the southern portion of the subject property from at least 1939 until approximately 1959.

Neither the ACEHD nor the OFD maintained any documentation regarding the removal of the USTs suspected to have historically been located on-site and associated with the historical occupancy of the southern portion of the subject property by a gasoline service station. Aqua Science performed a Phase II investigation at the subject property in 2005 that included the collection of soil samples from 2 feet bgs in seven borings. TPH-G/D/O, VOCs, and PCBs were not detected in these soil samples. Two additional soil borings were advanced along the southern property boundary to 16 feet bgs. The 11.5-foot bgs soil sample collected from the boring advanced south of the West Oakland Tire Repair facility (BH-A) did not contain detectable concentrations of TPH-G/D/O, VOCs, or PCBs. The 11.5-foot bgs soil sample collected from the southwest corner of the subject property (BH-B, near the former gasoline service station) contained ethylbenzene, total xylenes, naphthalene, and TPH-G/D above ESLs established by the RWQCB-SF. The grab groundwater sample collected from BH-A exceeded ESLs for TPH-O and the grab groundwater sample collected from BH-B exceeded ESLs for TPH-G/D, dissolved lead, ethylbenzene, total xylenes, and naphthalene. The source(s) and extent of petroleum hydrocarbons was not identified. SALEM conducted



a limited geophysical survey of the subject property in February 2012 which identified three sub-grade anomalies including several areas of “disturbed soil” that were suspected former UST locations and/or potential sub-grade structures of environmental concern. An additional geophysical survey of the subject property and a pothole investigation of the previously identified sub-grade anomalies were conducted in May 2012. The May 2012 geophysical survey did not identify the presence of any additional sub-grade structures of environmental concern. Excavation of the three sub-grade anomalies and areas of “disturbed soil” identified during the February 2012 geophysical survey did not reveal the presence of USTs or other sub-grade structures of environmental concern. However, excavated fill material generated during the pothole investigation was reported to have been stained and had odors similar to degraded petroleum hydrocarbons. SALEM conducted a Phase II ESA in February 2012 involving the collection of soil and soil vapor samples. Aromatic hydrocarbons were detected in a majority of soil vapor samples, the source of which is suspected to have been the former on-site gasoline service station, as well as off-gassing from petroleum hydrocarbon-impacted groundwater originating from the up-gradient Arco gasoline station LUST site at 889 West Grand Avenue, located approximately 140 feet southeast of the subject property. Detected soil vapor concentrations at the subject property did not exceed commercial/industrial CHHSLs with the exception of benzene in one sample. SALEM’s analysis for best estimate of indoor air risk using the USEPA Screening Level Johnson & Ettinger vapor intrusion model resulted in a cancer risk value that was significantly less than the  $10^{-5}$  value applied to commercial settings and determined that the likelihood of vapor intrusion of benzene into the existing or proposed structures at concentrations that may present an unacceptable health risk appeared to be low. In May 2012 three groundwater monitoring wells (MW-1, MW-2 and MW-3) were installed on the subject property. During the June 4, 2012 groundwater monitoring event, depth to groundwater was reported to be approximately 11 feet bgs with a general flow direction towards the northwest. TPH-D was not detected above laboratory method detection limits in MW-1, MW-2, or MW-3. TPH-G was not detected above laboratory method detection limits in MW-2 and MW-3. TPH-G was detected in MW-1 at a concentration of 3,300 µg/L. Benzene (1.2 µg/L), sec-butylbenzene (3.7 µg/L), ethylbenzene (79 µg/L), isopropylbenzene (10 µg/L), p-isopropyltoluene (3.0 µg/L), naphthalene (37 µg/L), n-propylbenzene (29 µg/L), toluene (1.5 µg/L), 1,2,4-trimethylbenzene (110 µg/L), 1,3,5-trimethylbenzene (59 µg/L), and total xylenes (188 µg/L) were detected in the groundwater sample collected from MW-1. No other VOCs were detected above laboratory method detection limits in this sample. The results of laboratory analyses of the groundwater sample collected from MW-3 indicated the presence of 1,1-DCA at a concentration of 3.8 µg/L, cis-1,2-DCE at 110 µg/L, t-1,2-DCE at 14 µg/L, MTBE at 3.6 µg/L, and TCE at 11 µg/L. No other VOCs were detected above laboratory method detection limits. VOCs were not detected in the groundwater sample collected from MW-2. The groundwater sample collected from MW-1 had a TPH-G concentration of 3,300 µg/L. This well (MW-1) is located in close proximity to the suspected former UST locations at the subject property. Based on the presence of hydrocarbon-affected soils identified during the pothole excavation investigation in this area, data suggests that the former USTs are likely the source of hydrocarbons identified in soil and groundwater proximate to this location. Regulatory drinking water standards for TPH and petroleum in general have not been developed. The RWQCB-SF has assigned the TPH-diesel taste and odor threshold of 100 µg/L referenced in *A Compilation of Water Quality Goals* (RWQCBCV 2003) as the drinking water screening level for all categories of TPH, meaning that the screening level for TPH-G would be 100 µg/L for the Hahn Property site as well. Screening levels for benzene and related light-weight hydrocarbon compounds are considered to provide adequate additional protection of drinking water concerns for gasoline-contaminated groundwater when used in conjunction with the TPH screening level of 100 µg/L. In general, sites may exceed the TPH screening level if carcinogenic compounds detected in the groundwater sample (primarily benzene) are low. Detectable concentrations of aromatic volatiles (benzene, ethylbenzene, naphthalene, and total xylenes) in the groundwater sample collected from MW-1 did not exceed ESLs under the existing land use and exposure scenario (groundwater is not a current or potential source of drinking water). Although the TPH-G concentration in MW-1 exceeds the ESL, aromatic volatiles are present at concentrations below the ESL. Given the proposed future use of the property as a parking lot, and presence of carcinogenic VOCs at concentrations below ESLs, data suggests that remediation of this area is unnecessary and unlikely to be required. TPH-G, TPH-D, and VOCs were not detected in MW-2, suggesting that the plume of hydrocarbon-affected groundwater near the former on-site gasoline service station has not migrated beneath



the JAC Truck Repair property. TPH-G, TPH-D, and aromatic hydrocarbons typically associated with gasoline (other than MTBE) were not detected in the groundwater sample collected from MW-3, located to the east of the former on-site gasoline service station. A trace MTBE concentration was detected in this well; however, the concentration was below ESL's and likely originated from an off-site source (Arco LUST site) to the southeast of the subject property. Chlorinated solvents commonly associated with dry cleaning facilities were detected in the groundwater sample collected from MW-3; however, the concentrations were all below ESL's. Chlorinated solvents identified in MW-3 are suspected to originate from the Burke/Kim Property, a former dry cleaner at 949 West Grand Avenue with known chlorinated solvent impacts in soil and groundwater, located approximately 80 feet south of the subject property. Because the concentrations are below ESL's, are not suspected to originate from on-site, and because chlorinated solvents were not detected in soil vapor samples collected from this location during SALEM's February 2012 site investigation, it is unlikely that the presence of chlorinated solvents in groundwater will negatively impact the proposed development of the subject property as a parking lot. No further sampling or assessment is recommended for the subject property. On-site impacts and off-site sources have been adequately defined and are not anticipated to require further actions. Based upon SALEM's review of historical aerial photographs, regulatory agency records, a field reconnaissance and contacts with the local regulatory agencies, the potential for RECs to exist in connection with the historical uses of the subject property appears to be low.

### **Current Uses**

At the time of SALEM's November 16, 2015 site reconnaissance, the northwest quadrant of the subject property was occupied by JAC Truck Repair at 2236 Myrtle Street (APNs 005-0431-023; 005-0431-021-04; and 005-0431-019-02). The single-story approximately 2,500 square-foot building at 2236 Myrtle Street was of metal construction with a metal roof on a concrete slab-on-grade foundation. The southern portion of the subject property was occupied by Enrique's Auto Repair and West Oakland Tire Repair at 914 West Grand Avenue (APN 005-0431-018-03). The single-story approximately 1,250 square-foot building at 914 West Grand Avenue was of wood frame construction with an asphalt shingle roof on a concrete slab-on-grade foundation. The second building on this portion of the subject property appears to have originally been the former gasoline service station canopy which was enclosed with four exterior walls. The northeast quadrant of the subject property was occupied by Mo-jointeriors general contractors and a parking lot at 2271 Market Street (APNs 005-0431-015-04 and 005-0431-017-01). The single-story approximately 6,250 square-foot commercial building at 2271 Market Street was of masonry construction on a concrete slab-on-grade foundation. The commercial building at 902 West Grand Avenue, located on the hard northwest corner of West Grand Avenue and Market Street was not included within the subject property boundaries.

Moderate quantities of hazardous wastes observed to be stored and handled on the subject property included waste oil, spent antifreeze and used oil filters. Two approximately 400-gallon steel ASTs containing waste oil were observed at JAC Truck Repair at 2236 Myrtle Street, as well as Enrique's Auto Repair and West Oakland Tire Repair at 914 West Grand Avenue. Additionally, one approximately 100-gallon steel waste oil AST was observed adjacent to the 400-gallon waste oil AST at the Enrique's Auto Repair and West Oakland Tire Repair facility. Significant staining of the asphalt surfaces beneath the ASTs was observed. Visual evidence of spillage and associated absorbent was observed in the vicinity of the ASTs. 55-gallon drums containing used oil filters and spent anti-freeze were stored at the JAC Truck Repair building and at the Enrique's Auto Repair and West Oakland Tire Repair facility. Numerous five-gallon plastic buckets containing waste oil were observed to be scattered throughout both facilities. Hazardous waste was reported to have been collected on an "as needed basis" at the JAC Truck Repair facility. Manifests or load tickets for the off-site disposal/recycling of used oil generated at the Enrique's Auto Repair and West Oakland Tire Repair facility were provided for SALEM's review.

During the visual observations of the subject property, moderate quantities of hazardous materials were observed to be stored and handled on-site including motor oil, antifreeze, gear lube, lubricants, brake cleaner, solvents, gasoline and household cleaners. Hazardous materials were observed to typically be stored in containers ranging in capacity from one-quart to five-gallons. Moderate staining of the concrete



and asphalt surfaces beneath the hazardous material storage areas was observed. Multiple five-gallon plastic containers of motor oil and refrigerant were observed to be stored in a metal shipping container located near the southwest corner of the subject property. Several floor drains were observed in the vicinities of the various areas on the subject property where hazardous materials were stored and handled. Dismantled engines and other vehicle components were observed to be scattered throughout both the JAC Truck Repair (2236 Myrtle Street) and Enrique's Auto Repair and West Oakland Tire Repair (914 West Grand Avenue) facilities. Leakage of vehicle maintenance fluids from dismantled engines and other vehicle components was observed. General hazardous material storage and handling procedures were observed to be best characterized as poor.

Several floor drains and exterior storm drains were observed on both the JAC Truck Repair (2236 Myrtle Street) and Enrique's Auto Repair and West Oakland Tire Repair (914 West Grand Avenue) facilities. The interior of the drains appeared to contain a mixture of water and motor oil. Surficial staining of the concrete and asphalt surfaces around the drains was observed. Hazardous materials and hazardous wastes were observed to be stored and handled in the vicinity of the drains.

Three sub-grade hydraulic hoists are located at the subject property. No significant staining around the perimeter of the sub-grade hydraulic hoist stems was observed. No repairs or know hydraulic fluid leaks were reported. Based on various influencing factors including the proposed future use of the subject property as a parking lot, the maintenance history of the sub-grade hydraulic hoists (no repairs or known leaks) and the results of previous environmental investigations of the subject property which did not reveal significant impacts to the subject property's shallow soil or groundwater from petroleum hydrocarbons, the sub-grade hydraulic hoists are not suspected to have significantly impacted soil at the subject property and do not require further investigation. The sub-grade hydraulic hoists represent a *de minimis* condition.

Three groundwater monitoring wells (MW-1, MW-2 and MW-3) installed by SALEM in May 2012 are located on the subject property. MW-1 was advanced in the Enrique's Auto Repair and West Oakland Tire Repair parking lot, located along the southwest corner of the subject property. MW-2 is located in the JAC Truck Repair driveway and MW-3 is located in the West Oakland Tire Repair's parking lot (along the southern/central portion of the subject property).

Based on SALEM's field reconnaissance, previous investigations, and contacts with local regulatory agencies, the potential for RECs to exist in connection with the current use of the subject property appears to be low.

### **Adjacent Properties**

Based on SALEM's field observations, review of the EDR Radius Map Report and consultation with local regulatory agencies, the potential for RECs to exist in connection with the subject property from adjacent property uses appears to be low.

### **11.1 Evaluation of Data Gaps/Data Failure**

In accordance with ASTM E1527-13 guidance, data gaps represent a lack of or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information. Data gaps may result from incompleteness in any of the activities required by this practice. Data failure represents the failure to achieve the historical research objects of this practice even after reviewing the standard historical sources that are reasonably ascertainable and likely to be useful. Data failure is one type of data gap. The following is a summary of data gaps encountered in the process of preparing this report including an observation as the presumed significance of that data gap to the conclusions of this assessment.

- Absence of a completed Phase I ESA Owner Questionnaire.

However, taken in consideration with the available information obtained in the course of preparing this



report in conjunction with professional experience, there is no evidence to suggest that these data gaps might alter the conclusions of this assessment.

## 12.0 SUMMARY AND CONCLUSIONS

We have performed a *Phase I Environmental Site Assessment* in conformance with the scope and limitations of ASTM Practice E1527-13 of the subject property located on the northeast corner of West Grand Avenue and Myrtle Street in Oakland, California, the *property*. Any exceptions to, or deletions from, this practice are described in Section 13 of this *report*. During the course of this assessment, SALEM identified no evidence of a REC in connection with the subject property as defined by ASTM E1527-13. However, the following Historical RECs (HRECs) were identified in connection with the subject property as defined by ASTM E1527-13:

- Based upon SALEM's review of HCCDs and PGDs included in the EDR-provided City Directory Abstract, as well as SALEM's review of SFIMs of the subject property and vicinity, Leon's Mohawk Service gasoline service station at 914 West Grand Avenue formerly occupied the southern one-third of the subject property from at least 1963 until at least 1970. Additionally, several vehicle maintenance businesses have historically occupied the subject property including JAC Truck Repair at 2236 Myrtle Street from at least 2000 until the present, 3A Tire Service at 2271 Market Street from at least 1992 until at least 2000. Neither the ACEHD nor the OFD maintained any documentation regarding the removal of the USTs suspected to have historically been located on-site and associated with the historical occupancy of the southern portion of the subject property by a gasoline service station. Aqua Science performed a Phase II investigation at the subject property in 2005 that included the collection of soil samples from 2 feet bgs in seven borings. TPH-G/D/O, VOCs, and PCBs were not detected in these soil samples. Two additional soil borings were advanced along the southern property boundary to 16 feet bgs. The 11.5-foot bgs soil sample collected from the boring advanced south of the West Oakland Tire Repair facility (BH-A) did not contain detectable concentrations of TPH-G/D/O, VOCs, or PCBs. The 11.5-foot bgs soil sample collected from the southwest corner of the subject property (BH-B, near the former gasoline service station) contained ethylbenzene, total xylenes, naphthalene, and TPH-G/D above ESLs established by the RWQCB-SF. The grab groundwater sample collected from BH-A exceeded ESLs for TPH-O and the grab groundwater sample collected from BH-B exceeded ESLs for TPH-G/D, dissolved lead, ethylbenzene, total xylenes, and naphthalene. The source(s) and extent of petroleum hydrocarbons was not identified. SALEM conducted a limited geophysical survey of the subject property in February 2012 which identified three sub-grade anomalies including several areas of "disturbed soil" that were suspected former UST locations and/or potential sub-grade structures of environmental concern. An additional geophysical survey of the subject property and a pothole investigation of the previously identified sub-grade anomalies were conducted in May 2012. The May 2012 geophysical survey did not identify the presence of any additional sub-grade structures of environmental concern. Excavation of the three sub-grade anomalies and areas of "disturbed soil" identified during the February 2012 geophysical survey did not reveal the presence of USTs or other sub-grade structures of environmental concern. However, excavated fill material generated during the pothole investigation was reported to have been stained and had odors similar to degraded petroleum hydrocarbons. SALEM conducted a Phase II ESA in February 2012 involving the collection of soil and soil vapor samples. Aromatic hydrocarbons were detected in a majority of soil vapor samples, the source of which is suspected to have been the former on-site gasoline service station, as well as off-gassing from petroleum hydrocarbon-impacted groundwater originating from the up-gradient Arco gasoline station LUST site at 889 West Grand Avenue, located approximately 140 feet southeast of the subject property. Detected soil vapor concentrations at the subject property did not exceed commercial/industrial CHHSLs with the exception of benzene in one sample. SALEM's analysis for best estimate of indoor air risk using the USEPA Screening Level Johnson & Ettinger vapor intrusion model resulted in a



cancer risk value that was significantly less than the  $10^{-5}$  value applied to commercial settings and determined that the likelihood of vapor intrusion of benzene into the existing or proposed structures at concentrations that may present an unacceptable health risk appeared to be low. In May 2012 three groundwater monitoring wells (MW-1, MW-2 and MW-3) were installed on the subject property. During the June 4, 2012 groundwater monitoring event, depth to groundwater was reported to be approximately 11 feet bgs with a general flow direction towards the northwest. TPH-D was not detected above laboratory method detection limits in MW-1, MW-2, or MW-3. TPH-G was not detected above laboratory method detection limits in MW-2 and MW-3. TPH-G was detected in MW-1 at a concentration of 3,300  $\mu\text{g/L}$ . Benzene (1.2  $\mu\text{g/L}$ ), sec-butylbenzene (3.7  $\mu\text{g/L}$ ), ethylbenzene (79  $\mu\text{g/L}$ ), isopropylbenzene (10  $\mu\text{g/L}$ ), p-isopropyltoluene (3.0  $\mu\text{g/L}$ ), naphthalene (37  $\mu\text{g/L}$ ), n-propylbenzene (29  $\mu\text{g/L}$ ), toluene (1.5  $\mu\text{g/L}$ ), 1,2,4-trimethylbenzene (110  $\mu\text{g/L}$ ), 1,3,5-trimethylbenzene (59  $\mu\text{g/L}$ ), and total xylenes (188  $\mu\text{g/L}$ ) were detected in the groundwater sample collected from MW-1. No other VOCs were detected above laboratory method detection limits in this sample. The results of laboratory analyses of the groundwater sample collected from MW-3 indicated the presence of 1,1-DCA at a concentration of 3.8  $\mu\text{g/L}$ , cis-1,2-DCE at 110  $\mu\text{g/L}$ , t-1,2-DCE at 14  $\mu\text{g/L}$ , MTBE at 3.6  $\mu\text{g/L}$ , and TCE at 11  $\mu\text{g/L}$ . No other VOCs were detected above laboratory method detection limits. VOCs were not detected in the groundwater sample collected from MW-2. The groundwater sample collected from MW-1 had a TPH-G concentration of 3,300  $\mu\text{g/L}$ . This well (MW-1) is located in close proximity to the suspected former UST locations at the subject property. Based on the presence of hydrocarbon-affected soils identified during the pothole excavation investigation in this area, data suggests that the former USTs are likely the source of hydrocarbons identified in soil and groundwater proximate to this location. Regulatory drinking water standards for TPH and petroleum in general have not been developed. The RWQCB-SF has assigned the TPH-diesel taste and odor threshold of 100  $\mu\text{g/L}$  referenced in *A Compilation of Water Quality Goals* (RWQCBCV 2003) as the drinking water screening level for all categories of TPH, meaning that the screening level for TPH-G would be 100  $\mu\text{g/L}$  for the Hahn Property site as well. Screening levels for benzene and related light-weight hydrocarbon compounds are considered to provide adequate additional protection of drinking water concerns for gasoline-contaminated groundwater when used in conjunction with the TPH screening level of 100  $\mu\text{g/L}$ . In general, sites may exceed the TPH screening level if carcinogenic compounds detected in the groundwater sample (primarily benzene) are low. Detectable concentrations of aromatic volatiles (benzene, ethylbenzene, naphthalene, and total xylenes) in the groundwater sample collected from MW-1 did not exceed ESLs under the existing land use and exposure scenario (groundwater is not a current or potential source of drinking water). Although the TPH-G concentration in MW-1 exceeds the ESL, aromatic volatiles are present at concentrations below the ESL. Given the proposed future use of the property as a parking lot, and presence of carcinogenic VOCs at concentrations below ESLs, data suggests that remediation of this area is unnecessary and unlikely to be required. TPH-G, TPH-D, and VOCs were not detected in MW-2, suggesting that the plume of hydrocarbon-affected groundwater near the former on-site gasoline service station has not migrated beneath the JAC Truck Repair property. TPH-G, TPH-D, and aromatic hydrocarbons typically associated with gasoline (other than MTBE) were not detected in the groundwater sample collected from MW-3, located to the east of the former on-site gasoline service station. A trace MTBE concentration was detected in this well; however, the concentration was below ESL's and likely originated from an off-site source (Arco LUST site) to the southeast of the subject property. Chlorinated solvents commonly associated with dry cleaning facilities were detected in the groundwater sample collected from MW-3; however, the concentrations were all below ESL's. Chlorinated solvents identified in MW-3 are suspected to originate from the Burke/Kim Property, a former dry cleaner at 949 West Grand Avenue with known chlorinated solvent impacts in soil and groundwater, located approximately 80 feet south of the subject property. Because the concentrations are below ESL's, are not suspected to originate from on-site, and because chlorinated solvents were not detected in soil vapor samples collected from this location during SALEM's February 2012 site investigation, it is unlikely that the presence of chlorinated solvents in groundwater will negatively impact the proposed development of the subject



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property as a parking lot. No further sampling or assessment is recommended for the subject property. On-site impacts and off-site sources have been adequately defined and are not anticipated to require further actions.

- SALEM's review of SFIMs and historical aerial photographs indicates that a railroad spur was located on the southern one-half of the subject property from at least 1939 until approximately 1959. Herbicides historically applied to railroad spur properties often contained arsenic. Additionally, on-site soils may have been impacted by lead due to the operation of trains over the course of time. Therefore, during SALEM's February 2012 Phase II ESA shallow soil samples were collected from the area of the former railroad spur. Trace to low concentrations of total arsenic and lead were detected in the five analyzed soil samples collected during SALEM's February 2012 investigation; however, concentrations did not exceed ESLs. Based on a review of soil analytical results, the former railroad spur is not suspected to have significantly impacted soil at the subject property and does not require further investigation.

### 13.0 LIMITATIONS

This Phase I ESA Report has been prepared for the exclusive use of **Mr. Sunny Hahn**. Unauthorized use of or reliance on the information contained in this report, unless given express written consent by SALEM and **Mr. Sunny Hahn**, is strictly prohibited. The following limitations and exceptions apply:

- The scope of work completed was designed solely to meet the needs of SALEM's client. SALEM shall not be liable for any unintended usage of this report by another party. In addition, based on the ASTM guidelines, the ESA is only valid if completed within 180 days of an acquisition or the transaction necessitating the ESA.
- No ESA can wholly eliminate uncertainty regarding the potential for RECs in connection with a property. This ESA was designed to reduce, but not eliminate the potential for RECs at the subject property, within reasonable limits of time and cost. The ESA is not intended to be exhaustive or all-inclusive and does not represent a guarantee of the identification of all possible environmental risk.
- An ESA is intended to be a non-intrusive investigation and generally does not include sampling or testing of air, soil, water or building materials. No destructive testing was completed and concealed areas, such as behind walls or within machinery, were not accessed. Testing, if any, is designed solely to meet the needs of the ESA, not to meet any local, state or federal regulations and should not be utilized as such.
- Information in this report is based on personal interviews, government records, published resources, and various historical documents. Accuracy and completeness of information varies among information sources and is often inaccurate or incomplete. The information utilized in this ESA is from sources deemed to be reliable; however, no representation or warranty is made as to the accuracy thereof. SALEM will have no ongoing obligation to obtain and include information that was not reasonably ascertainable, practically reviewable or provided to SALEM in a reasonable timeframe to formulate an opinion and complete the assessment by the agreed upon due date.
- Unless specifically identified in the scope of work, the ESA excludes consideration of non-ASTM scope issues including, but not limited to, lead in drinking water, asbestos, lead-based paint, industrial hygiene, health and safety, endangered species, wetlands, indoor air quality, vapor intrusion, electromagnetic fields, biological agents or mold.



- The ESA includes some information that may be relevant to regulatory compliance, but is not intended and shall not be construed as a compliance audit and cannot be considered a verification of regulatory compliance. While the general environmental setting of the subject property is described, this assessment is not intended to be a formal flood plain or wetland determination, and no warranty is made thereof. Depending on its past, present or future intended use, the property under review may or may not be subject to regulation and permitting under environmental and health and safety laws, such as, but not limited to, the Clean Air Act, the Clean Water Act, the Solid Waste Disposal Act, the Occupational Safety and Health Act, and other federal, state and local regulations. SALEM assumes no responsibility or liability respecting regulatory permitting or compliance issues.
- Client is advised that if the ESA is obtained with the intent of qualifying the purchaser as an innocent landowner, contiguous property owner, or bona fide prospective purchaser under CERCLA, there will be continuing obligations of due care and responsiveness and additional legal requirements that likely apply to such status. SALEM accepts and undertakes no responsibility as to such requirements and advises that counsel be separately consulted with respect to such requirements.
- The findings and conclusions presented in this Phase I ESA Report are based on field review and observations and on data obtained from the sources listed in the report. The findings of this report are valid as of the present. The passage of time, natural processes or human intervention on the subject property or adjacent properties and changes in the regulations can cause changed conditions which can invalidate the findings and conclusions presented in this report.

#### **14.0 QUALIFICATIONS**

This Phase I ESA was conducted under the supervision or responsible charge of SALEM's undersigned environmental professional with oversight from the undersigned registered engineer. The work was conducted in accordance with ASTM E1527-13, generally accepted industry standards for environmental due diligence in place at the time of the preparation of this report, and SALEM's quality-control policies.

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

#### **15.0 REFERENCES**

The following list summarizes the references utilized in preparing this report:

- Aerial photographs provided by Environmental Data Resources, Inc.
- Alameda County Assessor's Office records.
- Alameda County Environmental Health Division records.
- California Environmental Protection Agency, Department of Toxic Substances Control records.
- California Regional Water Quality Control Board records.
- Cal-EPA Voluntary Cleanup Program records.
- California Statewide Radon Survey Screening results conducting during 1990-1991.
- City of Oakland Building Department records.
- City of Oakland Fire Department records.





- City of Oakland Public Works Department records.
- City of Oakland Water System Management & Supply records.
- Federal and State regulatory agency lists compiled by EDR.
- Salem Engineering Group, Inc., AAI Phase 1 Environmental Site Assessment, Proposed FoodsCo Supermarket No. 536, Hahn Property, NEC West Grand Avenue and Myrtle Street, Oakland, CA, dated June 15, 2012.
- Sanborn Fire Insurance Maps for Oakland, California (EDR).
- The Munger Map Book, California – Alaska Oil & Gas Fields, Munger Maps – 1999.
- U.S. EPA Federal Superfund Liens List and the U.S. EPA California Liens, 1995.
- U.S. Geological Survey, 7.5 minute Anaheim, California topographic quadrangle map, 1959, photorevised 1980.

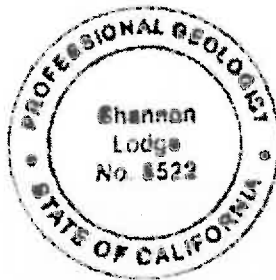
If you have any questions, or if we may be of further assistance, please do not hesitate to contact our office at (408) 577-1090.

Respectfully submitted,

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