Attachment C

Site Mitigation Plan





Rincon Consultants, Inc.

2215 Faraday Avenue, Suite A Carlsbad, California 92008 760 918 9444

FAX 918 9449

info@rinconconsultants.com www.rinconconsultants.com

September 20, 2017 Project No: 17-02403

Mitchell Crispell, Project Manager Alicia Gaylord, Director of Development – Northern California BRIDGE Housing 600 California Street, Suite 900 San Francisco, California 94108 MCrispell@bridgehousing.com

Subject: Site Mitigation Plan - Former DPH LOP Case No. 11063 490 South Van Ness Avenue, San Francisco, California EHB-SAM No. SMED: 1606

Dear Mr. Crispell:

At the request of BRIDGE Housing, Rincon Consultants, Inc. has prepared this Site Mitigation Plan (SMP) in support of a proposed residential development to be located at 490 South Van Ness Avenue in San Francisco, California (subject property). This SMP was developed in accordance with our proposal dated April 25, 2017.

The subject property was formerly associated with the City and County of San Francisco Department of Public Health (DPH) Local Oversite Program (LOP) case number 11063 for an unauthorized onsite release of gasoline. The subject property is currently enrolled with the City and County of San Francisco Department of Public Health (DPH) Maher Program (as of August 29, 2017).

Based on the findings of Rincon's Phase I Environmental Site Assessment (ESA) dated July 17, 2015, residual soil impacts associated with a former onsite release of gasoline are present on the subject property. Additionally, the subject property is located within a Maher Ordinance Area with the potential presence of onsite undocumented fill.

The purpose of this SMP is to mitigate the potential for health risks that may result from the excavation and removal of contaminated soil by designing procedures and protocols that will be followed during soil handling activities.

Sincerely, **Rincon Consultants, Inc.**

Meghan Hearne, GIT Environmental Scientist

Edward a Morelan

A. Edward Morelan, PG, CEG Principal, Environmental Services

Table of Contents

Table of Contents	i
Introduction	1
Purpose	2
Site Description	3
Geology and Hydrogeology	4
Project Background	5
Pre-Construction Excavation Soil Sampling	9
Remedial Excavation Environmental Monitoring and Soil Sampling	
Construction Dewatering	
Excavation Monitoring and Sampling	15
Excavation Requirements and Procedures	
Transportation Requirements and Procedures	
Shipment Documentation and Record Keeping	20
Final Remedial Action Completion Report	22
References	23

Figures

Figure 1	Vicinity Map
Figure 2	Site Map with Extent of Previous Excavation
Figure 3	Site Map with Potential Areas of Residual Contamination

Appendices

- Appendix A Site Specific Health and Safety Plan (for onsite workers)
- Appendix B Dust Control Plan

This page intentionally left blank.

Introduction

At the request of BRIDGE Housing, Rincon Consultants, Inc. (Rincon) has prepared this Soil Mitigation Plan (SMP) in support of a proposed residential development located at 490 South Van Ness Avenue in San Francisco, California (Assessor's Parcel Number [APN] 3553008) (Figure 1). BRIDGE Housing enrolled the subject property in the City and County of San Francisco Department of Public Health (DPH)/Environmental Health Maher Program, EHB-SAM No. –SMED: 1606 (enrolled as of August 28, 2017).

Rincon conducted a Phase I Environmental Site Assessment (ESA) for the subject property in 2015 (report dated July 17, 2015). Based on the results of the Phase I ESA, two Recognized Environmental Conditions (RECs) and one Potential REC were found in connection with the subject property as follows:

Recognized Environmental Conditions

- Former use of the subject property as a gasoline station/auto repair shop and former release of gasoline on the subject property (former onsite industrial uses)
- Location of the subject property within a Maher Ordinance Area and potential presence of fill onsite

Potential Recognized Environmental Condition

Hydraulic lifts on the subject property

Phase I ESA Recommendations

Based on the former use of the subject property as a gasoline station/auto repair shop and known residual contamination on the subject property associated with the former release of gasoline, Rincon recommended oversight by DPH and preparation of a SMP prior to redevelopment activities on the subject property.

Based on the location of the subject property within a Maher Ordinance Area and potential presence of undocumented fill onsite, the subject property would be enrolled in the Maher Program, which has recently been completed.

To evaluate the potential subject property impact associated with the hydraulic lifts on the subject property, Rincon recommended proper removal of the lifts and confirmation soil sampling.

Purpose

This Soil Management Plan has been prepared because the proposed project requires the removal of a rough estimate of 1,056 cubic yards of soil prior to redevelopment and impacted soil and groundwater is known to be present onsite. The objective of this SMP is to minimize health, safety, and environmental risks resulting from the excavation and removal of impacted soil and groundwater by designing procedures and protocols that will be followed during soil and groundwater handling and sampling activities.

This SMP includes a project and subject property description, a summary of previous remedial excavation activities, and an outline of the proposed scope of pre-construction/demolition environmental sampling and construction/demolition environmental monitoring.

Additionally, per DPH, the Maher required suite of analyses for the subject property has not been completed. Since the subject property is located in a Maher Ordinance Area of known fill, this SMP will include the collection of soil samples from onsite fill to be analyzed for the Maher Suite.

Site Description

The subject property is an approximately 0.327-acre parcel located on the northwest corner of 16th Street and South Van Ness Avenue (Block 2552, Lot 008) and south of Adair Street in San Francisco, California (Figures 1 and 2). The property is currently developed with the remnants of a gasoline service station and auto repair shop. It is comprised of a vacant, single-story structure equipped with repair bays/hoists and an office, a storage yard, two canopies, and three former pump islands. Nearby properties generally consist of residential and commercial land use.

The proposed redevelopment project consists of a publicly funded, 7—story, 100% affordable housing, residential building. The ground floor will be equipped with public community flex space. The current plans include a partial basement level (approximately 2,663 square feet) (50% Design Development Plans for 490 South Van Ness, dated September 1, 2017).

Note – previous plans had proposed for the complete excavation of the property down to a depth of 15 feet below street grade for the construction of an underground parking garage; however, current plans do not include an underground parking garage.

Geology and Hydrogeology

Geology

Regional Geology

The subject property is located in the Coast Ranges Geomorphic Province. The province is characterized by northwest-southeast trending mountains and faults sub-parallel to the San Andreas Fault Zone. The province is comprised of marine and terrestrial sedimentary deposits underlain by Salinian Block granitic rocks west of the San Andreas Fault Zone and the Franciscan Assemblage east of the San Andreas Fault Zone (Norris and Webb, 1990).

Site Geology

According to the United States Geologic Survey Geologic Map (San Francisco North Quadrangle, 1958), the subject property is underlain by alluvium which is described as predominantly clayey silty sand and clayey silt of Holocene age. The maximum thickness is reported to be approximately 25 feet.

After the USTs were removed from the subject property in 2012, the previous tank pit area was reportedly backfilled with loose, sub-angular gravel; therefore, those materials should be expected during construction excavation in that area.

According to the Earth Mechanics Consulting Engineers geotechnical investigation report for the subject property (dated May 8, 2013), the borings drilled at the subject site encountered sand-clay soil mixtures to the maximum depth explored of 51 feet. Fill materials reportedly encountered during the investigation consisted of very loose to loose, clayey sand with gravel.

Hydrogeology

The site is located within the Downtown San Francisco groundwater basin (2-40). According to the Regional Water Quality Control Board (RWQCB) Basin Plan for the San Francisco Bay Region, basin 2-40 has been assigned existing beneficial uses for municipal and agricultural supply, and potential beneficial uses for industrial process and service supply.

According to the Earth Mechanics Consulting Engineers geotechnical investigation report for the subject property (dated May 8, 2013), groundwater was encountered in the previous geotechnical borings at a depth of about 10 feet bgs. According to Case Closure Form Leaking Underground Fuel Storage Tank Program, 490 South Van Ness Avenue, San Francisco prepared by the DPH (dated January 10, 2013), groundwater at the subject property is reportedly located between 3 and 12 feet below ground surface (bgs) with a flow direction to the south-southeast.

Due to the presence of relatively shallow groundwater at the subject property, dewatering may be necessary to complete the planned construction excavation activities. Ongoing geotechnical and hydrological assessments will provide further information regarding the need for dewatering activities onsite.

Project Background

Historical records reviewed during the 2015 Phase I ESA showed that the subject property was used as a gasoline station from approximately 1936 to approximately 1983. Following the closure of the service station, the site was occupied by a Quality Tune-Up automobile repair shop for a number of years. On September 9, 1998, one 8,000-gallon gasoline underground storage tank (UST), two 6,000-gallon gasoline USTs, and one 550-gallon waste oil UST were removed from the site. Due to obvious subsurface contamination and free-floating product, the tank pit was over-excavated and 80 cubic yards of contaminated soil and 240 gallons of contaminated water were reportedly removed. An unauthorized release case was opened on September 22, 1998. The release reportedly originated from holes in the onsite USTs. Impacted soil and groundwater were excavated from the tank pit and disposed offsite. Between January 2011 and March 2012, a soil excavation project was undertaken in order to remove subsurface contamination at the site. The unauthorized release case was closed by the DPH in a Remedial Action Completion Certification letter dated March 21, 2013.

According to the March 2013 Remedial Action Completion Certification letter, eight USTs were located on the northern half of the subject property. Four of the USTs were removed in 1998 and the remaining four USTs were discovered abandoned beneath the sidewalk along Adair Street and removed during remedial excavation in 2012.

Previous Soil Excavation

From January to March 2012, corrective action remediation consisted of the excavation of contaminated soil, along with the extraction of contaminated shallow groundwater. Approximately 4,500 cubic yards of impacted soil were removed to depths of between 8 and 14 feet below ground surface (bgs) on the subject property and disposed offsite. Monitoring wells were installed, and then removed following closure of the site. According to the January 10, 2013 case closure summary, "The residual concentrations following remedial excavation do not trigger further remedial action under the Low Threat Closure Policy. Mitigation measures may be enacted as part of the planned construction project. Mitigation measures may include passive or active ventilation in and below a proposed below grade garage and/or passive venting along the structure foundation in areas of peripheral residual contamination." The general limits of the soil excavation are shown in Figure 2. Residual, post-remediation impacts left onsite were not at levels reported to warrant additional remediation/mitigation at the time. The general limits of post-remedial residual impacts, according to the information provided by Hydro Analysis' 2013 SMP, are depicted on Figure 3.

Potential Vapor Mitigation

Based on the presence of impacted soil remaining onsite, the DPH stated that mitigation measures may be enacted as part of planned construction projects, including "passive or active ventilation in and below a proposed below grade garage and/or passive venting along the structure in areas of peripheral residual contamination" (Case closure summary, January 10, 2013).

Note – previous plans had proposed for the complete excavation of the property down to a depth of 15 feet below street grade for the construction of an underground parking garage; however, current plans do not include an underground parking garage. The current plans include a partial basement

level approximately 2,663 square feet in size (50% Design Development Plans for 490 South Van Ness, dated September 1, 2017).

Potential Groundwater Impacts

A 2010 ESA report for the subject property issued by AllWest Environmental, Inc. indicated that that if the property is to be redeveloped, and if groundwater is encountered, that groundwater should be reevaluated for total petroleum hydrocarbons (TPH) prior to discharge to the sewer system (dated January 16, 2010).

Residual Soil and Groundwater Impacts

Soil Results

The residual concentration of constituents present in onsite soil was reported in the 2013 case closure summary as follows:

- 1,400 milligrams per kilogram (mg/kg) of total petroleum hydrocarbons as gasoline (TPH-g)
- 2.6 mg/kg of benzene
- 1.0 mg/kg of toluene
- 8.4 mg/kg of ethyl benzene
- 21 mg/kg of xylenes
- 2.9 mg/kg of lead

Residual concentrations of methyl tert-butyl ether (MTBE) were not detected in soil. Note – these concentrations reflect depths of 12 to 13 feet bgs and may be at depths below groundwater.

Groundwater Results

The residual concentrations of contaminants in groundwater were reported as follows:

- 1,700 micrograms per liter (μg/L) of TPH-g collected from dewatering casing (DC) 4
- 210 μg/L of benzene and toluene collected from MW-9
- 42 μg/L of ethyl benzene collected from DC-4
- 460 µg/L of xylenes collected from DC-4

Residual concentrations of MTBE and lead were not detected in groundwater.

Note – these concentrations were presented in the *Quarterly Groundwater Monitoring Report for Quality Ture-Up*, dated October 9, 2012 and prepared by Hydro Analysis, Inc.

Previous Excavations

Although the previous corrective action remedial excavation resulted in the removal of a significant amount of the onsite soil and groundwater impacts, residual soil impacts were determined to remain at the following locations onsite:

 Along street excavation sidewalls. Elevated petroleum hydrocarbon concentrations still remain localized in the soil where over-excavation became impractical due to the location of existing sidewalks and streets (along South Van Ness Avenue and 16th Street)

- Beneath former fuel dispenser pump islands. The pump islands were preserved during remedial excavation, but have since been removed; therefore, impacted soil may be expected beneath the footprints/concrete of the individual pump islands
- Beneath the former service station building. Based on the former building use as an auto repair facility and the presence of hydraulic lifts located inside the service repair bays, impacted soil may be encountered in the shallow subsurface

Figure 3 shows the general areas where these residual soil impacts may be encountered.

July 2017 Site Reconnaissance

Rincon conducted a site visit of the subject property on July 18, 2017. During the site visit, the following items were noted:

- Although reportedly decommissioned, the road box for suspected monitoring well MW4 was
 observed on the northeast portion of the subject property; no other monitoring well road boxes
 were observed onsite at the time.
- All pump islands appear to have been removed, although there is no documentation of the removal activities.
- There is a distinct depression in the center of the subject property which is likely related to the removal of impacted soil during the previous remedial excavation.
- Debris noted onsite included litter, concrete chunks, broken fence, shoes, bottles, and medical sharps.
- There are approximately ten 55-gallon drums of undetermined nature located in the former "Lube Room" of the onsite structure.
 - \circ $\;$ Ground surface staining was noted throughout the "Lube Room" area.
 - No secondary containment was noted.
 - Various other smaller 5-gallon buckets and 1-gallon containers of undetermined nature were also observed onsite.
 - Floor features were noted likely associated with hydraulic lifts.

Additional Assessment Recommendations

Based on the locations of known residual impacted soil and the potential for additional impacted soil to be encountered during construction excavation activities, additional soil sampling will be completed prior to groundbreaking activities and during construction excavation activities, as described in the following section.

Per the DPH, since the subject property is located in a mapped Maher Ordinance area, some of the soil samples collected will be analyzed for the Maher suite of analyses, as described in the pre-construction excavation soil sampling scope outlined below.

Additionally, it is our understanding that the subject property former monitoring well network has been decommissioned. According to the well destruction report issued by Hydro Analysis, Inc. and dated April 10, 2013, "On April 3, 2013, the six monitoring wells MW-1, MW-2, MW-4, MW-5, MW-6 and MW-9 were destroyed." The destructed wells were inspected by a San Francisco DPH Senior Environmental Health Inspector. Also per the report, "Upon completion of the pressure grouting,

the well boxes were removed and then filled to finish grade with Portland cement concrete." However, MW4's road box was observed in place during Rincon's July 2017 reconnaissance of the subject property. Therefore, the destruction of the well network should be confirmed prior to site demolition and excavation activities. If a well is found intact, then the DPH will be notified and measures to properly abandon the well will be taken.

Pre-Construction Excavation Soil Sampling

Prior to site demolition and construction excavation activities, additional soil sampling will be conducted from the following locations described below. The analytical results obtained will be utilized as follows:

- 1. To evaluate the type of soil impacts remaining onsite
- 2. To determine the proper location for recycling or disposal of soil, if excavated and removed from the property
- 3. For the completion of a Health Risk Assessment, if impacted soils above DPH-approved screening levels remain onsite

Pre-Field Activities

Prior to commencing soil sampling activities, Rincon will perform soil boring markouts and notify Underground Service Alert. Per the County of San Francisco, a well permit is not required for the proposed work scope. A site-specific Health & Safety Plan (HASP) has been prepared to address hazards that may be encountered by onsite workers during soil sampling activities (Appendix A).

Soil Sampling in Vicinity of Former Pump Islands

Since there is no documentation that soil beneath the former pump islands was assessed or removed from the subject property during the previous onsite remedial excavation, we recommend collecting soil samples from beneath the three former pump islands prior to site demolition and construction excavation activities. These soil samples are to be analyzed for the typical gasoline service station constituents as listed below.

Pump Island Sampling Scope

- Hand auger borings will be advanced adjacent to the former pump islands.
- Soil samples will be collected at depths of approximately 0.5-1.0 foot and 2.0-2.5 feet bgs, manually using a hand auger.
- Samples will be analyzed for volatile organic compounds (VOCs) by EPA Method 8260B and total petroleum hydrocarbons (TPH) by EPA Method 8015M.

Inside the Building from the Subsurface (Sub-Slab Staining)

Ground surface staining in the "Lube Room" of the onsite structure was noted during the July 2017 site visit. Prior to site demolition and construction excavation activities, soil samples will be collected from beneath the floor slab in areas where floor staining is observed. These soil samples will be analyzed for typical auto repair service station constituents as listed below:

Sub-slab Sampling Scope

- Soil samples will be collected from beneath the floor slab of areas exhibiting floor staining (number of samples to be determined based upon visual inspection).
- The locations will be cored prior to sampling.
- Soil samples will be collected at depths of approximately 0.0-0.5 foot (immediately beneath bottom of slab), 2.0-2.5 feet, and 4.5-5.0 bgs, manually using a hand auger.
- Samples will be analyzed for VOCs by EPA Method 8260B, TPH by EPA Method 8015M, Title 22 metals by EPA Method 6010B, and polychlorinated biphenyls (PCBs) by EPA Method 8082A.

Hydraulic Lifts

The presence of hydraulic lifts was noted inside the onsite structure/former auto repair shop during the July 2017 site visit.

Prior to demolition and removal of the hydraulic lifts, soil samples will be collected to evaluate if impacted soil may be present in the vicinity of the hydraulic hoists. The soil samples will be analyzed for typical auto repair service station constituents as listed below.

Hydraulic Lift Sampling Scope (pre-demolition)

- Up to two soil samples will be collected from beneath the floor slab adjacent to the hydraulic lifts (one on each side of the individual lifts). Prior to sampling, the locations will be cored.
- Soil samples will be collected at depths of approximately 0.0-0.5 foot (immediately beneath bottom of slab), 2.0-2.5 feet, and 4.5-5.0 bgs, manually using a hand auger.
- Samples will be analyzed for TPH by EPA Method 8015M, Title 22 metals by EPA Method 6010B, and PCBs by EPA Method 8082A.

Note: During site demolition, the hydraulic lifts should be removed and bottom/sidewall confirmation soil samples will be collected after the lifts are removed (See Excavation Monitoring and Sampling section below).

Onsite Drums

Multiple unidentified drums and other containers, along with ground surface staining were observed inside the former service station "Lube Room." The contents of the drums will be established and samples (liquid or solid) will be collected from the contents of the drums for waste characterization and proper disposal offsite.

Industrial Drum Sampling Scope

- If all of the drums contain soil, then one soil sample will be collected from each of the onsite 55gallon drums. The soil will be mixed and a composite soil sample will submitted for analysis of VOCs by EPA Method 8260B, TPH by EPA Method 8015M, Title 22 metals by EPA Method 6010B, and PCBs by EPA Method 8082A.
- If the drums contain water, then one sample per drum will be submitted for the analysis of VOCs by EPA Method 8260B, TPH by EPA Method 8015M, Title 22 metals by EPA Method 6010B, and PCBs by EPA Method 8082A.

Onsite Fill Material

It is our understanding that a geotechnical report, including physical testing, is currently in preparation. If the geotechnical engineer requires removal of the fill materials (from the previous UST excavation and excavated areas near the former dispensers) for the proposed construction, additional sampling of the previously excavated areas may be warranted for waste profiling prior to disposal/recycling of the fill material. These fill material soil samples will be analyzed for the Maher suite of constituents, typical auto repair service station constituents as listed below, as well as those constituents required by the receiving disposal facility.

Onsite Fill Material Sampling Scope

- If the geotechnical engineer determines that the onsite fill material cannot be reused, soil samples will be collected from the excavated and stockpiled fill material.
- The soil will be analyzed for of VOCs by EPA Method 8260B, TPH by EPA Method 8015M, Title 22 metals by EPA Method 6010B, and PCBs by EPA Method 8082A for waste disposal characterization.
- The number of samples to be analyzed will be based on the volume of soil to be disposed offsite.

Maher Suite Samples

Per the DPH Maher Program, up to ten of the soil samples collected from the five sampling locations described above (pump islands, sub-slab staining, hydraulic lifts, onsite drums, and onsite fill material) will be analyzed for the following constituents:

- VOCs and other flammable gases by EPA Method 8260B
- PCBs by EPA Method 8082A
- pH level by EPA 9045C
- Cyanides by EPA Method 335.4
- TPH by EPA Method 8015M
- Semi-volatile compounds (SVOCs) by EPA Method 8270

All soil samples will be collected using hand tools (hand auger or trowel) to the approximate depths proposed. The hand auger/trowel will be decontaminated between soil borings in a non-phosphatic soap solution and rinsed with potable water. Soil samples will be placed in 4-ounce glass jars and covered with Teflon-lined lids. If drum water samples are collected, the samples will be placed in the appropriate laboratory-provided bottle ware (e.g. 40 milliliter VOAs, 1-liter ambers). The sample containers will be properly labeled and placed on ice pending delivery to a State-certified laboratory under chain-of-custody documentation. Soil samples will be analyzed within a standard 7-10 business day turnaround time with an option for expedited results.

Pre-Construction Excavation Reporting

Upon completion of the soil sampling scope outlined above and receipt of the final soil analytical data, Rincon will summarize the activities and findings in a combined Phase II ESA/Updated SMP. The updated report will be provided, in draft form, to the client within two weeks of receiving the final analytical data from the laboratory. The report will include a figure depicting the sample locations, a table of analytical data, conclusions, and recommendations. The final report will be

signed and stamped by the Professional Geologist overseeing the project and will be submitted to the DPH for review and approval.

Remedial Excavation Environmental Monitoring and Soil Sampling

Remedial Excavation Environmental Monitoring and Soil Sampling will be conducted onsite when demolition/construction excavation activities commence. The analytical results obtained will be utilized as follows:

- 1. To evaluate the soil impacts, if any, remaining onsite that are associated with the hydraulic lifts
- 2. To verify the concentrations of impacted soil remaining onsite beneath the proposed structure to determine if a Health Risk Assessment (HRA) is warranted

Pre-Field and Excavation Activities

Underground Service Alert will be notified by the grading contractor at least 72 hours prior to commencement of soil excavation activities. Rincon has prepared a site-specific HASP to address hazards that may be encountered by onsite workers during remediation activities (Appendix A). Dust monitoring will be performed during soil excavation and removal activities in accordance with a site-specific Dust Control Plan approved by the DPH (Appendix B).

Construction Dewatering

Based on the relatively shallow depth to groundwater beneath the subject property (approximately 10 feet below grade), dewatering may be necessary to complete the proposed building construction. According to the May 2013 Site Mitigation Plan, there are reportedly four temporary dewatering casings remaining at the site. However, the condition of the dewatering wells has not been confirmed at this time. The construction of additional dewatering wells should be expected.

Also per the 2013 Site Mitigation Plan, a previous wastewater discharge permit (to the combined sewer system) was opened for the remedial excavation project. Permit #11-12189 was obtained from the San Francisco Public Utilities Commission (PUC) on December 21, 2011. It is unknown if the permit remains active or can be reopened.

Based on the results of the geotechnical report that is currently in preparation, if dewatering is required as part of the construction excavation, the groundwater will be tested prior to being discharged offsite. Additionally, if dewatering is not expected, then the remaining dewatering casings will be properly abandoned.

Excavation Monitoring and Sampling

Hydraulic Lift Removals

The proposed excavation will include the removal of the onsite hydraulic lifts located inside the structure/former auto repair shop. As the excavation progresses, the soil will be carefully monitored by the environmental consultant for apparent hydrocarbon impacts. Once the lifts are removed from the ground, sidewall and bottom soil samples will be collected from the individual excavations. Up to five samples (four sidewall and one bottom) will be collected for each lift. The soil samples will be analyzed for TPH by EPA Method 8015M, Title 22 metals by EPA Method 6010B, and PCBs by EPA Method 8082A.

Soil Excavation and Disposal

According to the March 2013 Remedial Action Completion Certification letter, onsite corrective action remediation consisted of the excavation of contaminated soil, along with the extraction of contaminated shallow groundwater. Approximately 4,500 cubic yards of impacted soil were removed to depths of between 8 and 14 feet on the subject property and disposed offsite. Monitoring wells were installed, and then removed following closure of the site. However, elevated hydrocarbon concentrations still remain localized in the soil where over-excavation became impractical due to the proximity of existing sidewalks and streets (along South Van Ness Avenue and 16th Street). Therefore, residual TPH, VOCs, and metals impacts can be expected in the onsite soil. The impacted soil will be excavated by a HAZWOPER-trained grading contractor. Required personal protective equipment must be worn at all times and in accordance with the Community Health and Safety Plan provided by the general contractor, which has been identified to Rincon as Nibbi Brothers.

As the excavation advances into native soil on the subject property, soil will be monitored by the environmental consultant for indications of petroleum hydrocarbon impacts. Also, per the May 2013 Site Mitigation Plan, *"the natural brown color of the native soil appears as olive-gray color when significant petroleum hydrocarbon concentrations are present."* The environmental consultant will have a photoionization detector (PID) onsite to monitor for VOCs during ground-disturbing activities.

Soil Segregation and Stockpiling

If impacted soil or suspect impacted soil is observed during construction excavation activities, then soil will be segregated and stockpiled and soil samples will be collected for laboratory analysis. Impacted soil will be disposed offsite at a licensed waste facility; no impacted soil will be used as backfill. Impacted soil will be removed until concentrations are achieved that meet the Tier 1 ESL remediation goals. Any soil that is suspect of being contaminated with petroleum hydrocarbons will be segregated, stockpiled, sampled, and profiled by laboratory analysis.

The impacted/stockpiled soil will placed on visqueen and covered with visqueen, pending laboratory analytical results. As a result, impacted soil will remain stockpiled or temporarily stored in roll-off bins in an accessible portion of the subject property (to be determined by the grading contractor).

The grading contractor will have water available by hose to perform dust mitigation during excavation activities and during the loading of soil into trucks or bins. Upon receipt of the final laboratory analytical results, the non-hazardous waste soil and hazardous waste soil (if generated) will be disposed offsite at the appropriate accepting facilities.

Soil Sampling

All soil samples will be collected from the bucket of the excavation equipment or stockpiles by using hand tools (hand auger or trowel). If hand tools are used, then the hand auger/trowel will be decontaminated between sample locations in a non-phosphatic soap solution and rinsed with potable water. Soil samples will be placed in 4-ounce glass jars and covered with Teflon-lined lids. The sample containers will be properly labeled and placed on ice pending delivery to a State-certified laboratory under chain-of-custody documentation. Soil samples will be analyzed within a three-day expedited turnaround time.

If a hot spot excavation area is encountered, then a confirmation sample will be collected at the bottom and sidewalls of each hot spot excavation. A hot spot can be defined as an area with visible and or olfactory hydrocarbon impacts and or an area where previous soil analytical results indicate exceedances in the DPH-approved screening levels. If concentrations in bottom samples exceed the DPH-approved screening levels, the excavation will be extended 0.5 foot vertically and an additional confirmation sample will be collected. If concentrations in sidewall confirmation samples exceed the DPH-approved screening levels, the excavation will be extended laterally as described below:

- Lateral excavations will extend to the locations of previous soil samples which exhibited analytical results below their respective approved screening levels or
- Lateral excavations will extend an additional 5 feet and new soil confirmation samples will be collected.

Draft Remedial Excavation Reporting

Upon completion of the soil sampling scope outlined above and receipt of the final soil analytical data, Rincon will summarize the activities and findings in a Draft Remedial Action Completion Report documenting the removal of impacted soil from the property and the remaining presence of impacted soil onsite.

The Draft Remedial Action Completion Report will be provided to the client within two weeks of receiving the final analytical data from the laboratory. The report will include a figure depicting the sample locations, a table of analytical data, conclusions, and recommendations (if any). The Draft Remedial Action Completion Report will be signed and stamped by the Professional Geologist overseeing the project and will be submitted to the DPH for review and approval.

If residual impacted soil is to remain onsite, then a HRA will be completed for the subject property.

Excavation Requirements and Procedures

Excavation and Handling of Hazardous Materials

Excavation activities involving impacted soil will be performed by a grading contractor possessing a "Hazardous Substance Removal and Remedial Action Certification" on their State Contractor's license. Field staff will be OSHA 40 Hour HAZWOPER trained. Personal Protective Equipment (PPE) outlined in the HASP (Appendix A) will be utilized.

Soil Staging

Any excavated impacted soil will be stockpiled at a pre-determined location on the subject property, placed on visqueen, and covered with visqueen. The stockpiled soil will remain securely covered onsite, pending laboratory analytical results for disposal characterization. Non-impacted soil will be temporarily stored in designated non-impacted soil staging areas within the site.

Confined Space Entry Requirements

Although not anticipated, if excavation activities result in trenching that is five feet deep or more, the excavation must be appropriately shored or sloped. If workers are required to enter an excavation that is five feet deep or more and is not shored or sloped, a permit from OSHA, California Department of Industrial Relations must be obtained before excavating and the appropriate OSHA confined space requirements must be followed.

Import Fill

Imported fill material may be used to replace the soil excavated from the subject property. Currently, there are no established standards or regulations that contain requirements for importing fill material. However, to ensure imported soil does not contain hazardous materials, it is recommended that the soil be sampled and analyzed for contaminants of concern prior to being imported to the site.

Transportation Requirements and Procedures

Requirements of Haulers

Nibbi Brothers will retain qualified haulers to transport soil from the site. The selected haulers will be fully licensed and insured to transport the soils. Haulers will follow all applicable requirements with regard to loading, unloading, and general handling based on transport mode.

Truck Loading Operations

Trucks will be loaded at designated soil staging areas for transportation to the designated offsite disposal facility. Stray waste material on vehicles, tires, or the lip of the container, etc. will be removed manually with a brush. The container of the truck will be covered to prevent soil and/or dust from being released from the truck during transport to the disposal facility. Prior to leaving the soil staging areas, each truck will be inspected by Nibbi Brothers personnel or the site supervisor to ensure that the containers are adequately covered or secured, the trucks are cleaned of overburden soil, and the shipment is properly manifested. Each truck will receive the proper placarding and paperwork. Water spray or mist suppressant will be applied during soil loading operations to prevent vagrant dust.

Transportation

Offsite transportation of non-hazardous or hazardous wastes will be in accordance with Department of Transportation (DOT) regulations contained in Code of Federal Regulations (CFR), Title 49 and the California Hazardous Waste Control Law (Health and Safety Code Section 25100 et seq.; California Code of Regulations (CCR), Title 22, Section 66428 et Seq.). Vehicle idling time within the staging areas will be kept to a minimum to limit air emissions. Hazardous waste haulers will have a valid Department of Toxic Substances Control (DTSC) registration and will satisfy the following requirements:

- Vehicles will have passed an annual inspection.
- Vehicle operators will be trained in the safe handling of the waste/material.
- Haulers will maintain the ability to pay damages caused by their operations through proper insurance coverage.
- Haulers will have licenses issued by the California Highway Patrol (CHP) for transportation of hazardous materials.
- Haulers will comply with the Uniform Hazardous Waste Manifest System.
- Haulers will take certain actions in response to hazardous waste discharges during transport (e.g., covering the load to prevent the discharge of dust/particulates into the atmosphere during hauling).

Dust monitoring will be performed at the northern, eastern, and southern property boundaries during remedial excavation and truck-loading activities as described in the Dust Control Plan

(Appendix B). A map detailing haul truck access and egress locations and pathways at the property should be prepared by Nibbi Brothers and included in the Community Health and Safety Plan.

Route

Routes for the transportation of waste will be on arterial streets and freeways approved for truck traffic to minimize potential impacts on the local neighborhood. Transportation will be conducted in accordance with the National Hazardous Material Route Registry - US Department of Transportation DOT-Federal Motor Carrier Safety Administration (FMCSA) Hazardous Materials (HM) designated, preferred or prescribed routes for transportation of hazardous materials in California.

Traffic Control Procedures

Soil for delivery to offsite disposal facilities will be transported in trucks from the designated soil staging areas. Prior to loading, all trucks will be staged to avoid impacts on the local streets. Traffic will be coordinated in such a manner that, at any given time, a limited numbers of trucks will be at the site to reduce truck traffic on surrounding surface streets and to reduce the generation of dust. For safety purposes and to minimize dust, all onsite vehicles will be required to maintain slow speeds (e.g., less than five miles per hour).

Shipment Documentation and Record Keeping

Shipment Documentation

The appropriate non-hazardous waste bill of lading or Uniform Hazardous Waste Manifest will be used to track the movement of waste soils from the point of generation to the disposal facility. Prior to transporting the excavated soil that exceeds hazardous waste thresholds offsite, an authorized BRIDGE Housing representative will sign each waste manifest. Following disposal of material, copies of the manifests signed by the disposal facility will be provided to BRIDGE Housing for records. BRIDGE Housing will maintain a copy of the waste manifest for each truckload onsite until completion of the project. At a minimum, the shipping document will include the following information:

- Name and address of waste generator
- Name and address of waste hauler
- Name and address of disposal facility
- Description of the waste
- Quantity of waste shipped

Record Keeping

Waste transportation will comply with the applicable California Vehicle Code (CVC), CHP Regulations (13 CCR), California State Fire Marshal Regulations (19 CCR), DOT Regulations, Title 49, Code of Federal Regulations (49 CFR), and the California Health and Safety Code (HSC) and 22 CCR. These requirements include keeping of appropriate records during transportation activities. Nibbi Brothers will be responsible for maintaining a record book during onsite activities. The record book will serve to document observations, personnel onsite, as well as truck arrival and departure times.

Health and Safety

All contractors will be responsible for operating in accordance with applicable federal, state, and local laws and regulations. All personnel working at the site will be required to be familiar with the HASP (Appendix A). The HASP will be provided to each onsite contractor and communicated via tailgate safety meetings to all onsite workers by the Site Safety Officer (SSO). The HASP contains contaminant descriptions, hazard analysis, and requirements for the containment and cleanup of an accidental release along with basic safety requirements, personnel in charge, contact information and a map and directions to the nearest hospital. The SSO will be responsible for reviewing the HASP with the onsite workers prior to commencing work.

Truck drivers will be adequately trained and equipped to implement the requirements of the HASP. In the event of an offsite release or accident involving the transported material, the driver will immediately notify the SSO.

During site excavation and loading activities, Nibbi Brothers will monitor and take appropriate site control measures to minimize fugitive dust that may be generated from excavation and

transportation activities. Such control measures will follow the necessary regulations and the HASP. If necessary, all excavated areas and soil stockpiles will be sprayed with water to reduce dust generation.

Contingency Plan

The waste hauler will be required to have a contingency plan prepared for emergency situations (vehicle breakdown, accident, diesel spill, fire, explosion, etc.) during transportation offsite. In the event of an offsite release, accident involving transported material, or in the event of encountering potentially hazardous road conditions (e.g., accident sites, inclement weather, and nightfall or other cause of restricted visibility) alternate routes may be used or transport will be delayed. Truck drivers will be in direct radio communication with their dispatchers. In the event of equipment failure or other contingency, the dispatcher will contact the most appropriate source of aid. Notification will immediately be given to the CHP and other appropriate agencies.

It is not anticipated, but if soil located outside of the known impacted soil areas is to be excavated and disposed of offsite, then management of this soil will be conducted in accordance with this SMP and HASP.

Final Remedial Action Completion Report

Upon completion of the above-described scope and receipt of all the analytical data and waste disposal manifests, Rincon will finalize the activities and findings in the Draft Remedial Action Completion Report. The report will be will be signed and stamped by the Professional Geologist overseeing the project and will be submitted to the DPH for review and approval.

References

Ankrom Moisan, 50% Design Development Plans, 490 South Van Ness, September 1, 2017.

- AllWest Environmental, Inc. Environmental Site Assessment, 490 S. Van Ness Avenue, San Francisco, California, January 16, 2010.
- Earth Mechanics Consulting Engineers, Report Geotechnical Investigation Planned Development at 490 South Van Ness Avenue, San Francisco, California, May 8, 2013.
- Hydro Analysis, Inc., Request for Low Risk Case Closure, 490 South Van Ness Avenue, San Francisco, California, prepared for JCN Developers, LLC, December 7, 2012.
- _____. Quarterly Groundwater Monitoring Report for Quality Tune-Up, 490 South Van Ness Avenue, San Francisco, California, October 9, 2012.
- _____. Site Mitigation Plan, 490 South Van Ness Avenue, San Francisco, California, prepared for JCN Developers, LLC, May 9, 2013.
- Norris, Robert M., and Webb, Robert Wallace. Geology of California, 1990.
- Rincon Consultants, Inc., Phase I Environmental Site Assessment, 490 South Van Ness Avenue, San Francisco, California, prepared for the San Francisco Mayor's Office of Housing and Community Development, July 17, 2015.
- San Francisco Bay Regional Water Quality Control Board (RWQCB), Environmental Screening Levels Residential Soil,

<u>http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.shtml,</u> February, 2016.

- San Francisco Department of Public Health, Remedial Action Completion Certification, March 21, 2013 (includes the January 10, 2013 Case Closure Summary).
- United States Geologic Survey Geologic Map, San Francisco North Quadrangle, 1958.

490 South Van Ness Avenue, San Francisco, California Site Mitigation Plan



Vicinity Map



Site Map with Extent of Previous Excavation



Site Map with Potential Areas of Residual Contamination Figure 3

APPENDIX A SITE SPECIFIC HEALTH & SAFETY PLAN

INTRODUCTION

This document contains the safety and health measures designed to protect onsite workers from environmental hazards that may be encountered during the completion of environmental monitoring and sampling activities specific to the subject property, as outlined in the Draft – September 2017 Site Mitigation Plan (SMP). Described in this document are the procedures that environmental personnel working at the site are to follow to minimize the potential for health and safety hazards during the proposed course of work.

Additionally, the contents of this Health and Safety Plan (HASP) are intended to complement the onsite General Construction Contractor's Community Health and Safety Plan, specifically with regard to environmental issues that may be encountered at the subject property.

This HASP will be provided to the General Construction Contractor prior to the start of environmental monitoring and sampling. Additionally, the contents of this HASP should be communicated via daily morning tailgate safety meetings to other onsite workers by the Rincon Site Safety Officer (SSO). The HASP contains contaminant descriptions, hazard analysis, and requirements for the containment and cleanup of known onsite hydrocarbon impacts or an accidental release. This HASP also outlines basic safety requirements, personnel in charge, contact information, and a map and directions to the nearest hospital. The SSO will be responsible for reviewing the HASP daily with the onsite workers prior to commencing work.

Truck drivers will be adequately trained and equipped to implement the requirements of this HASP. In the event of an offsite release or accident involving the transported hazardous waste and/or non-hazardous waste, the driver will immediately notify the SSO.

SITE DESCRIPTION

The subject property is an approximately 0.327-acre parcel located on the northwest corner of 16th Street and South Van Ness Avenue and south of Adair Street in San Francisco, California. The subject property is currently developed with the remnants of a gasoline service station and auto repair shop. It is developed with a vacant, single-story structure equipped with repair bays and an office, a storage yard, two canopies, and three former pump islands.

Location	490 South Van Ness Avenue, San Francisco, California		
Site Use	Former gasoline service station; remnant service station structure		
	(unoccupied)		
Area Affected	Soil matrix and groundwater		
Surrounding Land Use	Commercial		
Site Topography	Generally flat		
Site Accessibility	From Van Ness		

PROJECT BACKGROUND/SCOPE OF WORK

Eight USTs were located on the northern half of the subject property. Four of the USTs were removed in 1998 and the remaining four USTs were removed in 2012. From January to March 2012, corrective action remediation consisted of the excavation of contaminated soil, along with the extraction of contaminated shallow groundwater. Approximately 4,500 cubic yards of impacted soil were removed to depths of between 8 and 14 feet on the subject property and disposed offsite. The release case was closed under the San Francisco Department of Public Health's Low Threat Closure Policy; however, residual contamination remains on the subject property.

Based on the presence of impacted soil remaining onsite, Rincon has prepared a Site Mitigation Plan (SMP) for the proposed onsite construction activities. The SMP includes the following general scope of work:

Pre-Construction Excavation Soil Sampling at the following locations:

- 1. Beneath the former pump islands
- 2. Inside the building from the subsurface (sub-slab)
- 3. From onsite drums
- 4. Adjacent to the hydraulic lifts
- 5. Onsite fill for the collection of samples for Maher Suite analysis

Remedial Excavation Environmental Monitoring and Soil Sampling Tasks, such as but not limited to:

- 1. Dust monitoring
- 2. Visual and olfactory environmental monitoring during groundbreaking activities
- 3. Monitoring and sampling post hydraulic lift removal
- 4. Excavation soil sampling
- 5. Stockpile soil sampling
- 6. Construction dewatering sampling

ONSITE ORGANIZATION AND CONTROL

A "to be determined" representative of Rincon Consultants will be the designated SSO/Project Team Leader for this site and will be responsible for implementation of this HASP. The chosen SSO will have completed the 40-hour Hazardous Materials and Waste Operations (HAZWOPER) training and the 8-hour refresher training pursuant to 29 CFR 1910.120. If the SSO is not onsite, then another Rincon staff member will be the designated site safety officer. All Rincon personnel on the site will have completed the 40-hour HAZWOPER and the 8-hour refresher training pursuant to 29 CFR 1910.120. The following personnel are designated to carry out stated job functions on site.

Project Team Leader	To be determined Rincon personnel
Site Safety Officer	To be determined Rincon personnel
Subcontractor(s)	To be determined
Regulatory Agency Representative	City and County of San Francisco Department of
	Public Health (DPH), Maher Program

Project Team Leader – All Rincon Personnel arriving or departing the site should log in and out with the Project Team Leader. All activities on site must be cleared through the Project Team Leader. The Project Team Leader will collect and prepare samples, and decontaminate equipment as necessary.

Site Safety Officer – The SSO is responsible for ensuring that all Rincon personnel present onsite are aware of the Health and Safety Plan procedures. The SSO is responsible for ensuring that all Rincon personnel onsite have been adequately trained for the work to be completed onsite (HAZWOPER & Refresher classes).

Prior to commencement of work, the SSO will review the potential physical and chemical hazards associated with site operations, and review safe work practices.

Site Control

The designated site safety officer will coordinate access control and security on site. Three work areas will be established at the site as follows:

- Restricted Zone (Exclusion Zone)
- Decontamination Zone (Contamination Reduction Zone) for cleaning personnel and equipment
- Clean zone (Support Zone)

Restricted Zone – all areas where hazardous materials operations are being conducted will be considered restricted zones. Only authorized personnel may enter this area. There will be no smoking, eating, chewing gum, or drinking in the exclusion zone.

Decontamination Zone - outside of the Restricted Zone, but within the boundaries of the subject property construction fencing. Only authorized personnel may enter this area; no public access permitted.

Clean Zone - beyond the area of field activities, outside of the subject property boundaries/construction fencing.

Work zones will be established during the tailgate safety meetings at the beginning of the workday. Based on the onsite presence of structures, trees or debris, these zones will be adjusted in the field.

Depending on the level of noise that is produced due to nearby traffic, hand signals may need to be used within the work zones described above. There are two main hand signals that will be used within the work zones:

- Thumbs up "OK, Continue Working"
- Hand in front, palm facing away "Stop Working"

Site personnel will also be familiar with the following emergency hand signals:

Hand Gripping Throat:	Cannot Breathe. Respirator Problems.
Grip Team Member's Wrist or Both Hands on Team Member's Waist	Leave Site Immediately, No

If other hand signals are needed, they will be discussed and determined in the field. All new hand signals will be noted in the onsite field log.

POTENTIAL SITE HAZARDS

Chemical Hazards

Volatile organic compounds (VOCs), total petroleum hydrocarbons (TPH), metals, and polychlorinated biphenyls (PCBs) may be present in the onsite soil and in groundwater generated from construction dewatering. Based on the nature of the onsite activities (largescale construction excavation using heavy machinery), exposure to the potential contaminants is possible.

Chemical Exposure Monitoring Plan

The following actions will be implemented to reduce potential exposure to the onsite contaminants:

- Dermal exposure will be limited by the use of nitrile (chemical resistant) gloves during sample collection, sample preparation, and equipment decontamination (See Personal Protective Equipment [PPE] section below).
- Ingestion exposure will be limited by thorough decontamination of hands and exposed body parts prior to smoking, eating, or engaging in other activities (See Decontamination Procedures section below).

• Inhalation exposure will be limited through the use of environmental monitoring instruments (See Environmental Monitoring section below).

PHYSICAL HAZARDS

Physical/mechanical hazards associated with site activities, including:

- Slipping on wet or oily surfaces.
- Tripping over hoses, tools, equipment, or uneven terrain.
- Inhalation of dirt, dust, and other airborne particulates.
- Underground utilities, especially pipelines and fiber optics cables.

Sampling activities at the site will be conducted by Rincon personnel. Rincon personnel will use caution and appropriate PPE when working with equipment. PPE shall include at a minimum steel toed boots, a hard hat, shatter resistant safety glasses, and an orange safety vest.

Environmental Hazards

Weather stresses, including heat and rain, must be considered by the site safety officer. If heat exceeds 80 F, additional fluids and breaks are to be taken. In the case of rain, extra care is to be followed when working around heavy machinery.

Noise exposure should be minimized through the use of ear plugs.

ENVIRONMENTAL MONITORING

Dust monitoring will be conducted onsite and in accordance with Rincon's Dust Control Plan (DCP). Rincon will have a photoionization detector (PID) onsite to monitor for VOCs in soil and air.

PERSONAL PROTECTIVE EQUIPMENT

Based on the available information, work will be initiated using Level D personal protective equipment (PPE). Based on the site monitoring to be conducted (described in the following section), PPE may be modified as indicated. The specific PPE levels are as follows:

Level DStandard work clothing and chemical resistant gloves:Work clothing includes steel toe boots, long pants, shatter resistant
safety glasses, a hardhat, and an orange safety vest.

NO CHANGES TO THE SPECIFIED LEVELS OF PROTECTION SHALL BE MADE WITHOUT THE APPROVAL OF THE SSO AND THE PROJECT TEAM LEADER.

DECONTAMINATION PROCEDURES

Personnel and equipment leaving the exclusion zone shall be thoroughly decontaminated. Hands shall be washed prior to smoking, eating, or engaging in other activities. Normal decontamination will consist of washing with a non-phosphate detergent solution and rinsing with potable water.

MEDICAL MONITORING

Rincon personnel engaged in project operations that expose them to hazardous wastes, hazardous substances, or any combination of hazardous wastes or hazardous substances shall be participants in a Medical Surveillance Program, and must be cleared by the examining physician to wear respiratory protection devices and protective clothing for working with hazardous materials. Respirator fit tests and medical evaluations to wear a respirator are performed annually on Rincon personnel. The use of a respirator is not anticipated during this course of work.

STANDARD SAFETY PROCEDURES

Personnel working onsite will work in a safe manner at all times. These safe manners are described below.

Personnel entering the site work area will sign statements attesting they have read and understood, and agree to follow, the Site Safety Plan.

Personnel are responsible for the proper use of all PPE.

Torn protective clothing or other damaged PPE will be repaired or replaced immediately.

Eating, drinking, chewing gum or tobacco, and smoking are not allowed on the site except in designated areas. Personnel will be required to wash their hands prior to work breaks.

EMERGENCY RESPONSE PLAN

Emergency Telephone Numbers/Assistance

If an emergency occurs during the proposed fieldwork, the following emergency telephone numbers should be used:

Fire	Dial 911	
Ambulance	Dial 911	
Hospital	Saint Francis Memorial Hospital	
	900 Hyde Street	
	San Francisco, CA	
	(415) 353-6000	

24-Hour Contact

Rincon Consultants 760-918-9444 (8 am to 5 pm)

Meghan Hearne: 760-214-2262 (During and after office hours)

The hospital is located approximately 12 minutes from the subject property. If an emergency should occur, the hospital will be called immediately. A telephone will be available onsite during the fieldwork. A first aid kit will be available inside the Rincon vehicle.

Route to Hospital

Head north on South Van Ness Avenue toward Adair Street Turn right onto Bush Street Turn left onto Leavenworth Street Turn left at the 1st Cross Street onto Pine Street Saint Francis Medical Center will be on the left

See Attached Map.

Emergency Responses/Procedures

If there is a potentially life threatening or serious accident, the emergency contacts should be made immediately. Response personnel should be informed of the potential danger if toxic chemicals are involved. Information regarding chemical emergencies can be obtained through the CHEMTREC 24-hour emergency hotline (800-424-9300).

If toxic gas inhalation occurs, personnel in the immediate vicinity of the gas leak are to evacuate to an upwind location and emergency response personnel are to be contacted. Staff should not attempt to rescue any unconscious persons. If victims can be safely evacuated without endangering other personnel, victims are to be given fresh air, artificial respiration, or other pertinent procedures.

For minor abrasions or cuts, the affected area should be washed with soap and water, and the wound bandaged. A first aid kit is to be brought to each site and kept in an accessible location. The first aid kit will be equipped with materials to treat minor cuts and abrasions.

In the event of a fire, the following procedures will be followed. For small fires, the onsite fire extinguisher shall be used. For large fire (beyond our control), personnel will immediately leave the area and meet at an upwind location. The fire department will be called using 9-1-1. All personnel will wait for the arrival of the fire department at a safe distance from the fire.

Personnel working on this project are to acknowledge having read the plan by signing the attached sheet.

By signing the following table, site personnel acknowledge that they have read the above Site Safety Plan and are familiar with its provisions.

NAME	SIGNATURE	DATE	COMPANY

Y(OUR TRIP TO:	mapapasi
900	Hyde St, San Francisco, CA, 94109-4806	
10	MIN 2.2 MI :	
Est	t. fuel cost: \$0.30	
Trip	time based on traffic conditions as of 11:11 AM on September 20, 2017. Current Traffic: Hear	vy
~	Start of next leg of route	
ô	 Start out going north on S Van Ness Ave toward Adair St. 	1 00 total miles
	I nen 1.09 miles	1.09 total miles
р	2. Turn right onto Golden Gate Ave.	
-	Golden Gate Ave is just past Redwood St.	
	It you are on Van Ness Ave and reach Elm St you've gone a little too far.	
	Then 0.09 miles	1.18 total miles
2	3. Take the 1st left onto Polk St.	
Т	If you reach Larkin St you've gone a little too far.	
	Then 0.52 miles	1.70 total miles
	A Turn right onto Bush St	
р	Bush St is just past Fern St.	
	If you reach Frank Norris St you've gone a little too far.	
	Then 0.27 miles	1.07 total miles
	Then 0.27 times	1.97 total miles
i	5. Turn left onto Leavenworth St.	
	If you reach Jones St you've gone a little too far.	
	Then 0.07 miles	2.04 total miles
÷	6. Take the 1st left onto Pine St.	
Т	lf you reach California St you've gone a little too far.	
	Then 0.09 miles	2.13 total miles
	7. Take the 1st left onto Hyde St.	
i	If you reach Larkin St you've gone a little too far.	
	Then 0.04 miles	2.16 total miles
~		2.10 10101 111103
Ş	8. 900 Hyde St, San Francisco, CA 94109-4806, 900 HYDE ST is on the left . <i>If you reach Bush St you've gone a little too far.</i>	

Use of directions and maps is subject to our Terms of Use. We don't guarantee accuracy, route conditions or usability. You assume all risk of use.



APPENDIX B DUST CONTROL PLAN

INTRODUCTION

Rincon has prepared this Dust Control Plan (DCP) in conjunction with the Site Mitigation Plan (SMP) prepared in support of the residential improvements planned for the property located at 490 South Van Ness Avenue, San Francisco, California (subject property - Figure 1, Vicinity Map). The purpose of this DCP is to describe the best management practices to be followed to minimize fugitive dust that may be generated during the excavation, storage, loading, and transportation of impacted soil derived from the subject property.

SITE DESCRIPTION

The subject property is an approximately 0.327-acre parcel located on the northwest corner of 16th Street and South Van Ness Avenue and south of Adair Street in San Francisco, California (Figure 1). The property is currently developed with the remnants of a gasoline service station and auto repair shop. It is developed with a vacant, single-story structure equipped with repair bays and an office, a storage yard, two canopies, and three former pump islands. Nearby properties generally consist of residential and commercial land use.

PROJECT BACKGROUND

As described in the Draft - September 2017 SMP, the subject property was used as a gasoline station from approximately 1936 to approximately 1983. Following the closure of the service station, the site was occupied by a Quality Tune-Up automobile repair shop for a number of years. On September 9, 1998, one 8,000-gallon gasoline underground storage tank (UST), two 6,000-gallon gasoline USTs, and one 550-gallon waste oil UST were removed from the site. Due to obvious subsurface contamination and free-floating product, the tank pit was over-excavated and 80 cubic yards of contaminated soil and 240 gallons of contaminated water were reportedly removed. An unauthorized release case was opened on September 22, 1998. Between January 2011 and March 2012, a soil excavation project was undertaken in order to remove subsurface contamination at the site. The unauthorized release case was closed by the DPH in a Remedial Action Completion Certification letter, eight USTs were located on the northern half of the subject property. Four of the USTs were removed in 1998 and the remaining four USTs were discovered abandoned beneath the sidewalk along Adair Street and removed during remedial excavation in 2012.

Based on the presence of impacted soil remaining onsite and according to the January 10, 2013 case closure summary, "The residual concentrations following remedial excavation do not trigger further remedial action under the Low Threat Closure Policy. Mitigation measures may be enacted as part of the planned construction project. Mitigation measures may include

passive or active ventilation in and below a proposed below grade garage and/or passive venting along the structure foundation in areas of peripheral residual contamination." Additionally, a 2010 ESA report for the subject property issued by AllWest Environmental, Inc. indicated that that if the property is to be redeveloped, and if groundwater is encountered, that groundwater should be reevaluated for total petroleum hydrocarbons (TPH) prior to discharge to the sewer system (dated January 16, 2010).

RESIDUAL SOIL AND GROUNDWATER IMPACTS

Soil Results

The residual concentrations of constituents present in onsite soil were reported in the 2013 case closure summary as follows:

- 1,400 milligrams per kilogram (mg/kg) of total petroleum hydrocarbons as gasoline (TPH-g)
- 2.6 mg/kg of benzene
- 1.0 mg/kg of toluene
- 8.4 mg/kg of ethyl benzene
- 21 mg/kg of xylenes
- 2.9 mg/kg of lead

Residual concentrations of methyl tert-butyl ether (MTBE) were not detected in soil. Note – these concentrations reflect depths of 12 to 13 feet bgs and may be at depths below groundwater.

Groundwater Results

The residual concentrations of contaminants in groundwater were reported as follows:

- 1,700 micrograms per liter (μg/L) of TPH-g collected from dewatering casing (DC) 4
- 210 μg/L of benzene and toluene collected from MW-9
- 42 μg/L of ethyl benzene collected from DC-4
- 460 μg/L of xylenes collected from DC-4

Residual concentrations of MTBE and lead were not detected in groundwater. Note – these concentrations were presented in the *Quarterly Groundwater Monitoring Report for Quality Ture-Up*, dated October 9, 2012 and prepared by Hydro Analysis, Inc.

DUST CONTROL PROCEDURES

Due to the confirmed presence of residual hydrocarbons in onsite soil and groundwater, the project will implement dust control measures in accordance with Article 22B, Section 1242 of the San Francisco Health Code, outlined below:

- A. Reclaimed water will be used for dust control and soil compaction (In accordance with Article 21 of the San Francisco Public Works Code, *Restriction of Use of Potable Water for Soil Compaction and Dust Control Activities*) unless permission is obtained from the City Water Department to use potable water.
- B. Wetting down areas around soil improvement operations, visibly dry disturbed soil surface areas, and visibly dry disturbed unpaved driveways at least three times per shift per day (using reclaimed water).
- C. Applying water three times daily or applying non-toxic soil stabilizers on all unpaved access roads, parking areas, and staging areas at the construction site (using reclaimed water).
- D. Sweeping streets with water sweepers at the end of each day if visible soil material is carried onto adjacent paved roads (using reclaimed water).
- E. Sweeping of surrounding streets during demolition, excavation, and construction at least once per day to reduce particulate emissions (using reclaimed water).
- F. Analysis of the wind direction and terminating excavation, grading, and other construction activities when wind speeds exceed 25 miles per hour.
- G. Establishing requirements for when dust generating operations have to be shut down due to dust crossing the subject property boundary or if dust is contained within the property boundary but not controlled after a specified number of minutes.
- H. Establishing a hotline for surrounding community members to call and report visible dust problems so that the Applicant can promptly fix those problems; posting signs around the site with the hotline number and making sure that the number is given to adjacent residents, schools, and businesses.
- I. Limiting the area subject to excavation, grading, and other demolition or construction, activities at any one time.
- J. Minimizing the amount of excavated material or waste materials stored on the subject property.
- K. Loading haul trucks carrying excavated material and other non-excavated material so that the material does not extend above the walls or back of the truck bed. Tightly cover with tarpaulins or other effective material all trucks hauling soil, sand, and other loose materials before the trucks leave the loading area. Wet prior to covering if needed.
- L. Establishing speed limits so that vehicles entering or exiting construction areas shall travel at a speed that minimizes dust emissions. This speed shall be no more than 5 miles per hour.
- M. Installing wheel washers to clean all trucks and equipment leaving the construction site. If wheel washers cannot be installed, tires or tracks and spoil trucks shall be brushed off before they reenter City streets to minimize deposition of dust-causing materials.
- N. Hydroseeding inactive construction areas, including previously graded areas inactive for at least 10 calendar days, or applying non-toxic soil stabilizers.

O. Installing dust curtains, plastic tarps or windbreaks, or planting tree windbreaks on the property line on windward and downwind sides of construction areas, as necessary.

ALTERNATIVE DUST CONTROL PROCEDURES

Dust control measures in accordance with Article 22B, Section 1242 of the San Francisco Health Code will be implemented by the general contractor; however, alternative work methods may be utilized by the general contractor as long as dust control measures are effective in controlling fugitive dust during demolition and construction excavation activities and meet requirements of Article 22B, Section 1242 at a minimum.

DUST NOTIFICATIONS

Nearby properties will be provided with a dust hotline to contact the designated dust monitor to register complaints of fugitive dust. The hotline notice will also be posted on signs at the project fence line and will be distributed to adjacent residences surrounding the property. The hotline notice will include the general contractor's point of contact name(s) and telephone number(s). Any complaints of fugitive dust from adjacent properties will be addressed within 4 hours of receiving the complaint at the hotline.

REFERENCES

Article 21 of the San Francisco Public Works Code, Restriction of Use of Potable Water for Soil Compaction and Dust Control Activities.

AllWest Environmental, Inc. Environmental Site Assessment, 490 S. Van Ness Avenue, San Francisco, California, January 16, 2010.

Rincon Consultants, Inc., Site Mitigation Plan, 490 South Van Ness Avenue, San Francisco, California, Draft – September 2017.

San Francisco Department of Public Health, Remedial Action Completion Certification, March 21, 2013 (includes the January 10, 2013 Case Closure Summary).

San Francisco Health Code Article 22B, Section 1242, Construction Dust Code Requirements.