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Soil Management Plan

Hamilton Square Main Gate Road and C Street

Prepared for

Thompson Development Inc.

October 2015



595-04-14-01



WEST YOST ASSOCIATES

consulting engineers

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AN AFFILIATE OF WEST BAY BUILDERS INC.

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SOIL MANAGEMENT PLAN



1.0 INTRODUCTION

This Soil Management Plan (SMP) has been prepared to provide procedures to guide soil management during excavation, confirmation sampling, and backfilling operations at the Hamilton Square Site (Site) located at Main Gate Road and C Street in Novato, California (Figure 1: Site Location Map). The SMP has been modified from the Draft Soil Management Plan for the Site prepared by Ninyo and Moore for West Bay Builders in 2007 (Ninyo & Moore, 2007). The SMP has been prepared in accordance with the *Quitclaim Deed and Environmental Restrictions Pursuant to California Civil Code Section 1471 for Hamilton Square Parcel - Novato, California* (Covenant). A copy of the Covenant is presented in Appendix A. The Covenant was prepared by the Department of Navy (DON), the Department of Toxic Substances Control (DTSC), and the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) in April 2005 (DON, DTSC, SFBRWQCB, 2005). The applicable Article of the Covenant relating to the soil and groundwater management practices at the Site is Article I, Soil and Groundwater Management, summarized as follows:

- Part 1: The DON, DTSC, and SFBRWQCB will concur on a dewatering plan prior to conducting any dewatering activities on the Site;
- Parts 2 and 3: The owner and/or occupant shall not disturb or use the existing groundwater wells or install groundwater wells without approval from the DON, DTSC, and SFBRWCQB;
- Part 4: The owner or occupant shall not conduct any actions that will affect the existing groundwater plume (i.e. creating groundwater recharge areas, surface improvements, or disposal trenches) unless conducted in accordance with a work plan approved by the DON, DTSC, and SFBRWCQB;
- Part 5: The owner or occupant shall not disturb soil below 5 feet below ground surface (ft bgs) on the entire property without a soil management plan and a health and safety plan;
- Part 6: The owner or occupant shall not disturb soil below 3 ft bgs in the area of known residual contamination in the area of Building 970 without a soil management plan and a health and safety plan and without a minimum of 30 days' notice; and,
- Part 7: Removal and disposal of contaminated soil and groundwater shall be conducted in accordance with all applicable Federal, State, and local regulations governing such removal.

This SMP outlines the procedures for the excavation and removal of the building footings and soil in accordance with the Covenant at the Site. These activities will begin after the DON, SFBRWQCB, and DTSC have approved this SMP. This SMP is part of a remedial action plan (RAP) that has been prepared for Thompson Development, Inc.



2.0 BACKGROUND

The Site is located approximately 20 miles north of San Francisco, in the City of Novato, County of Marin, California. The Site is bordered on the south by Main Gate Road, on the north by former underground storage tanks (UST) site 957, on the east by C Street, and on the west by residential development.

According to Ninyo & Moore (2005), the Site is approximately 2.7 acres in size and is occupied by an abandoned building (Building 970) on the eastern section of the Site, formerly occupied by the Naval Exchange service station (NEX). The Site was originally part of the Hamilton Army Airfield (HAAF) which was constructed between 1932 and 1935 and encompassed 927 acres. The HAAF was transferred to the U.S. Air Force (USAF) in 1947. The USAF deactivated the facility in 1974 and transferred the property to various federal agencies, including the DON. The NEX was operated by the DON as a gasoline service station from 1970 to 1990.

The Site was closed in the early 1990s and between January, 1995 and July, 1996 three 10,000-gallon USTs and one 1,000-gallon waste oil UST were removed from the southeast and central areas of the Site, respectively (Figure 2: Site Plan). Subsequent investigations of the soil and groundwater on the Site resulted in the detection of total petroleum hydrocarbons as diesel (TPHd), as motor oil (TPHmo), as hydraulic oil (TPHo), and as gasoline (TPHg); total oil & grease (TOG); benzene, toluene, ethylbenzene, total xylenes (BTEX); and methyl tert butyl ether (MTBE) in soil and groundwater. An in situ air sparging and soil vapor extraction system (IAS/SVE) was installed in 1998, and operated from May 1998 through January 2009 to assist in soil and groundwater remediation on the Site.

Three hydraulic lifts and associated subsurface features were excavated and removed from inside Building 970 in April 2000. Contaminated soil and groundwater associated with the excavation activities were removed from the Site and disposed at permitted hazardous waste management facilities. Some hydrocarbon-impacted soil in the vicinity of the building foundations located in the northern wing of Building 970 was not excavated due to potential undermining and destabilization of the structural integrity of the building.

SFBRWQCB Order No. 00.064 issued cleanup requirements for the Site in 2000. Since the order was issued, several other regulatory documents have been prepared. These include a Final Revised Risk Assessment (Battelle 2001) prepared by the DON with the guidance of the DTSC, and the Covenant restricting use of the property for commercial and industrial use (DON, DTSC, and SFBRWQCB, 2005). The Site is currently under regulatory oversight by the SFBRWQCB, with guidance on human health risk issues from DTSC.

2.1 Soil and Groundwater Impacts for the Hamilton Square Property

The environmental reports prepared for the Hamilton Square Property were completed under the direction and oversight of the SFBRWQCB. A brief description of environmental investigations conducted at the Site was provided in the Ninyo & Moore 2005 Due Diligence Evaluation, Hamilton Square (Ninyo & Moore, 2005). Ninyo & Moore conducted a Limited Phase II Environmental Assessment of the Site in 2005 and prepared a report with the results for West Bay Builders in 2008 (Ninyo & Moore, 2008). The results of Ninyo & Moore's assessment provide the most recent subsurface soil analytical data from the Site and, along with subsurface data collected during previous investigations at the Site, provide a portion of the basis of the

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remedial action by excavation. Hydrocarbon impact to soil and groundwater based on these investigations is presented in Sections 2.1.1 and 2.1.2 below.

2.1.1 Hydrocarbon Distribution in Soil

Based on the most recent soil sampling by Ninyo & Moore (2005) and on previous investigations by Battelle (2002), the Site can be divided into four areas with hydrocarbon-impacted soil. As shown on Figure 3, soil impacted by TOG, and by TPHd and TPHmo exceeding residential Environmental Screening Levels (ESLs) of the SFBRWQCB, remains underneath Building 970 and adjacent to the west side of the building at various depths, most ranging from 3 to 6 ft bgs. Soil impacted by TPHo remains at a depth of approximately 10 ft bgs beneath the building at the former location of the northern hydraulic lift (H-N). Other than in these specific areas, the vertical extent of TPHd/o/mo below 6.0 ft bgs beneath the building has not yet been delineated.

Soil impacted by TPHmo at a concentration exceeding residential ESLs remains in the former waste oil tank location (UST970-waste oil) at a depth of 4.5 ft bgs and in the southwest corner of the UST 970-3 excavation at a depth of 0.5 ft bgs.

Soil impacted by TPHg at concentrations exceeding current residential ESLs may remain to a depth of 9.5 ft bgs where it was detected during Battelle's 2000 Site investigation (Battelle, 2001), downgradient from the former gasoline UST location (USTs 970-1, 970-2, and 970-3) at the south end of the Site and in a small area between the west and center pump islands. It has likely attenuated due to the remediation conducted at the Site. It is no longer detected in groundwater sampled at the Site.

Soil impacted by MTBE remains downgradient of the former gasoline UST location (USTs 970-1, 970-2, and 970-3) at the south end of the Site, in the vicinity of and downgradient of the pump islands, and, based on the extent of the MTBE in groundwater plume, likely underneath the station building. Concentrations of MTBE detected in soil during Ninyo & Moore's 2005 sampling event ranged from 0.21 to 3.0 mg/kg at depths ranging from 0.5 to 4.5 ft bgs in these areas.

2.1.2 Groundwater

Based the most recent annual groundwater sampling event and the DON's ongoing long-term groundwater monitoring at the Site (Battelle, 2014), groundwater impacted by MTBE exceeding residential ESLs remains in a plume that extends northward from the former gasoline UST location at the south end of the Site to approximately 30 feet north (downgradient) of the pump islands. MTBE concentrations in groundwater have attenuated as a result of remediation between 1998 and 2009, and the plume beneath the Site has contracted and separated from the UST 957 plume with which it was commingled. During the November 2013 groundwater sampling event at the Site, the highest concentration of MTBE detected in the groundwater plume beneath the Site was 55 micrograms per liter (μ g/l) in well MW-4, which is immediately north (downgradient) of the pump islands (Battelle, 2014).



2.1.3 Removal of Subsurface Features

Subsurface features removed from beneath Building 970 included three hydraulic lifts, two oil/water separator systems, associated lines, floor drains, and four buried drums (acting as subsurface storage tanks) with associated piping. USTs 970-1, 970-2, 970-3, and 970-Waste Oil were removed in April 2000.

2.1.4 Risk Assessment

A *Tier 3 Risk-Based Corrective Action Assessment for Former Underground Storage Tank Site* 957/970 (Battelle, 1999) and a *Final Revised Risk Assessment* (Battelle, 2001) were prepared by Battelle in 1999 and 2001, respectively. The risk assessments reported that if the Site was used for commercial and/or industrial purposes it would not pose an unacceptable cancer risk or non-cancer hazard to the users or occupants of the Site. However, restrictions were established in the Covenant agreement. The proposed use of the Site has since been changed to residential.

2.1.5 Subsurface Investigation Restrictions Based on the Covenant

The land use restrictions were prepared to protect human health, the environment, and state waters from hazardous materials in accordance with the California Water Code Division 7. The restrictions are based on the previous Site investigations and risk assessments. The Covenant restricts disturbing the soil at or below 3 ft bgs in the area of known residual contamination beneath the foundation of Building 970, without a DON, DTSC, and SFBRWQCB approved SMP, and a Health and Safety Plan (HSP). The Covenant also restricts soil disturbance below 5 ft bgs in all areas of the Site without DON, DTSC, and SFBRWQCB approval. Additionally, on-site dewatering, destroying, moving, or installing groundwater wells, and impacting the existing groundwater plumes (i.e. creating groundwater recharge areas), and constructing surface improvements, or disposal trenches are prohibited without approval from the DON, DTSC, and RWCQB.

3.0 PURPOSE

This SMP provides procedures for the effective handling of soil and groundwater as well as the prompt communication of the discovery of unknown environmental features to the SFBRWQCB during Site excavation, confirmation sampling, and backfilling activities. This SMP and the general contractor's HSP will provide guidance and procedures to control the exposure of Site workers and the general public to dust, vapors, and/or odors associated with these operations.

4.0 PROGRAM PARTICIPANTS

4.1 West Yost Participants

West Yost Associates (West Yost) will act as the environmental consultant and provide field oversight and management services for the SMP. West Yost personnel will include a project manager and field coordinator.

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The SMP field coordinator for this project is:

• Daria Isupov, West Yost (707) 666-4813

The alternate SMP field coordinator for this project is:

• Patrick O'Connell, West Yost (925) 949-5811

The SMP project manager for this project is:

• Peter Dellavalle, West Yost (707) 666-4814

The alternate SMP project manager for this project is:

• Andy Rodgers, West Yost (707) 666-4812

4.2 Owner's Participants

The owner's project director is:

• Casey Clement, Thompson Development (415) 456-8972

4.3 General Contractor's Participants

The general contractor's project manager, Site superintendent, and field health and safety monitor is:

• Bryan Musco, Musco Excavators, Inc. (707) 975-6885

4.4 Regulatory Agency Participants

- Margarete Beth, SFBRWQCB (510) 622-2338
- Theresa McGarry, DTSC (916) 255-3664
- Wilson Doctor, DON (619) 532-0928

5.0 INDIVIDUAL RESPONSIBILITIES

5.1 West Yost SMP Field Coordinator

The SMP field coordinator shall be responsible for:

- Monitoring excavation and confirmation sampling operations visually and with the appropriate monitoring equipment;
- Reporting suspected unknown features and other unknown environmental conditions to the general contractor, the SMP project manager, and the owner's project director. Owner's project director or a designee will initiate and approve all non-emergency contacts;



- Coordinating activities related to unknown features and other unknown environmental conditions, as directed by the West Yost SMP project manager and after having been permitted (if required);
- Collecting samples and arranging for laboratory analyses, if and when needed,; and
- Maintaining records of soil sample locations.

5.2 West Yost SMP Project Manager

The SMP project manager shall be responsible for:

- Monitoring the work of the SMP field coordinator;
- Communicating field activities to the owner's project director;
- Communicating with the SMP field coordinator to investigate unknown features and other unknown environmental conditions, if encountered;
- Evaluating results of soil sampling in accordance with the protocols and criteria set forth in Section 6;
- Notifying the RWQCB if unknown features are discovered and coordinating with them regarding the proper management of such features if directly or indirectly related to potential impacts to human health or the environment.
- Characterizing, delineating, and supervising the proper management of unknown features and other unknown environmental conditions after consulting with the SMP field coordinator and the owner's project director; and
- Preparing reports of field activities.

5.3 General Responsibilities

5.3.1 West Yost Associates

West Yost personnel will establish excavation boundaries, direct excavation, conduct screening sampling, and collect confirmation samples. All West Yost personnel working at the Site will have current HAZWOPER health and safety training. As presented in Section 6.1.1, West Yost will implement a HSP that covers West Yost's employees and subcontractors. A copy of the HSP is presented in Appendix B. West Yost's scope of work for this project does not include health and safety monitoring for the grading contractor's personnel and subcontractors as part of their daily work activities or during any soil excavation activities.

5.3.2 General Contractor

The general contractor will complete the excavation, maintain equipment and vehicles, minimize hazards, load and transport excavated soil, and complete other as-needed support tasks. The general contractor has prepared a project-specific HSP (Appendix C) that is in general accordance with the overall project health and safety requirements presented in Appendix B. The Musco Excavtors, Inc. HSP plan will be submitted to the client and the SFBRWQCB for review and approval. Additionally, the general contractor will be required to provide for the appropriate on-site monitoring and documentation called for in the approved Musco HSP.



6.0 ENVIRONMENTAL ACTIVITIES FOR EXCAVATION, CONFIRMATION SAMPLING, AND BACKFILLING

The following presents the activities that will be performed prior to, during, and following the excavation, confirmation sampling, and backfilling activities:

6.1 Site Worker Preparation Activities

Site worker preparation activities will be conducted to minimize down time and interruptions of on-site activities if unknown environmental features are encountered. These preparation activities are intended to identify health and safety issues, and prepare and coordinate Site individuals with their respective responsibilities.

6.1.1 Health and Safety Plan

West Yost has prepared a HSP to protect West Yost's workers and subcontractors from chemicals that might be encountered. Field personnel will review and sign the HSP prior to commencing field activities. A copy of the West Yost HSP is provided in Appendix B.

6.1.2 Pre-Work Meeting

The SMP field coordinator, the SMP project manager, the general contractor, Thompson Development's project director, and a SFBRWQCB and DTSC representative will be requested to attend a pre-work meeting. The agenda of the meeting will include an oversight of the historical land use, environmental investigations, remedial activities performed at the Site, and the Covenant restrictions associated with the Site and the scope of work to be conducted. The meeting will also cover possible unknown environmental features that might be encountered. Additionally, project participant information will be confirmed and updated as needed by the SMP project manager.

The meeting will include review of the weather conditions forecast, activities and associated measures to mitigate potential impacts and address concerns of the neighboring school and residential properties, and review all conditions related to plan and permit approvals.

6.2 Pre-Excavation Soil Characterization

West Yost will conduct a pre-excavation soil assessment to characterize the soil to be removed for proper disposal.

West Yost will oversee the digging and sampling of ten (10) exploratory potholes to depths up to approximately 7 ft bgs within the limits of the proposed excavation. West Yost will collect up to one (1) four-point composite soil sample sets from each pothole for a total of ten (10) four-point composites for waste disposal characterization. The pre-excavation potholes will generally be located in areas of highest estimated probability to contain compounds of concern. We anticipate there will be approximately 2,800 cubic yards of soil generated from the project. Each sample set will represent approximately 280 cubic yards of excavated material.





Samples will be logged and transported to a laboratory under chain of custody for analysis in accordance with landfill acceptance criteria. The borings will be logged to include measured thickness of asphalt and base rock, depth to contact with native soil, depth to groundwater (if encountered), lithologic description, recorded blow counts, moisture and other relevant observations.

West Yost will receive, review, and summarize the analytical data representing the soil to be removed for disposal and provide verbal recommendations to Thompson Development regarding which disposal facilities are most appropriate and cost-effective. Following this coordination, West Yost will prepare proposal packages for the select disposal facilities.

The pre-excavation soil assessment will be designed to collect the data necessary to satisfy disposal requirements for Potrero Hills Landfill in Suisun City and B&J Landfill in Vacaville.

West Yost will prepare a report presenting the results of the pre-excavation characterization and the details regarding the loading and transportation to the selected disposal option. Copies of the report will be made available to all contractors with responsibility for completing the Remedial Action Plan.

6.3 Soil Loading, Transport, and Disposal

Excavated soil will be loaded directly onto trucks for off-hauling to the appropriate waste disposal facility as determined during the soil pre-characterization activities.

The soil transport vehicles will be equipped with plastic sheeting and will be loaded using a standard front-end loader. After the soil is loaded into the transport trucks, the soil will be covered with secured tarps according to all applicable Department of Transportation regulations to prevent soil from spilling during transport to the disposal facility. Prior to departure, the general contractor will ensure that loose soil debris is removed from trucks via dry brushing the tires and truck body.

Trucks will drive southbound on C Street, enter the Site from the northern gate on C Street, follow a designated ingress route to the soil loading area, exit the Site via the same gate, and drive northbound on C Street to leave the project area. Trucks will follow this route to avoid trips past residential structures and minimize trips past the adjacent school property. See Figure 3 for truck circulation and loading plan.

Department of Transportation approved, placarded end-dump or bottom dump trucks will transport excavated soil to the appropriate off-site disposal facility. The number of vehicles to be used for soil loading and transport will be minimized to avoid generating excess decontamination wastes. Waste haulers will be required to provide proof of valid registrations and permits for waste transport to a Class II and III facilities. The vehicles will be properly registered, operated, and placarded in compliance with local, State, and Federal requirements. Trucks will be inspected by the general contractor before leaving the Site to verify that they are properly registered, operated, and placarded in accordance with the requirements.





If excavated impacted soil is stockpiled on-site prior to off-hauling, it will be placed on a paved surface and covered with visqueen plastic (See Section 6.4.1). The sheeting shall be held down with rock-filled bags cross-tied into a weighted net. If decant water is present in the stockpiled soil, the contractor shall locate the stockpile so that decant water drains back into the excavation or use other site control measures to prevent discharge of the decant water to water ways including storm drain inlets during stockpiling, loading, and transport. Decant water will be handled with groundwater as described in Section 6.4.2 below.

6.4 Site Control Measures

Once excavation has begun, the following activities will be performed.

6.4.1 Dust and Odor Control

The SMP field coordinator will monitor excavation operations for fugitive dust and direct the general contractor to take measures, as necessary, such as the application of water or a change in operations or equipment in order reduce the potential of dust leaving the Site. The contractor shall obtain a permit and temporary meter from the City of Novato to obtain water from the nearest hydrant for dust control. Water for dust control will be applied at a rate that prevents runoff and discharge to the storm drain or waters of the State.

If Gnoss Field Airport wind conditions are reported at 25 miles per hour or higher or fugitive dust is seen to be leaving the Site, the SMP coordinator will call for a halt in work. Work will remain at a halt until windy conditions have subsided, at which time the SMP coordinator can direct general contractor to resume work.

Stockpiled soil, if any, will be covered with plastic sheeting, or other similar material, at the end of each workday. A stockpile that is not being actively worked on for more than 60 minutes will be covered with plastic sheeting to prevent dust from leaving the Site.

Petroleum hydrocarbon odors are expected, therefore, the SMP field coordinator will monitor operations for excessive odors and direct the general contractors to take measures such as the application of water or a change in operations or equipment in order to minimize noticeable or nuisance odors from leaving the Site.

6.4.2 Real Time Air Monitoring

A total volatile organics instrument shall be used to periodically monitor airborne concentrations of contaminants on site. A photo ionization detector (PID) (e.g., hNu or OVM) or equivalent and explosimeter/oxygen meter will be used to screen excavated soils for volatile organic compound contamination. The PID will also be used to measure and record employee breathing zone levels of organic vapors and gasses. The monitoring program may be increased, reduced, or modified by the SMP field coordinator, based on site conditions and monitoring results. All monitoring will be accomplished under the direction of the SMP Field Coordinator, who will interpret the results.

The air-monitoring program will include sufficient monitoring of air quality in work zones and other on-site areas to assess levels of employee exposure, determine that the work zone designations are valid, and verify that the respiratory protection being worn by personnel is

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adequate. The air-monitoring program is also designed to ensure that contaminants are not migrating off site to minimize exposure of nearby populations and/or workers. Air monitoring shall be conducted at 15 minute intervals, unless it is determined that air monitoring may occur at less frequent intervals. These less frequent intervals would be the result of ambient air movement (wind) or through the reduction of the air threat through verification monitoring. Such changes to plan will be logged.

Monitoring shall be conducted:

- When work begins on a different portion of the site.
- When contaminants other than those previously identified are being handled.
- When a different type of operation is initiated.
- If a sufficient reasonable interval has passed so that exposures may have significantly increased.

Measurements shall be taken at the anticipated source and in the breathing zone of site personnel.

Instruments shall only be used by employees who have been trained in the proper operation, use limitation, and calibration of the monitoring instrument and who have demonstrated the skills necessary to operate the instrument.

6.4.3 Perimeter Monitoring

Monitoring shall be conducted at least two times each day, with a total volatile organics directreading instrument, at location upwind and downwind at the perimeter of the site. Measurements shall also be taken periodically downwind of each active sampling site to assess the potential for off-site migration. If airborne levels of contamination exceed background levels for a sustained period of time at the perimeter of the site, the work area shall be expanded to encompass all area subjected to the elevated levels. If airborne levels of contaminants exceed background levels by 5 ppm at the perimeter of the site, the work will be stopped, the suspected source of the contamination will be covered to eliminate emissions.

If airborne levels of contaminants exceed background levels, a decision will then be made as to how to proceed with the work and how to more fully characterize the airborne emissions.

6.4.4 Field Instruments

Two types of PID vapor analyzers are available for on-site screening during field operations: hNu Model PI 101 and/or Thermo Environmental Instruments 580A or 580B.

The Gastech Flammable Gas Detector shall be used to measure explosion/oxygen levels. Equivalent instruments may be used.

Calibration of instruments will be performed prior to field use on a daily basis. Calibration methods as specified in manufacturers-supplied manuals for each instrument will be followed. A two-point calibration is performed on portable gas analyzers using hydrocarbon-free air as the zero point and a manufactured calibration gas as the high point. A gas-analyzed instrument is



considered to be accurate if readings of the standards are within 20 percent of the actual concentration of standard gas.

6.4.5 Record Keeping Requirements

The result of air monitoring readings shall be recorded on standard air monitoring data forms. A calibration and maintenance log for each instrument shall also be maintained. Records shall also be kept of all significant events, addendum's, or changes to level of protection.

6.4.6 Groundwater Control

The excavation is unlikely to encounter groundwater. If groundwater is encountered during excavation or backfilling activities and if those conditions limit the execution of the RAP, then groundwater will be pumped into a holding tank, characterized for disposal, and removed from the Site by an appropriate disposal company based on its characterization.

6.4.7 Storm Water Control

Storm water pollution can occur when surface runoff contacts disturbed soils in excavation areas, exposed wastes, or soil stockpiles. Therefore, this type of runoff will be minimized by using dust control measures such as those discussed in 6.4.1 and maintaining good housekeeping practices on-site.

We understand that the City of Novato may require an erosion and sediment control plan as a condition of the excavation permit. To control runoff, structural practices may be used to divert flows from exposed impacted soils or otherwise constrain runoff and the discharge of pollutants from exposed areas of the Site containing impacted soil. Silt fences, straw bales, diversion dikes, storm drain inlet protection, outlet protection, visqueen covers, sediment traps, and/or sediment basins may be used to control storm water flow.

6.4.8 Notification and Identification of Unknown Environmental Features

Thompson Development will be notified if unknown environmental features are encountered and additional investigations or remediation are required to meet the goals of the remedial action plan. The SMP field coordinator will direct a limited excavation to identify the feature. If the unknown environmental feature is stained and/or odorous soil or other unregulated feature, the feature will be addressed according to the procedures described in 6.5.1. The specific scope of work will be verbally discussed with Thompson Development prior to beginning the work. Documentation of the work conducted to assess and remediate these features will be provided in the final grading report. Confirmation samples will be collected and analyzed subsequent to soil remediation to assess environmental conditions in the soil after excavation.

If the unknown environmental feature is a regulated feature, such as a UST, septic pit, or clarifier, the appropriate regulatory agencies will be notified, permits will be obtained, and work plans will be provided for a removal action for the feature. Delays in the removal action will not delay the remedial action already in progress as long as that remedial action work can be conducted in a safe manner in the vicinity of the regulated feature. The results of the investigations and remediation will be documented in the remedial action report or in an individual report.



6.5 Site-Specific Soil Management Protocols

These Site-Specific Soil Management Protocols will be followed during all excavation, confirmation sampling, and backfilling activities. The Site-Specific Soil Management Protocols are grouped by the type of environmental condition and have been developed with acknowledgement of past Site use history and previous subsurface investigations completed at the Site.

6.5.1 Stained and/or Odorous Soil, or Other Unregulated Feature

If undocumented stained and/or odorous soil or other unregulated features are discovered at the Site will be assessed or mitigated using on-site equipment. If, as a result, the excavation boundaries are extended past the anticipated limits, the area will be subdivided into new decision units (DUs) and field screening will be conducted in accordance with the RAP and the SAP to ensure the extent of impact has been reached. Confirmation samples will be collected in accordance with the procedures described in the SAP and analyzed for COCs including TPHd/mo, TPHg, BTEX, and MTBE, depending on their location.

6.5.2 Regulated Features

If a regulated feature such as a UST, septic pit, or clarifier is encountered, West Yost will notify the appropriate agencies, obtain the applicable permissions and permits to remove the feature.

6.6 Final Report

Following completion of the excavation, confirmation sampling, and backfilling activities, West Yost will prepare a remedial action report that will document the results of these activities. The report will be submitted to the SFBRWQCB, DTSC, and DON for review.

If regulated unknown environmental features such as USTs or clarifiers are removed and remediated, a separate document will be prepared and provided to the SFBRWQCB and DTSC presenting the closure procedures, and a request will be made for a No Further Action or case closure for each feature or group of features.

7.0 LIMITATIONS

This soil excavation and disposal project will be conducted in general accordance with the accepted standard of practice for similar services that exists in Northern California at the time the work is performed. It should be recognized that definition and evaluation of environmental conditions is a difficult and inexact art. Judgments leading to conclusions and recommendations are generally made with an incomplete knowledge of the conditions present. More extensive studies, including additional environmental investigation, can reduce the inherent uncertainties associated with such studies. If Thompson Development wishes to reduce the uncertainty beyond the level associated with this study, West Yost should be notified for additional consultation. Our firm has prepared this report for Thompson Development's exclusive use for this particular project and in accordance with generally accepted environmental practices within the area at the time of our work. No other representation, expressed or implied, and no warranty or guarantee is included or intended.





This report may be used only by Thompson Development and only for the purposes stated, within a reasonable time from its issuance. Land use, Site conditions (both on-site and off-site) or other factors may change over time, and additional work may be required with the passage of time. Any party other than Thompson Development who wishes to use this report shall notify West Yost of such intended use. Based on the proposed use of the report, West Yost may require that additional work be performed and that an updated report be issued. In the absence of express, written approval from West Yost, no use of this report for other than the original stated purpose is authorized.



8.0 SELECTED REFERENCES

- Battelle. Tier 3 Risk-Based Corrective Action (RBCA) Assessment for Former Underground Storage Tank Site 957/970, Department of Defense Housing Facility, Novato, California and Adjoining Property on Hamilton Army Airfield, Version 2.0. Prepared for NFEC, EFA West, San Bruno, California. November 24, 1999.
- Battelle, Final Revised Risk Assessment for Former UST Site 957/970 at Department of Defense Housing Facility, Novato, California. Prepared for the Southwest Division, Naval Facilities Engineering Command under NFESC Contract No. N47408-95-D-0730. June 8, 2001.
- Battelle, Final Corrective Action Plan for Groundwater For Former Underground Storage Tank Site 957/970, Department of Defense Housing Facility, Novato, California. March 1, 2002.
- Battelle, Annual Site Status Report for the Year 2013, Former UST Site 957/970, Former Department of Defense Housing Facility Novato, Novato, California. February 26, 2014.
- Department of Navy, Department of Toxic Substances, and the Regional Water Quality Control Board, *Quitclaim Deed and Environmental Restrictions Pursuant to California Civil Code Section 1471 for Hamilton Square Parcel Novato, California.* April 20, 2005.
- Ninyo & Moore, Environmental Due Diligence Evaluation, Hamilton Square, Main Gate Road and C Streets, Novato, California. February 1, 2005.
- Ninyo & Moore, Draft Soil Management Plan, Hamilton Square, Main Gate Road and C Street, Novato, California. January, 24, 2007.
- Ninyo & Moore, Limited Phase II Environmental Site Assessment, Hamilton Square, Novato, California. January 15, 2008.

APPENDIX A

Quitclaim Deed and Environmental Restrictions Pursuant to California Civil Code Section 1471 for Hamilton Square Parcel - Novato, California



RECORDING REQUESTED BY:

Paul Thompson, Managing Member

And when recorded, mail this Deed and, unless otherwise shown below, mail tax statements to:

Hamilton Square, LLC 250 Bel Marin Keys Blvd., Bldg. A Novato, CA 94949 Recorders Serial No. 2005 - 2868

Recorded 1 20 2005 @ (2:00 M)

Certified to be a true and correct copy of the original.

FIRST AMERICAN SITLE COMPANY of the original in

Space Above This Line Reserved for Recorder's Use

QUITCLAIM DEED AND ENVIRONMENTAL RESTRICTIONS PURSUANT TO CALIFORNIA CIVIL CODE SECTION 1471 FOR HAMILTON SQUARE PARCEL -NOVATO, CALIFORNIA

This Deed is made this ________, day of __________, 2005, by and between the United States of America, acting by and through the Department of the Navy, hereinafter called GRANTOR, and Hamilton Square, LLC, a California limited liability company, hereinafter called GRANTEE.

WITNESSETH:

WHEREAS in response to GRANTOR'S Invitation For Bids No. 9PR-2004-192, GRANTEE offered to purchase a portion of the former Department of Defense Housing Facility Novato ("DODHF"), which was closed pursuant to and in accordance with the Defense Base Closure and Realignment Act of 1993, as amended ("Base Closure Act"), and which no longer is required for military purposes: and

WHEREAS, GRANTOR is authorized to convey such property at DODHF to the GRANTEE pursuant to the Base Closure Act; and

WHEREAS, GRANTOR has completed remedial actions on the property to be conveyed to GRANTEE herein that are necessary to provide the covenant required by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. Section 9620(h)(3)(A)(ii)(I); and

WHEREAS, GRANTOR has found and determined that the property is suitable for transfer pursuant to the Finding of Suitability to Transfer (FOST), dated 1 August 2003, and the First Amendment to the FOST, dated 15 September 2003; and

WHEREAS, Pursuant to California Civil Code § 1471, GRANTOR has determined that it is reasonably necessary to impose certain restrictions on the use of such

property to protect present and future human health or safety or the environment as a result of the presence of hazardous materials on portions of the property described hereinafter with particularity.

NOW, THEREFORE, GRANTOR, for good and valuable consideration of Nine Hundred Thousand and No/100 Dollars (\$900,000.00) in lawful money of the United States of America, the receipt and sufficiency of which is hereby acknowledged, does hereby remise, release and forever quitclaim to GRANTEE, all of GRANTOR's right, title and interest in and to that certain real property, comprising approximately 2.7 acres, more or less (hereinafter called "Property"), as more particularly described in Exhibit "A," attached hereto and made a part hereof.

I. TOGETHER WITH all of GRANTOR's right, title and interest in and to:

- A. All buildings, facilities, roadways, utility systems, and other improvements and infrastructure located on the property.
- B. All hereditaments and tenements therein and reversions, remainders, issues, profits, privileges, appurtenance and other rights belonging or related thereto.
 - C. All rights to minerals, gas, oil and water.
- II. SUBJECT TO THE FOLLOWING RESERVATION, NOTICES, COVENANTS, RESTRICTIONS, AND CONDITIONS, which shall be binding upon and enforceable against GRANTEE, its successors and assigns, and every successor in interest to the Property herein described, or any part thereof, in perpetuity:
- A. GRANTOR and GRANTEE acknowledge that the Property is subject to the provisions of a certain COVENANT TO RESTRICT USE OF PROPERTY AND ENVIRONMENTAL RESTRICTION FOR PARCELS 28, 29 AND 30 (aka EXCHANGE TRIANGLE PARCEL 1 - "SALE AREA") AT DEPARTMENT OF DEFENSE HOUSING FACILITY, NOVATO (the "Covenant Agreement") by and between the GRANTOR, as Covenantor, and the State of California acting by and through the Department of Toxic Substances Control (DTSC) and the San Francisco Bay Regional Water Quality Control Board (RWQCB), as Covenantees. In accordance with its terms, this Covenant Agreement was recorded in the County of Marin prior to recordation of this Deed. Said Covenant Agreement includes restrictions on use of the Property and requirements for soil and ground water management on the Property also covered below. GRANTOR and GRANTEE intend that the restrictions and requirements set out below, which are enforceable by the GRANTOR against the GRANTEE and its successors and assigns, shall be interpreted in a manner that is consistent and not in conflict with the restrictions and requirements set forth in Article IV of the Covenant Agreement which is enforceable by DTSC and RWQCB against the GRANTEE and its successors and assigns. A failure to enforce the Covenant Agreement by DTSC and RWQCB shall not preclude the GRANTOR from enforcing any restrictions or covenants herein.
- B. GRANTEE agrees to accept conveyance of the Property subject to all covenants, conditions, restrictions, easements, rights-of-way, reservations, rights, agreements,

and encumbrances of record, and any facts which a physical inspection or accurate survey of the premises may disclose. Failure of GRANTOR to insist in any one or more instances upon complete performance of any of the covenants or conditions of this quitclaim deed will not be construed as a waiver or a relinquishment of the future performance of such covenants or conditions, but the obligations of GRANTEE, its successors and assigns, with respect to such future performance shall continue in full force and effect.

C. Except as otherwise provided herein, or as otherwise provided by law, GRANTEE acknowledges that it has inspected, is aware of, and accepts the condition and state of repair of the Property, and that the Property is conveyed "as is" and "where is" without any representation, promise, agreement, or warranty on the part of GRANTOR regarding such condition and state of repair, or regarding the making of any alterations, improvements, repairs or additions. GRANTEE further acknowledges that GRANTOR shall not be liable for any latent or patent defects in the Property, except to the extent provided herein, or as otherwise required by law.

D. A FOST and a First Amendment to the FOST have been completed and an Environmental Baseline Survey ("EBS") and a Supplemental EBS report are referenced in the FOST. The FOST and EBSs reference environmental conditions on the Property. GRANTEE acknowledges that it has received copies of the EBSs, the FOST and the First Amendment to the FOST, and that all documents referenced therein have been made available to GRANTEE for inspection and copying.

E. FEDERAL AVIATION ADMINISTRATION COVENANT.

GRANTEE covenants for itself, its successors and assigns and every successor in interest to the Property herein described, or any part thereof, as a covenant running with the land that any construction or alteration is prohibited unless a determination of no hazard to air navigation is issued by the Federal Aviation Administration ("FAA") in accordance with Title 14 of the Code of Federal Regulations, Part 77, entitled "Objects Affecting Navigable Airspace," or under the authority of the Federal Aviation Act of 1958, as amended.

F. LEAD BASED PAINT.

(1) GRANTEE hereby is informed and does acknowledge that Lead Based Paint ("LBP") is presumed to exist in the building and structures on the Property. Lead from paint, paint chips, and dust can pose health hazards if not managed properly.

assigns and every successor in interest to the Property herein described, or any part thereof, as a covenant running with the land that in its use and occupancy of the Property, it will comply with all applicable Federal, State and local laws relating to LBP. GRANTEE acknowledges that GRANTOR assumes no liability for damages for personal injury, illness, disability, or death to GRANTEE, or to any other person, including members of the general public, arising from or incident to the purchase, transportation, removal, handling, use, disposition, or other activity causing or leading to contact of any kind whatsoever with LBP on the Property, arising after the

conveyance of the Property from GRANTOR to GRANTEE, regardless of whether GRANTEE has properly warned, or failed to properly warn, the persons injured.

G. ASBESTOS AND ASBESTOS CONTAINING MATERIALS.

(1) GRANTEE hereby is informed and does acknowledge that asbestos or asbestos containing materials ("ACM") have been found and are otherwise presumed to exist in the building and structures on the Property. GRANTEE acknowledges receipt of certain documentation, which is described more particularly in Exhibit "B", disclosing the presence of any known asbestos or ACM hazards in buildings and structures on the Property. GRANTEE covenants for itself, its successors and assigns and every successor in interest to the Property herein described, or any part thereof, as a covenant running with the land that it will prohibit occupancy of the building and structures, or portions thereof, containing known asbestos or ACM hazards prior to abatement of such hazards or demolition of the building or structure.

assigns and every successor in interest to the Property herein described, or any part thereof, as a covenant running with the land that in its use and occupancy of the Property, including but not limited to demolition of the building containing ACM, it will comply with all applicable Federal, State and local laws relating to ACM. GRANTEE acknowledges that GRANTOR assumes no liability for damages for personal injury, illness, disability, or death to GRANTEE, or to any other person, including members of the general public, arising from or incident to the purchase, transportation, removal, handling, use, disposition, or activity causing or leading to contact of any kind whatsoever with ACM in the structures on the Property, arising after the conveyance of the Property from GRANTOR to GRANTEE, regardless of whether GRANTEE has properly warned, or failed to properly warn, the persons injured.

H. PROHIBITED USES.

(1) The GRANTEE covenants and agrees, on behalf of itself, its successors and assigns, and every successor in interest to the Property herein described, or any part thereof, as a covenant running with the land, that the Property shall not be used for the following purposes:

(a) A residence including any mobile home or factory built housing constructed or installed for use as residential human habitation.

- (b) A hospital for humans.
- (c) A school for persons under 21 years of age.
- (d) A daycare center for children.

(2) The GRANTEE may request approval from the GRANTOR for, and the GRANTOR may at its discretion provide, a variance or termination of the Prohibited Uses under Paragraph H (1) above as they apply to all or any portion of the Property. The GRANTEE's request shall only be made after the GRANTEE has applied for and obtained

written approval from DTSC and RWQCB for a variance or termination of such Prohibited Uses in accordance with Article VI, Paragraphs 6.01 or 6.02 of the Covenant Agreement referred to in Paragraph A herein. GRANTOR shall not unreasonably withhold approval for a requested variance or termination of the Prohibited Uses under Paragraph H(1) above, and in the event of approval, GRANTOR shall provide a Notice of Release or other appropriate instrument, in recordable form, documenting the approved variance or termination.

I. SOIL AND GROUNDWATER MANAGEMENT.

(1) The GRANTEE covenants and agrees, on behalf of itself, its successors and assigns, and every successor in interest to the Property herein described, or any part thereof, as a covenant running with the land, that it will prepare and obtain from GRANTOR, California Department of Toxic Substances Control (DTSC), and San Francisco Bay Regional Water Quality Control Board ("RWQCB") concurrence on a dewatering plan prior to conducting any dewatering activities on the Property.

(2) The GRANTEE covenants and agrees, on behalf of itself, its successors and assigns, and every successor in interest to the Property herein described, or any part thereof, as a covenant running with the land, that it shall not disturb or use existing groundwater monitoring or other test wells on the Property without the prior written approval of the GRANTOR, DTSC, and RWQCB.

(3) The GRANTEE covenants and agrees, on behalf of itself, its successors and assigns, and every successor in interest to the Property herein described, or any part thereof, as a covenant running with the land, that it shall not install groundwater production wells nor use the groundwater for residential, municipal, agricultural, or industrial uses without the written approval of the GRANTOR, DTSC, and RWQCB.

(4) The GRANTEE covenants and agrees, on behalf of itself, its successors and assigns, and every successor in interest to the Property herein described, or any part thereof, as a covenant running with the land, that it shall not conduct actions on the Property which could affect the gasoline constituent groundwater plumes (e.g., construction or creation of groundwater recharge areas, surface impoundments, or disposal trenches), unless conducted in accordance with a workplan prepared by GRANTEE and approved by GRANTOR, DTSC, and RWQCB.

(5) The GRANTEE covenants and agrees, on behalf of itself, its successors and assigns, and every successor in interest to the Property herein described, or any part thereof, as a covenant running with the land, that it will not conduct activities which will disturb the soil at or below 5 feet below current ground surface (e.g., excavation, grading, removal, trenching, filling, earth movement, or mining) on the entire Property without a soil management plan and a health and safety plan prepared by GRANTEE and approved by GRANTOR, DTSC, and RWQCB. GRANTEE shall submit written notification and request for approval of the aforementioned plans no later than thirty days prior to the date on which the GRANTEE desires to commence the proposed restricted activity. GRANTOR shall respond to such notification and request for approval in a timely manner and without unreasonable delay.

(6) The GRANTEE covenants and agrees, on behalf of itself, its successors and assigns, and every successor in interest to the Property herein described, or any part thereof, as a covenant running with the land, that it will not conduct activities which will disturb the soil at or below 3 feet below current ground surface in the area of known residual contamination on the Property beneath the foundation of Building 970, which is more particularly described in Exhibit "C", without a soil management plan and a health and safety plan prepared by GRANTEE and approved by GRANTOR. The GRANTEE shall submit written notification and request for approval of the aforementioned plans no later than thirty days prior to the date on which the GRANTEE desires to commence the proposed restricted activity. GRANTOR shall respond to such notification and request for approval in a timely manner and without unreasonable delay.

(7) The GRANTEE covenants and agrees, on behalf of itself, its successors and assigns, and every successor in interest to the Property herein described, or any part thereof, as a covenant running with the land, that removal and disposal of contaminated soil or groundwater shall be conducted in accordance with all applicable Federal, State, and local regulations governing removal transport, and disposal of hazardous substances and hazardous waste.

(8) The GRANTEE may request approval from the GRANTOR for, and the GRANTOR may at its discretion provide, a variance or termination of the restrictions and requirements related to Soil and Ground Water Management set forth under Paragraph I (1) through I (7) above as they apply to all or any portion of the Property. The GRANTEE's request for approval shall only be made after the GRANTEE has applied for and obtained written approval from DTSC and RWQCB for a variance or termination of such restrictions and requirements in accordance with Article VI, Paragraphs 6.01 or 6.02 of the Covenant Agreement referred to in Paragraph A herein. GRANTOR shall not unreasonably withhold approval for a requested variance or termination of the of the restrictions and requirements related to Soil and Ground Water Management set forth under Paragraph I (1) through I (7) above, and in the event of approval, GRANTOR shall provide a Notice of Release or other appropriate instrument, in recordable form, documenting the approved variance or termination.

J. ACCESS AND ONGOING CORRECTIVE ACTIONS.

assigns, and every successor in interest to the Property herein described, or any part thereof, as a covenant running with the land that GRANTOR, or its officers, agents, employees, contractors and subcontractors, or any Federal, State or local regulatory agency, shall have the right, upon reasonable notice to the GRANTEE, to enter and inspect the Property to ensure the viability of the selected land use controls as set forth in this Deed, or to perform ongoing corrective actions. The ongoing corrective actions include sampling and maintenance of subsurface groundwater wells and soil-gas probes as described in Corrective Action Plan (CAP) for Groundwater for Former Underground Storage Tank Site 957/970 at Department of Defense Housing Facility Novato of March 2002, which the CAP is referenced in the FOST.

(2) GRANTEE agrees on behalf of itself, its successors and

assigns, and every successor in interest to the Property herein described, or any part thereof, as a covenant running with the land, that construction and/or operations on the Property shall not interfere with said ongoing corrective actions being conducted by or for the GRANTOR or any Federal, State, or local regulatory agency. The GRANTOR and GRANTEE agree to cooperate in good faith to minimize any conflict between necessary ongoing remedial and corrective actions being conducted by the GRANTOR at the Property, and the operations and construction activities of the GRANTEE, and its successors and assigns.

K. COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA) RESPONSE CLAIMS AND SECTION 120h PROTECTIONS: Pursuant to Title 42 U.S.C. Section 9620 (h)(3)(A) of CERCLA, as amended, the following notices, assurances, covenants and declarations apply to the Property.

(1) <u>Hazardous Substance Notification</u>. Pursuant to 42 U.S.C. Section 9620(h)(3)(A), and the provisions of 40 C.F.R. Part 373, notice is hereby provided that hazardous substances were stored for one year or more, known to have been released, or disposed of on the Property. The information contained in this notice is required by regulations promulgated under Section 126(h) of CERCLA. The GRANTOR has made a complete search of its files and records concerning the Property. Based upon that search, the type and quantity of such hazardous substances, the time the storage, release, or disposal took place to the extent such information is available, and (3) a description of the remedial action taken, if any, is set out in Exhibit "D."

(2) <u>Warranty</u>. GRANTOR warrants for the benefit of GRANTEE, its successors and assigns, that environment with respect to any hazardous substances remaining on the Property, has been taken before the date of this Deed.

(3) Additional Remediation Obligation. GRANTOR covenants for the benefit of GRANTEE, its successors and assigns, as a covenant running with the land, that GRANTOR shall conduct any additional remedial action found to be necessary after the date of this Deed for any hazardous substance existing on the Property prior to the date of this Deed. This covenant shall not apply to the extent that the GRANTEE caused or contributed to any release or threatened release of any hazardous substance, pollutant, or contaminant.

and assigns, as a covenant running with the land, that the United States and its agencies, officers, agents, employees, contractors and subcontractors shall have the right, upon reasonable notice to GRANTEE, its successors and assigns, to enter upon the Property, in any case in which remedial action or corrective action is found to be necessary at such Property after the date of this Deed, or such access is necessary to carry out remedial action or corrective action on adjoining property. In exercising these rights of access, except in case of imminent and substantial endangerment to human health or the environment, GRANTOR shall give to GRANTEE, its successors and assigns, reasonable notice of actions to be taken related to such remedial action or corrective action necessary at the Property, or on adjoining property and shall make reasonable efforts to minimize interference with the use of the Property, by GRANTEE, its successors and

assigns. Furthermore, the GRANTOR and GRANTEE agree to cooperate in good faith to minimize any conflict between the necessary environmental investigation and remediation activities and the GRANTEE's use of the Property. Any inspection, survey, investigation or other response, corrective or remedial action undertaken by GRANTOR will, to the maximum extent practicable, be coordinated with representatives designated by the GRANTEE. Neither GRANTEE nor its successors and assigns shall have any claim on account of such entry against the United States, or any of its agencies, officers, agents, employees, contractors or subcontractors.

(a) The right to enter described herein shall include the right to conduct tests, investigations and surveys, including, where necessary, drilling, testpitting, boring and other similar activities. Such right also shall include the right to construct, operate, maintain or undertake any other necessary remedial or corrective action including, but not limited to, monitoring wells, extraction wells treatment facilities, and the installation of associated utilities.

(b) In connection with GRANTOR's remedial or corrective actions described herein, GRANTEE agrees on behalf of itself, its successors and assigns, as a covenant running with the land that it shall comply with those provisions of any health and safety plan applicable to GRANTEE, that is in effect during the course of any such action.

(5) <u>Notification</u>. GRANTEE agrees, on behalf of itself and its successors and assigns, as a covenant running with the land, that it shall:

(a) Notify GRANTOR in writing within 90 days after learning of any previously unidentified condition of the Property that suggests a response action is necessary, or, within 15 days after receiving notice of a claim by Federal, State or local regulators, or other third parties, of the existence of any condition on the Property that suggests a response action is necessary. If GRANTEE, or its successors and assigns, is served with a complaint or written notice of a claim by Federal, State or local regulators, the served party shall provide GRANTOR with a copy of such document not later than 15 days following service of such document; and

(b) Furnish GRANTOR copies of pertinent papers received by GRANTEE or any successors and assigns; and

(c) Provide, upon written notification and request of GRANTOR, reasonable access to the records and personnel of GRANTEE, or any successors and assigns, for purposes of defending or resolving the need for additional response action.

L. FETROLEUM. GRANTEE agrees, on behalf of itself and its successors and assigns, and every successor in interest to the Property herein described, or any part thereof, as a covenant running with the land, that upon learning of any previously unidentified release or threatened release of petroleum or petroleum derivative (including without limitation MTBE) from, on, under or about the Property and any related soils or ground or surface waters, which may have been associated with Department of Defense activities at or about the Property, GRANTEE will notify GRANTOR by following the notification procedures set forth in subsection K(5) above.

- WARRANTIES, INDEMNITIES, AND COVENANTS set forth in this Deed, unless subsequently released, are a binding servitude on the Property; shall inure to the benefit of GRANTOR and GRANTEE, and their respective successors and assigns, and will be deemed to run with the land in perpetuity, pursuant to California Civil Code Section 1462 and 1471, and other applicable authority.
- IV. NOTICES. Notices shall be deemed sufficient under this Deed if made in writing and submitted to the following addresses (or to any new or substitute address hereinafter specified, in a writing theretofore delivered in accordance with the notice procedures set forth herein by the intended recipient of such notice):

If to the Grantee:

Hamilton Square, LLC

250 Bel Marin Keys Blvd., Bldg. A

Novato, CA 94949

If to the Grantor:

BRAC Program Management Office - West

Attn: BCM Novato

1230 Columbia St., Suite 1100

San Diego, CA 92101

If to Water Board:

San Francisco Bay Regional Water Quality Control Board

1515 Clay Street, Suite 1400 Oakland, California 94612 Attention: Executive Officer

If to DTSC:

Department of Toxic Substances Control

Northern California Branch Office of Military Facilities 8800 Cal Center Drive Sacramento, California 95826

- V. LIST OF EXHIBITS: The following exhibits are attached hereto and made a part of this Quitclaim Deed:
 - A. Exhibit "A" Legal Description of the Property.
 - B. Exhibit "B" List of ACM Documentation.
 - C. Exhibit "C" Legal Description of Building 970 Foundation.
 - D. Exhibit "D" Notice of Hazardous Substances.

SIGNATURE PAGE

IN WITNESS WHEREOF, GRANTOR has caused its name to be signed to these presents by an authorized Real Estate Contracting Officer on the day first above written.

UNITED STATES OF AMERICA,
Acting by and through the Department of the Navy,

BY:

WILLIAM R. CARSILLO
Real Estate Contracting Officer
Base Realignment & Closure Program
Management Office

ACCEPTANCE:

GRANTEE hereby accepts this Deed and agrees to be bound by all the agreements, covenants, conditions, restrictions and reservations contained therein.

Date:

HAMILTON SQUARE, LLC

BY:

AUL/THOMPSON langing Member

EXHIBIT "A"

LEGAL DESCRIPTION OF THE PROPERTY

Legal Description of Hamilton Square

ALL THAT CERTAIN real property situated in the City of Novato, County of Marin, State of California, described as follows:

Beginning at a point on the Easterly line of Parcel 'E', as shown on that certain Map entitled, "Map of Lanham Village", filed for record July 19, 1983 in Volume 18 of Maps, at Page 90, Marin County Records; said point being North 04° 54′ 16" East 139.09 feet from the Southerly terminus of the line described as "North 04° 54′ 16" East 462.75 feet" on said map; thence leaving said Easterly line of Parcel 'E', South 83° 41′ 05" East 423.80 feet; thence South 06° 26' 03" West 254.45 feet; thence along a curve to the right, tangent to the preceding course, having a radius of 200.00 feet, through a central angle of 19° 29′ 54″, an arc length of 68.06 feet; thence South 25° 55′ 57" West 19.05 feet to the Northeasterly line of Main Gate Road, as shown on the Map of Hamilton Field, filed December 18, 1995 in Volume 21 of Maps, at Page 45, Marin County Records; thence along said Northeasterly line of Main Gate Road in a Westerly direction along a curve to the left, whose radius point bears South 25° 55′ 57" West, 1,648.77 feet, through a central angle of 09° 29′ 41″, an arc length of 273.23 feet; thence North 73° 33′ 44″ West 60.89 feet, to the Easterly line of said Parcel 'E'; thence leaving said Northeasterly line of Main Gate Road, and along the previously identified Easterly line of Parcel 'E' (18 Maps 90), North 26° 53' 44" West 142.64 feet; thence continuing along said Easterly line of Parcel 'E', North 04° 54' 16" East 139.09 feet to the Point of Beginning.

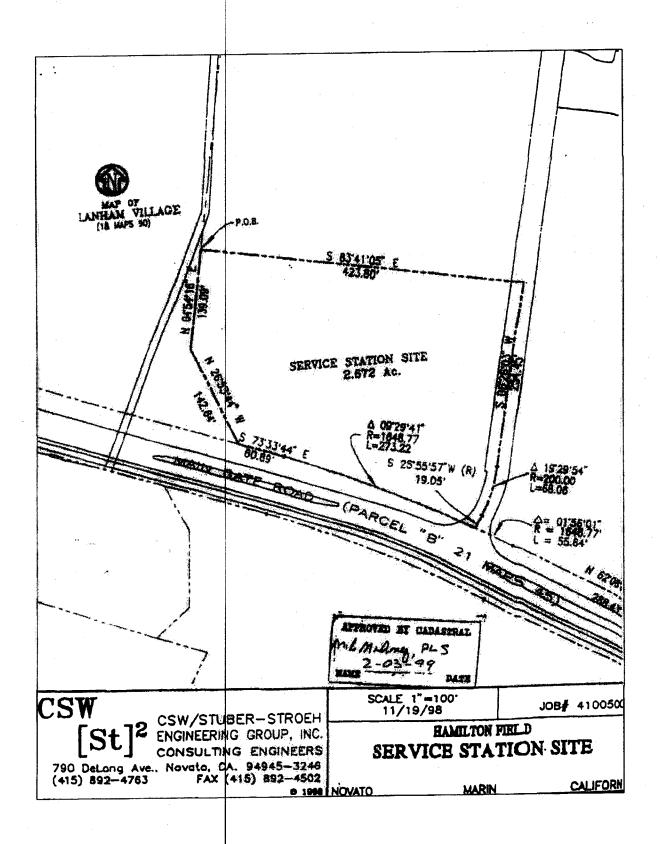


EXHIBIT "B"

LIST OF ASBESTOS CONTAINING MATERIAL DOCUMENTS

"Asbestos Survey Report." Prepared by Supervisor of Shipbuilding, Conversion, and Repair, Portsmouth Shipyard (SSPORTS) Environmental Detachment, January 1998 (SSPORTS 1998a).

Asbestos Remediation Completion Report for Non-residential Buildings, Department of Defense Housing Facility, Novato California." Prepared by SSPORTS, April 1998 (SSPORTS 1998b).

"Asbestos Debris Pickup at Department of Defense (DoD) Housing Facility, Novato, California." Letter prepared by SSPORTS, July 21, 1998 (SSPORTS 1998d).

"Final Asbestos Survey of Condition Report at Buildings 930, 960, 965, 969, 970, 971, 972, and 973, Department of Defense Housing Facility, Novato, California." Prepared by CDM, January 17, 2003 (CDM 2003).

EXHIBIT "C"

LEGAL DESCRIPTION OF BUILDING 970 FOUNDATION

Legal Description Hamilton Field Building 970
Including 3 Foot Buffer Zone

COMMENCING at a point on the easterly line of Parcel "E", as shown on the Map of Lanham Village, recorded July 19, 1983 in Volume 18 of Maps at Page 90, Marin County Records, said point being the southeasterly terminus of the line described as "North 26°53′44" West, 142.64 feet" on said map;

- 1. Thence leaving said easterly line of Parcel "E" North 68°35'49" East, 145.16 feet to a magnetic nail and tag LS 3303, said point being the True Point of Beginning of this description;
- 2. Thence North 06°21′33" East, 124.20 feet to a magnetic nail and tag LS 3303;
- 3. Thence South 83°38′27 East, 36.21 feet;
- 4. Thence South 06°21′33 West, 81.94 feet;
- 5. Thence South 83°38'27" East, 25.38 feet;
- 6. Thence South 06°21′33″ West, 42.26 feet;
- 7. Then North 83°38'27" West, 61.59 feet to the Tue Point of Beginning.

Containing 5,570 square feet more or less.

The basis of bearing for this description is taken from the "Map of Hamilton Field" filed in Book 21 of Maps, Page 45, Marin County Records.

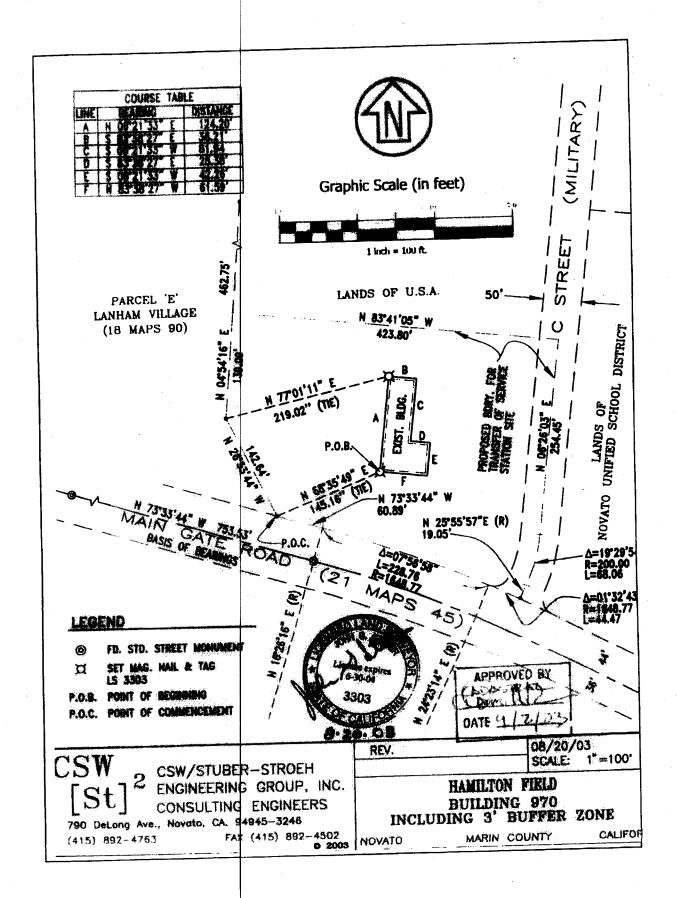


EXHIBIT "D"

NOTICE OF HAZARDOUS SUBSTANCES

The information contained in this notice is required under the authority of regulations promulgated under section 120(h) of the Comprehensive Environmental Response, Liability, and Compensation Act (CERCLA of 'Superfund') 42 U.S.C. Section 9620(h).

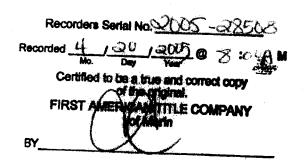
Parcel Number	Building Number	Hazardous Substance(s	the court was self-	Dates of Storage, Disposal, or Release	Stored (S), Disposed of (D), or Released (R)	Quantity Stored, Disposed of, or Released (Kilograms)
N. C.					•	
29	970	Lead	7439-92-1	Between 1974 and 1992	R	Unknown

CALIFORNI	A ALL-PURPOSE ACKNOWLEDGEMENT	
	File No: 2108-1728836 (AC)	
)SS APN No:	
STATE OF California COUNTY OF Marin		
	personally appea	ared
OII	re me,	
william R. Carsillo & Paul Thompson personally known to me (or proved to me subscribed to the within instrument and ad capacity(ies) and that by his/her/their signatu acted, executed the instrument.	on the basis of satisfactory evidence) to be the person(s) whose name(s) is knowledged to me that he/she/they executed the same in his/her/their author re(s) on the instrument the person(s) or the entity upon behalf of which the person	s/are rized on(s)
WITNESS my hand and official seal. Signature	O COTIME # 1443905 D	
	This area for official notarial seal.	
	OPTIONAL SECTION CAPACITY CLAIMED BY SIGNER o fill in the data below, doing so may prove invaluable to persons relying on the	
PARTNER(S) LIMITED ATTORNEY-IN-FACT TRUSTEE(S) GUARDIAN/CONSERVATOR OTHER	GENERAL	
SIGNER IS REPRESENTING:		
Name of Person or Entity	Name of Person or Entity	
	OPTIONAL SECTION	
	not required by law, it could prevent fraudulent reattachment of this form.	
THIS CERTIFICATE MUS	T BE ATTACHED TO THE DOCUMENT DESCRIBED BELOW	
TITLE OR TYPE OF DOCUMENT:		
NUMBER OF PAGES	DATE OF DOCUMENT	
SIGNER(S) OTHER THAN NAMED ABOVE	Reproduced by First American Title Insurance	1/2001

RECORDING REQUESTED BY: United States of America Department of the Navy C/o BRAC Operations Office 1220 Pacific Highway San Diego, California 92132-5190

WHEN RECORDED, MAIL TO:
Department of Toxic Substances Control
Northern California Region
8800 Cal Center Drive
Sacramento, California 95826
Attention: Anthony J. Landis,
Office of Military Facilities

San Francisco Bay Regional
Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, California 94612
Attention: Loretta K. Barsamian, Executive
Officer



SPACE ABOVE THIS LINE RESERVED FOR RECORDER'S USE

COVENANT TO RESTRICT USE OF PROPERTY AND ENVIRONMENTAL RESTRICTION FOR PARCELS 28, 29 AND 30 (aka EXCHANGE TRIANGLE PARCEL 1 – "SALE AREA") AT DEPARTMENT OF DEFENSE HOUSING FACILITY, NOVATO

This Covenant and Agreement ("Covenant") is made by and between the United States of America (the "Covenantor") acting by and through the Department of the Navy ("DON"), the current owner of property situated in the City of Novato, County of Marin, State of California, described in Exhibits "A" attached hereto and incorporated herein by this reference (the "Property"), the State of California acting by and through the Department of Toxic Substances Control (the "Department") and the San Francisco Bay Regional Water Quality Conrol Board (the "Water Board"). Pursuant to Civil Code section 1471 and California Health and Safety Code ("H&SC") sections 25222.1 and

25355.5, the Department and the Water Board have determined that this Covenant is reasonably necessary to protect present or future human health or safety or the environment as a result of the presence on the land of hazardous materials, as defined in H&SC section 25260, in the groundwater and the soil, and to protect waters of the state in accordance with California Water Code Division 7. In addition, pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) section 104 (42 USC section 9604), as delegated to the Covenantor by E.O. 12580, ratified by Congress in 10 USC Sec. 2701, et seq., and implemented by the National Oil and Hazardous Substances Pollution Contingency Plan (NCP B 40 CFR Part 300) and implementing guidance and policies, the Covenantor has also determined that this Covenant is reasonably necessary to protect present or future human health or safety or the environment as the result of the presence on the land of hazardous substances, pollutants and contaminants as defined in CERCLA section 101 (42 USC section 9601).

The Covenantor, the Department and the Water Board, collectively referred to as the "Parties", therefore intend that the use of the Property be restricted as set forth in this Covenant, in order to protect human health, safety and the environment.

The Covenantor retains sufficient legal title and interest in the subject property to insure continuing enforcement of the protective covenants and agreements contained within this Covenant to Restrict the Use of Property. Further, in any subsequent transfers or conveyance of title to nonfederal entities the DON shall burden the Property with additional deed covenants that insure that any subsequent deed or transfer contains the protective covenants and right of access and power to conduct monitoring of wastes retained on site. Those covenants and agreements shall be enforceable against the

servient estate in that those protective covenants shall run with the land to all successors and assigns.

ARTICLE I

STATEMENT OF FACTS

- 1.01 The Property, totaling approximately 2.7 acres, is more particularly described and depicted in Exhibit "A", attached hereto and incorporated herein by this reference. The Property is located at the corner of Main Gate Road and C Street on the former Department of Defense Housing Facility ("DODHF"), City of Novato, County of Marin, State of California.
- 1.02 The Property is affected by petroleum contamination in soil and groundwater. Petroleum hydrocarbon contamination is present in the soil of all parcels of the Property. Petroleum hydrocarbon and metals-impacted soil is present in the soil under a portion of Building 970 (as depicted in Exhibit "B"). Benzene and Ethylbenzene are each present in groundwater underlying most of the Property and methyl tertiary butyl ether ("MTBE") is present in groundwater underlying all parcels of the Property.
- 1.03 Subsurface features beneath Building 970 were removed which included three hydraulic lifts, two oil water separator systems, associated lines, floor drains, and four buried drums (acting as subsurface storage tanks) with associated piping.

 Overexcavation activities were conducted in accessible areas until contaminant concentrations were below the screening criteria summarized in Exhibit "D". To protect

Figures 3 and 4 of the Finding of Suitability of Transfer (FOST), Exhibit "C", show the extent of the MTBE and ber zene groundwater plumes, respectively.

the structural integrity of Building 970, excavation activities were not conducted underneath the building footers or internal walls. Approximately 120 cubic yards of petroleum hydrocarbon contamination is still present in these areas. Beneath Building 970, the following contaminants exceeded the screening criteria for the Building 970 area (the maximum concentration is shown in parenthesis): Total Petroleum Hydrocarbons – Gasoline ("TPH-G") (260 mg/kg), Total Petroleum Hydrocarbons – Diesel ("TPH-D") (8,000 mg/kg), lead (850 mg/kg), and total oil and grease (6,300 mg/kg).

The Water Board and the Department concurred that remedial action objectives for soil have been met at the Property and that no further corrective action for soils is required other than the implementation and enforcement of the institutional controls outlined in the Final Corrective Action Plan of March 2002.

In August 2000, the Water Board issued Order No. 00-064, which identified requirements for a portion of DODHF Novato, including the Property. Pursuant to Order No. 00-064 the DON conducted a Remedial Investigation at the Property. In 2001 the Final Revised Risk Assessment identified Benzene, Toluene, Ethylbenzene, Xylene (BTEX) and Methyl Tertiary Butyl Ether (MTBE) as contaminants of concern for groundwater at the Property. It also looked at the following constituents of concern for soils at the Property: TPH-G and various gasoline-derived volatile compounds including: BTEX, MTBE, isopropylbenzene (cumene), naphthalene, n-propylbenzene, 1,2,4-trimethylbenzene (TMB), 1,3,5-TMB, and 4-isopropyltoluene. DON then submitted a Final Corrective Action Plan (CAP) in March 2002. The CAP selected a remedy that reduces the time to meet the MTBE final cleanup level at the site (maximum contaminant level) while assisting with additional cleanup of other contaminants of concern in the

petroleum plume in accordance with the Water Board Order. Biosparging with monitored natural attenuation ("MNA") and institutional controls was selected as the corrective action alternative that would most efficiently and effectively achieve the final cleanup goal established to restore the groundwater resources at the Site to their potentially most stringent domestic beneficial use.

The biosparging system began operation in August of 2002. It is expected to operate for 1.5 years, after which MNA will officially commence. During the MNA phase, results of regular groundwater monitoring will be presented semi-annually or as mutually agreed to by the DON, the Water Board, and the Department or their respective successors in interest.

1.04 The DON evaluated the human health impacts of the soil and groundwater contamination in both a 1999 Tier 3 Risk-Based Corrective Action (RBCA) assessment and a June 2001 "Final Revised Risk Assessment" as a supplement to the Tier 3 RBCA assessment. Based on the Final Revised Risk Assessment, the Department and the Covenantor have concluded that use of the Property for commercial and/or industrial uses does not pose an unacceptable cancer risk, or non-cancer hazard to the users or occupants of the Property. The Department, Water Board, and the Covenantor have further concluded that the Property, as being remediated, and operated or occupied subject to the restrictions of this Covenant, does not present an unacceptable threat to human health or safety or the environment.

² The 1999 Tier 3 Risk-Based Corrective Action (RBCA) assessment and June 2001 "Final Revised Risk Assessment" can be found at the document depository located at Southwest Division, Naval Facilities Engineering Command (SWDIV) 1220 Pacific Highway, San Diego, California, 92132-5190. It is also currently located at the South Novato Public Library, 476 Ignacio Blvd., Novato, California, 94949.

The Final Revised Risk Assessment, as amended on September 11, 2003, evaluated the Property, which includes Building 970, the former NEX gas station at the DODHF. Based on the planned reuse of the property, the Property was evaluated for a commercial/industrial scenario, a nonresidential standard. This Risk Assessment determined that for occupational exposures, the hazard index was below a level that would necessitate further remediation with the restrictions imposed by this covenant in place.³ Additionally, the risk assessment evaluated the potential risk to an excavation worker in the former gas station area (Former UST Site 957/970). The results of the assessment suggest that excavation workers should take precautionary measures (e.g., proper personal protective equipment) when working at the site.⁴ Restrictions to ensure that appropriate health and safety measures are taken are included in Article IV of this Covenant.

³ Total cancer risk estimated to the occupational receptor in the Property was 3.23 x 10⁻⁶ and 1.06 x 10⁻⁵ based on the federal and Cal/EPA unit risk factors for benzene, respectively. This value falls within the risk range (1 x 10⁻⁴ to 1 x 10⁻⁶) that warrants a site-specific risk management decision about the suitability of the property for its intended future reuse. The total hazard or hazard index (total non-cancer risk) in the Property was below 1.0 for the occupational receptor. After completion of the Risk Assessment and prior to finalizing the Finding of Suitability for Transfer, the U.S. EPA Region IX listed ethylbenzene as a carcinogen on its Preliminary Remediation Goal table. As a result, the Department required a recalculation of the cancer risk numbers to include the cancer risk associated with the ethylbenzene contaminant. After recalculation, the Department has determined that if the restrictions in this covenant are adequately implemented, the total cancer risk estimates in the Property remain health protective and future remediation activities are not necessary to protect the health of future occupational receptors. The August 5, 2003 internal DTSC memo to T. McGarry from M. Wade and P. Wong-Yim regarding the calculation and evaluation of the ethylbenzene risk is on file in the administrative file for this site at the Department and has been incorporated into the document depository found at SWDIV.

⁴ Estimates of total cancer risk for the excavation worker are 5.76 x 10⁻⁶ and 2.08 x 10⁻⁵ for the Property, based on the federal and Cal/EPA unit risk factors for benzene, respectively. In an internal DTSC memo to T. McGarry from M. Wade and F. Wong-Yim dated September 15, 2003, DTSC calculated very similar risk values to those presented in the Risk Assessment Report as amended on September 11, 2003. The hazard index for the excavation worker in the Property is 1,130. These risks suggest that excavation workers should take precautionary measures (e.g., proper personal protective equipment) when working at the site.

1.05 The DON prepared a Finding of Suitability to Transfer, executed on August 11, 2003, which can be found at the document depository located at Southwest Division, Naval Facilities Engineering Command, 1220 Pacific Highway, San Diego, California, 92132-5190. The document depository also has relevant regulatory correspondence related to the Property.

ARTICLE II

DEFINITIONS

- 2.01 <u>Department</u>. "Department" means the State of California by and through the Department of Toxic Substances Control and includes its successor agencies, if any.
- 2.02 Owner. "Owner" means the Covenantor's successors in interest, and their successors in interest, including heirs and assigns, during their ownership of all or any portion of the Property.
- 2.03 Occupant. "Occupant" means Owners and any person or entity entitled by ownerships, leasehold or other legal relationship to the right to occupy any portion of the Property.
 - 2.04 Covenantor. "Covenantor" shall mean the United States of America.
- 2.05 <u>Water Board</u> "Water Board" shall mean the San Francisco Bay Regional Water Quality Control Board and includes its successor agencies, if any.

ARTICLE III

GENERAL PROVISIONS

- 3.01 Restrictions to Run with the Land. This Covenant sets forth protective provisions, covenants, restrictions, and conditions (collectively referred to as "Restrictions"), subject to which the Property and every portion thereof shall be improved, held, used, occupied, leased, sold, hypothecated, encumbered, and/or conveyed. These Restrictions, described in Article IV, are consistent with the separate restrictions placed in the deed by and in favor of the Covenantor, conveying the Property from the Convenantor to its successor in interest described above. Each and every Restriction: (a) runs with the land in perpetuity pursuant to H&SC sections 25222.1, 25355.5 and Civil Code section 1471; (b) inures to the benefit of and passes with each and every portion of the Property; (c) shall apply to and bind all subsequent Occupants of the Property; (d) is for the benefit of, and is enforceable by the Department and the Water Board; and (e) is imposed upon the entire Property unless expressly stated as applicable only to a specific portion thereof.
- 3.02 <u>Binding upon Owners and Occupants</u>. Pursuant to H&SC sections 25222.1 and 25355.5, this Covenant binds all Owners of the Property, their heirs, successors, and assignees, and the agents, employees, and lessees of the owners, heirs, successors, and assignees, as well as any Occupants and their agents. Pursuant to Civil Code section 1471(b), all successive owners of the Property are expressly bound hereby for the benefit of the Department and the Water Board.
- 3.03 Written Notification of Hazardous Substance Release. The Owner shall, prior to the sale, lease, or rental of the Property, give written notice to the subsequent

transferee that a release of hazardous substances has come to be located on or beneath the Property, pursuant to H&SC section 25359.7. Such written notice shall include a copy of this Covenant.

- 3.04 <u>Incorporation into Deeds and Leases</u>. The Restrictions set forth herein shall be incorporated by reference in each and all deeds and leases for any portion of the Property.
- Department and Water Board not later than thirty (30) days after any conveyance of any ownership interest in the Property (excluding mortgages, liens, and other non-possessory encumbrances). The Department and the Water Board shall not, by reason of this Covenant alone, have authority to approve, disapprove, or otherwise affect a conveyance, except as otherwise provided by law, by administrative order, or by a specific provision of this Covenant.

ARTICLE IV

RESTRICTIONS

- 4.01 <u>Prohibited Uses</u>. The Property shall not be used for any of the following purposes:
 - (a) A residence, including any mobile home or factory built housing constructed or installed for use as residential human habitation.
 - (b) A hospital for humans.
 - (c) A school for persons under 21 years of age.
 - (d) A day care center for children.

4.02 Soil and Groundwater Management.

- (a) The Owner or Occupant shall not:
 - (i) Dewater excavations unless conducted in accordance with a DON, Department, and Water Board approved workplan.
 - (ii) Disturb or use existing groundwater wells without the prior approval of the DON, Department, and Water Board.
 - (iii) Install groundwater production wells for residential, municipal, agricultural, or industrial use without the written approval of the DON, Department, and Water Board.
 - (iv) Conduct actions which could affect the gasoline constituent groundwater plumes (e.g., construction or creation of groundwater recharge areas, surface impoundments, or disposal trenches), unless conducted in accordance with a DON,

 Department, and Water Board approved workplan.
- (b) The Owner or Occupant will not conduct activities which will disturb the soil at or below 5 feet below the current ground surface (e.g., excavation, grading, removal, trenching, filling, earth movement, or mining), without a DON, Department, and Water Board approved soil management plan and a health and safety plan. The Owner or Occupant shall submit written notification and request approval of the aforementioned plans no later than thirty days prior to the date on which the Owner or Occupant desires to commence the proposed restricted activity.

- disturb the soil at or below 3 feet below the current ground surface in the area of known residual contamination beneath the foundation of Building 970 (Exhibit "B"), without a DON, Department, and Water Board approved soil management plan and a health and safety plan.

 The Owner or Occupant shall submit written notification and request approval of the aforementioned plans no later than thirty days prior to the date on which the Owner or Occupant desires to commence the proposed restricted activity.
- (d) The Owner or Occupant shall remove and dispose of contaminated soil or groundwater in accordance with all applicable federal, state, and local regulations governing removal, transport, and disposal of hazardous substances and hazardous waste.
- 4.03 Ongoing Corrective Actions. Construction and/or operations on the

 Property shall not interfere with ongoing corrective actions being conducted by or for the

 United States or any federal, state, or local regulatory agency.
- 4.04 Access. The Covenator, the Department and the Water Board shall have the right, upon reasonable notice to the Owner or Occupant, to enter and inspect the Property to ensure the viability of the selected land use controls or to perform ongoing corrective actions. The ongoing corrective actions include sampling and maintenance of subsurface groundwater wells and soil-gas probes as described in the CAP.

ARTICLE V

ENFORCEMENT

Restrictions specifically applicable to the Property shall be grounds for the Department and/or the Water Board to require that the Owner modify or remove any improvements ("Improvements" herein shall include but is not limited to all buildings, roads, driveways, utilities, wells and paved parking areas) constructed or placed upon any portion of the Property in violation of the Restrictions. Violation of this Covenant by the Owner or Occupant may result in the imposition of civil and/or criminal remedies including nuisance or abatement against the Owner or Occupant as provided by law. The State of California shall have all remedies as provided for in California Civil Code section 815.7 as that enactment may be from time to time amended.

ARTICLE VI

VARIANCE, TERMINATION AND RELEASE

- aggrieved person may apply to the Department and the Water Board for a written variance from the provisions of this Covenant. Such application shall be made in accordance with H&SC section 25233. The Department and/or water Board will grant the variance only after finding that such a variance would be protective of human health, safety and the environment.
- 6.02 <u>Termination</u> The Owner, or with the Owner's consent, any Occupant, or any aggrieved person may apply to the Department and Water Board for a termination of

the Restrictions or other terms of this Covenant as they apply to all or any portion of the Property. Such application shall be made in accordance with H&SC section 25234. No termination or other terms of this Covenant shall extinguish or modify the retained interest held by the United States.

ARTICLE VII

MISCELLANEOUS

- 7.01 No Dedication Intended. Nothing set forth in this Covenant shall be construed to be a gift or dedication, or offer of a gift or dedication, of the Property, or any portion thereof to the general public or anyone else for any purpose whatsoever.
- 7.02 Recordation. The Covenantor shall record this Covenant, with all referenced Exhibits, in the County of Marin within ten (10) days of the Covenantor's receipt of a fully executed original.

7.03 Notices.

(a) The Owner shall notify the Water Board of each of the following: (1)

The type, cause, location and date of any disturbance to any cap, any remedial measures taken or remedial equipment installed, and of the groundwater monitoring system installed on the Property pursuant to the requirements of the Water Board, which could affect the ability of such cap or remedial measures, remedial equipment, or monitoring system to perform their respective functions and (2) the type and date of repair of such disturbance. Notification to the Water Board shall be

made by registered mail within ten (10) working days of both the discovery of such disturbance and the completion of repairs.

(b) Whenever any person gives or serves any Notice ("Notice" as used herein includes any demand or other communication with respect to this Covenant), each such Notice shall be in writing and shall be deemed effective: (1) when delivered, if personally delivered to the person being served or to an officer of a corporate party being served, or (2) three (3) business days after deposit in the mail, if mailed by United States mail, postage paid, certified, return receipt requested:

To Covenantor:

Commanding Officer

Southwest Division Engineering Field Division

Naval Facilities Engineering Command

1220 Pacific Highway San Diego, CA 92132-5190

With a copy to:

Navy BRAC Operations Office

Attention: BCM Novato Southwest Division

Naval Facilities Engineering Command

1220 Pacific Highway San Diego, CA 92132-5190

To:

City of Novato

900 Sherman Avenue Novato, California 94945

To Department:

Department of Toxic Substances Control

Northern California Branch Office of Military Facilities 8800 Cal Center Drive

Sacramento, California 95826

To Water Board:

San Francisco Bay Regional Water Quality Control Board

1515 Clay Street, Suite 1400 Oakland, California 94612 Attention: Executive Officer Any party may change its address or the individual to whose attention a Notice is to be sent by giving written Notice in compliance with this paragraph.

- 7.04 Partial Invalidity. If any portion of the Restrictions or other term set forth herein is determined by a court of competent jurisdiction to be invalid for any reason, the surviving portions of this Covenant shall remain in full force and effect as if such portion found invalid had not been included herein.
- 7.05 <u>Statutory References</u>. All statutory references include successor provisions.
- 7.06 Article Headings. Headings at the beginning of each numbered article of this Covenant are solely for the convenience of the parties and are not a part of the Covenant.
- 7.07 <u>Construction</u>. If any provision of this instrument is found to be ambiguous, an interpretation consistent with the purpose of this instrument that would render the provision valid shall be favored over any interpretation that would render it invalid.

IN WITNESS WHEREOF, the Parties execute this Covenant. UNITED STATES OF AMERICA, Acting by and through the Department of the Navy By: WILLIAM RY CARSILLO Real Estate Contracting Officer STATE OF CALIFORNIA, Acting by and through the California Environmental Protection Agency, Department of Toxic Substances Control Date: By: ANTHONY J. LANDIS, Chief Northern California Branch Office of Military Facilities Acting by and through the Regional Water Quality Control Board Date: 9. 18.03 CORETTA K. BARSAMIAN, Executive Officer

San Francisco Bay Region

STATE OF CAL			A)				
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signature(s) on	he instrum	ent the	person(s),	or the ent	ity upon 1	oehalf of	which th	e
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IN W	TNESS WHEREOF. th	he Parties execute this Coven	ant.	
Actin	ED STATES OF AME g by and through the tment of the Navy	ERICA.		
By:			Date:	
	WILLIAM R. CARSI Real Estate Contraction			
				· · · · · · · · · · · · · · · · · · ·
Actin Califo	E OF CALIFORNIA g by and through the ornia Environmental Pro	otection Agency,		
Depai By:	tment of Toxic Substan	fands_	Date:	9-16-03
	ANTHONY YANE Northern California B Office of Military Fac	Branch		
				e e e e e e e e e e e e e e e e e e e
Actin Regio	g by and through the onal Water Quality Con	trol Board		
By:			Date:	
~j.	LORETTA K. BARS San Francisco Bay Re	SAMIAN, Executive Officer egion		

STATE OF CALIFORNIA COUNTY OFSacra	mento)
before me Wathle	September, in the year 2003,
anthony D	dandis, personally known to me (or
proved to me on the basis of	satisfactory evidence) to be the person(s) whose name(s) is
/are subscribed to the within	instrument and acknowledged to me that he/she/they
executed the same in his/her	their authorized capacity(ies), and that by his/her/their
signature(s) on the instrume	nt the person(s), or the entity upon behalf of which the
person(s) acted, executed th	e instrument.
WITNESS my hand and of	icial seal.
Signature Hathleen	Duncan

KATHLEEN DUNCAN
Commission # 1324867
Notary Public - California
Sacramento County
by Cor. Sxpir-s Oct 26, 2006

STATE OF CALIFORNIA)	
COUNTY OF	win)	
On this / Standay of _	April	, in the year <u>2005</u> ,
before me $\mathcal{A} \cdot \mathcal{C}$	ardy	, personally appeared
William	R Carsillo	_, personally known to me (or
proved to me on the basis of	satisfactory evidence) to be th	ne person(s) whose name(s) is
/are subscribed to the within	instrument and acknowledged	I to me that he/she/they
executed the same in his/her	their authorized capacity(ies)	, and that by his/her/their
signature(s) on the instrume	at the person(s), or the entity u	pon behalf of which the
person(s) acted, executed the	instrument.	
		
WITNESS my hand and off	cial seal.	A. CARDY Comm. # 1443904 NOTARY PUBLIC - CALABORA
		MARIN COUNTY
Signature /		
	A. Cardy	A. CARDY
	/	HOTALY PUBLIC - CALLED BY MARIN COMP

EXHIBIT A

DESCRIPTION

ESCROW NO. 316342B PB

ALL THAT CERTAIN real property situate in the City of Novato, County of Marin, State of California, described as follows:

Beginning at a point on the Easterly line of Parcel 'E', as shown on that certain Map entitled, "Map of Lanham Village", filed for record July 19, 1983 in Volume 18 of Maps, at Page 90, Marin County Records; said point being North 04° 54' 16" East 139.09 feet from the Southerly terminus of the line described as "North 04° 54' 16" East 462.75 feet" on said map; thence leaving said Easterly line of Parcel 'E', South 83° 41' 05" East 423.80 feet; thence South 06° 26' 03" West 254.45 feet; thence along a curve to the right, tangent to the preceding course, having a radius of 200.00 feet, through a central angle of 19° 29' 54", an arc length of 68.06 feet; thence South 25° 55' 57' West 19.05 feet to the Northeasterly line of Main Gate Road, as shown on the Map of Hamilton Field, filed December 18, 1995 in Volume 21 of Maps, at Page 45, Marin County Records; thence along said Northeasterly line of Main Gate Road in a Westerly direction along a curve to the left, whose radius point bears South 25° 55' 57" West, 1,648.77 feet, through a central angle of 09° 29' 41", an arc length of 273.23 feet; thence North 73° 33' 44" West 60.89 feet, to the Easterly line of said Parcel 'E'; thence leaving said Northeasterly line of Main Gate Road, and along the previously identified Easterly line of Parcel 'E' (18 Maps 90), North 26° 53' 44" West 142.64 feet; thence continuing along said Easterly line of Parcel 'E', North 04° 54' 16" East 139.09 feet to the Point of Beginning.

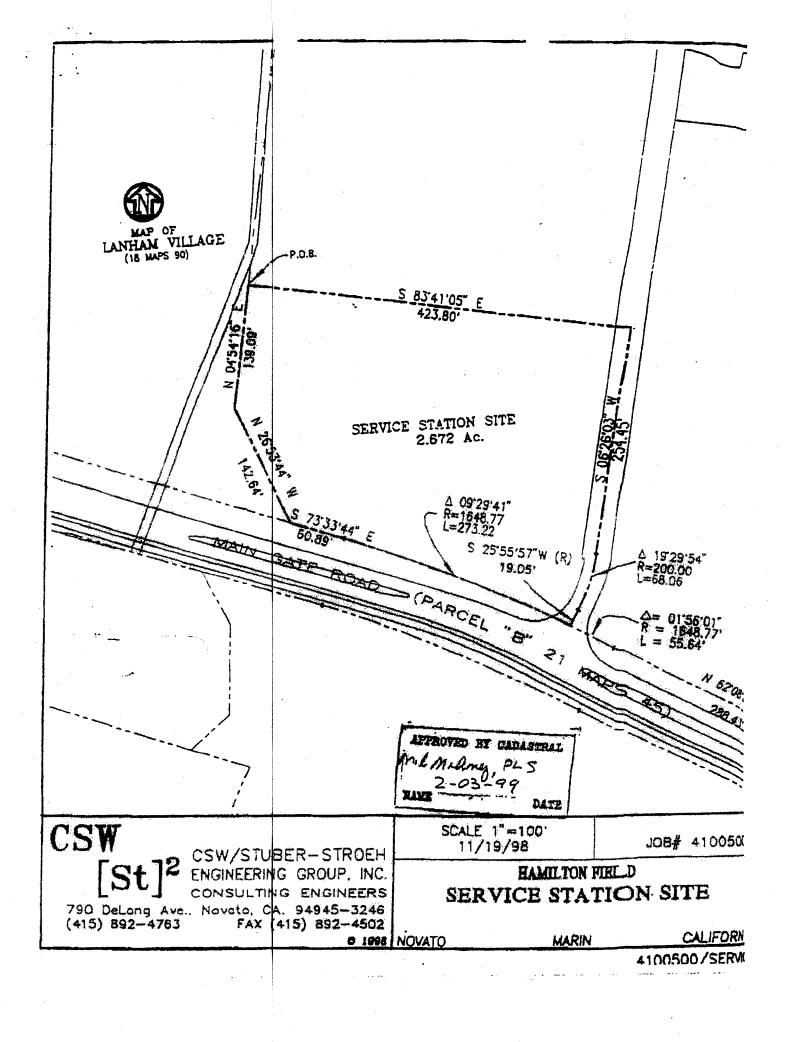
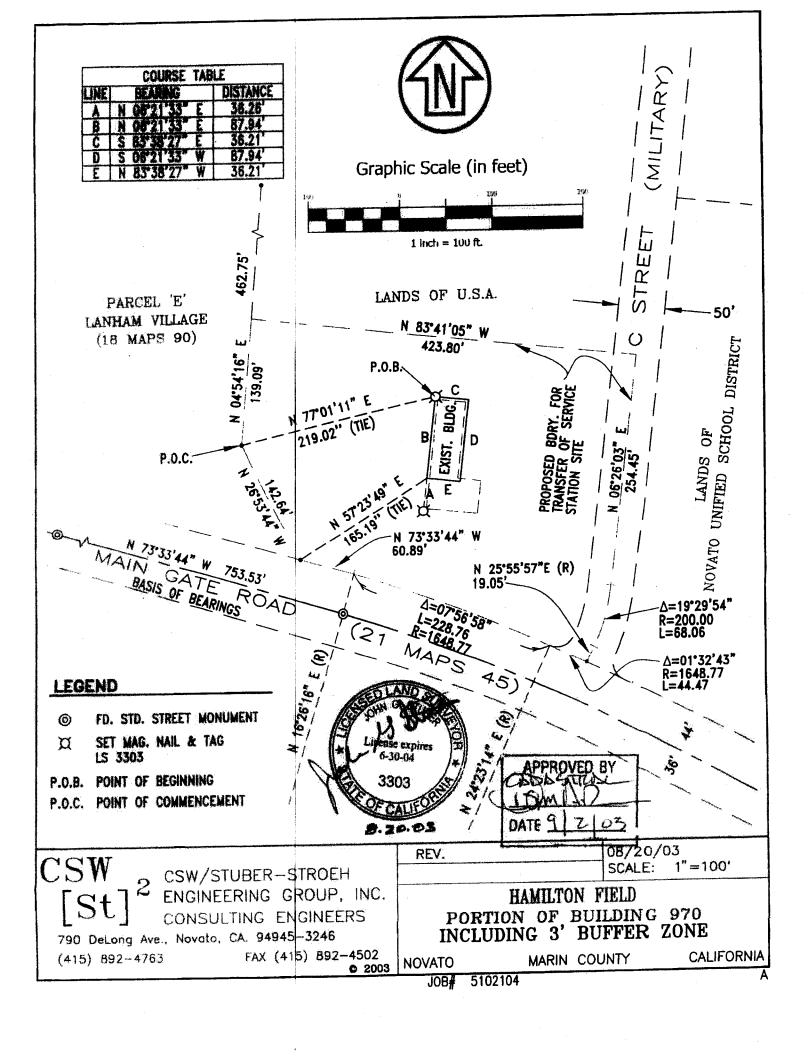
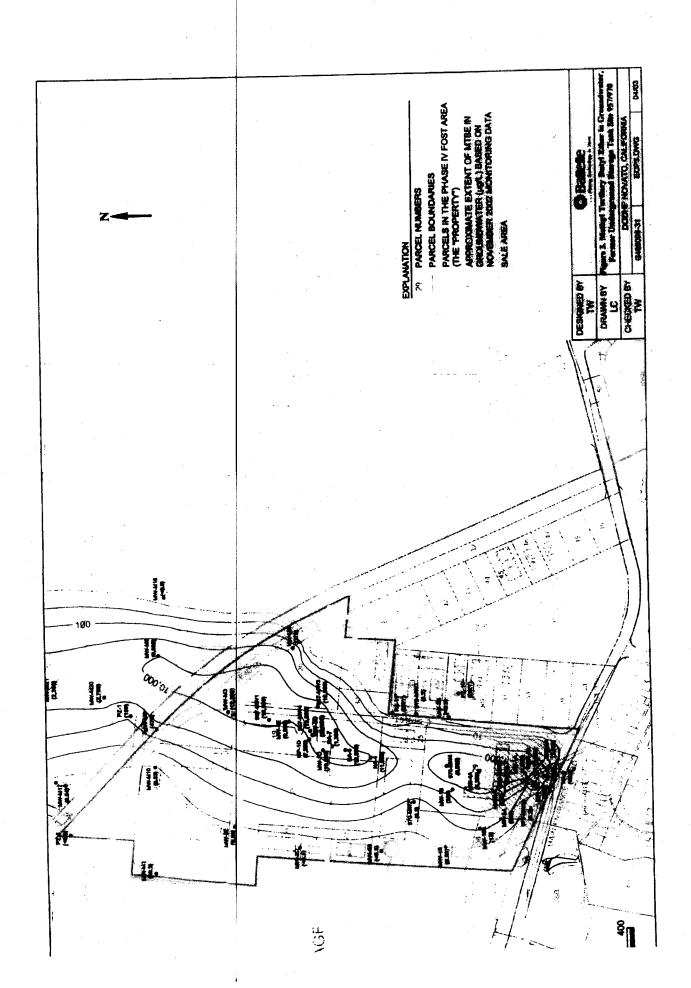
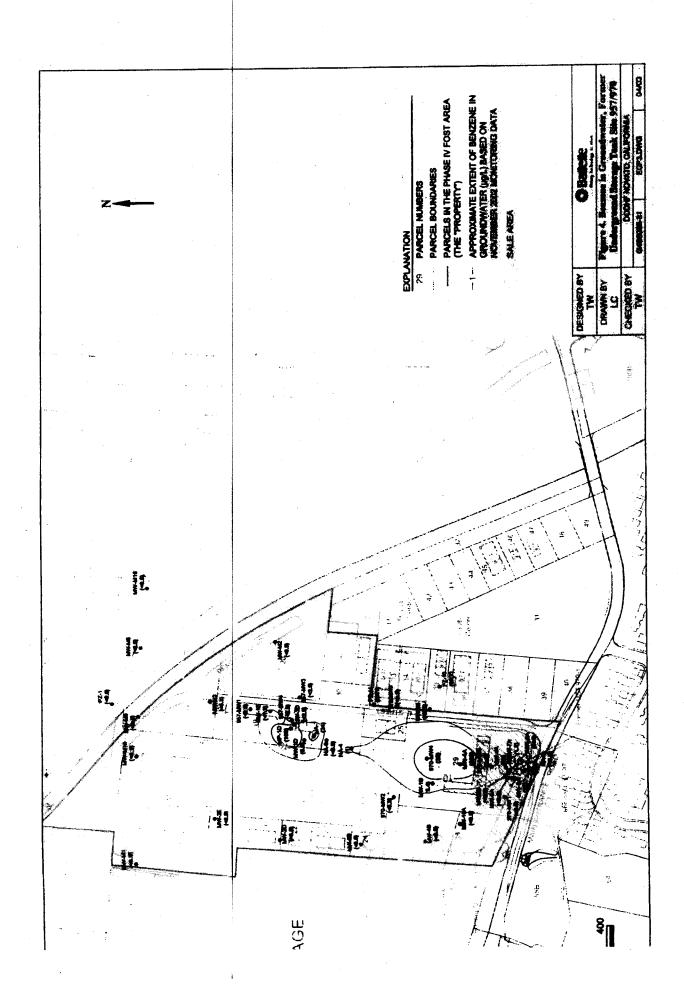


EXHIBIT B



DYSH BIT C





EXHIBITD

Screening Criteria For Building 970 Area

Compound	Concentration (mg/kg)	Reference
Benzene	1,3	U.S. EPA Region 9 Industrial PRG
Toluene	520	U.S. EPA Region 9 Industrial PRG
Ethylbenzene	20	U.S. EPA Region 9 Industrial PRG
Xylenes	420	U.S. EPA Region 9 Industrial PRG ¹
MTBE	36	Cal-modified PRG
Naphthalene	190	U.S. EPA Region 9 Industrial PRG
Phenanthrene	100,000	U.S. EPA Region 9 Industrial PRG
Fluoranthene	22,000	U.S. EPA Region 9 Industrial PRG ¹
Pyrene	29,000	U.S. EPA Region 9 Industrial PRG
2-Methylnaphthalene	520	U.S. EPA Region 9 Industrial PRG
Total chromium	450	U.S. EPA Region 9 Industrial PRG
Lead	750	U.S. EPA Region 9 Industrial PRG
Nickel	20,000	U.S. EPA Region 9 Industrial PRG
Zinc	100,000	U.S. EPA Region 9 Industrial PRG
TPH-G	100	California LUFT Guidance
TPH-D	1,000	California LUFT Guidance ²
TPH-O	1,000	California LUFT Guidance ²
Total Oil and Grease	1,000	California LUFT Guidance ¹

Notes:

¹United States Environmental Protection Agency. 2002. Region 9 Preliminary Remediation Goals (PRGs) Table. Available from

http://www.epa.gov/regionp9/waste/sfund/prg/files/02table.pdf.

²California State Water Resources Control Board. 1989. Leaking Underground Fuel Tank Field Manual: Guidelines for Site Assessment, Cleanup, and Underground Storage Tank Closure. Issued by the Leaking Underground Fuel Tank Task Force. October.

APPENDIX B

West Yost Health and Safety Plan





Health and Safety Plan

Hamilton Square Main Gate Road and C Street

Prepared for

Thompson Development Inc.

August 2015



595-04-14-01



WEST YOST ASSOCIATES

consulting engineers

Health and Safety Plan

Hamilton Square Main Gate Road and C Street

Prepared for

Thompson Development Inc.

August 2015



595-04-14-01



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HEALTH AND SAFETY PLAN



1.0 INTRODUCTION

This Health and Safety Plan has been prepared to minimize the threat of serious injury to workers during the excavation activities at 970 C Street, Novato, California (Site).

It is the responsibility of every person working on the project site to behave cautiously and avoid actions or situations that could jeopardize his or her own safety and well-being. This Site Safety Plan offers guidelines and precautions that the workers on this project should consider.

West Yost Associates (West Yost) is not responsible for *enforcing* the guidelines of this Health and Safety Plan. West Yost is not responsible or liable for the injuries of any person working on the project site with the exception of West Yost employees, to the extent that they are covered by Worker's Compensation Insurance.

2.0 EMERGENCY RESPONSE

Dialing 911 on the telephone will provide access to ambulance, fire and police services.

2.1 Emergency Information

Ambulance: 911

Hospital: Novato Community Hospital

180 Rowland Way Novato CA 94945

911 Emergency or (415) 209-1300

Poison Control Center: 911

Police: 911

Fire Department: 911

Agency Contacts: Margarete Beth, SFBRWQCB (510) 622 2338

Theresa McGarry, DTSC (916) 255 3664

Wilson Doctor, DON (619) 532 0928 Emergency Contacts:

On-Site Manager: Andy Rodgers, West Yost

Office: (707) 666-4812 or

Mobile: (707) 480-1019

Project Manager: Peter Dellavalle, West Yost

Office: (707) 666-4814 or

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Mobile: (707) 490-5040

HEALTH AND SAFETY PLAN



2.2 Hospital Route - Novato Community Hospital

Novato Community Hospital is the nearest hospital to the Site. The route (directions) to the hospital is described as follows (see Site Vicinity and Hospital Location Map in Appendix A):

- Head southwest on C St toward Main Gate Rd
- Turn right on to Main Gate Rd
- Turn right on to Nave Dr
- Take the ramp to US-101 N
- Turn right on to US-101 N
- Take the Rowland Blvd exit
- Turn right on to Rowland Blvd
- Turn left on to Rowland Way
- Novato Community Hospital is on the right side of the street at: 180 Rowland Way, Novato, CA 94945

3.0 PURPOSE

This site safety plan is designed to protect the health and safety of personnel engaged in excavation activities from potential hazards associated with those activities. All such personnel will be briefed on the site safety plan and will have access to the plan at all times.

4.0 HAZARDS

This section assesses the chemical and physical hazards that are known to exist at the Site and those that may be created by the remediation effects.

The known hazards associated with this site are:

- Underground/overhead utilities,
- Chemical injury from contaminants potentially existing in soil,
- Physical injury from heavy equipment accident,
- Physical injury from sampling equipment and activities, and
- Trip/fall from site construction debris and/or equipment.

4.1 Utility Lines

Underground utilities were located for the project. Underground Service Alert (USA) will be notified prior to excavation operations.



4.2 Chemical Hazards

The primary chemical of concern (COC) at this site is methyl tert-butyl ether (MTBE). Additional COCs include petroleum related hydrocarbons including benzene, ethylbenzene, toluene, and xylenes. Gasoline is flammable, explosive, and toxic through inhalation, ingestion, or dermal contact. Benzene – a constituent of gasoline – is considered carcinogenic to humans. Physical symptoms of exposure to these contaminants may include nausea, blurred vision, dizziness, or headaches. Work required in this project may expose personnel to materials that might contain any or all of these contaminants. Any personnel entering the Site shall be informed of all hazards associated with these contaminants.

The Occupational Health and Safety administration's (OSHA) Permissible Exposure Levels (PELs) for inhalation, in terms of the 8-hour time-weighted average (TWA) and the 15-minute short term exposure level (STEL), for these chemicals and gasoline are as described in Table 1 (29 CFR 1910.1000, 54 FR 2920, January 19, 1989, and California Department of Industrial Relations Permissible Exposure Limits for Chemical Contaminants).

Table 1. OSHA Permissible Exposure Levels					
TWA STEL					
Benzene	1 ppm	5ppm			
Ethylbenzene	100 ppm	135 ppm			
Toluene	100 ppm	150 ppm			
Xylenes	100 ppm	150 ppm			
Gasoline	300 ppm	500 ppm			
MTBE	40 ppm				

4.3 Physical Hazards

The physical hazards expected to be present at the Site may include:

- Drilling Equipment
- Moving Equipment
- Heavy Equipment
- Power/hand tools
- Saw Cutting
- Snapping Cables, Slings and Rope
- Sharp Objects
- Loose Foundations

- Open Pits or Ditches
- Lifting Hazards
- General Debris
- Excessive Noise
- Fire/Explosions
- Weather Hazards
- Heat Stress

3



5.0 RISK CONTROL

This section describes the procedures to follow to ensure the avoidance of operational hazards.

5.1 Accident Prevention (General)

While work is in progress, only persons authorized by the site safety officer will be permitted entry.

Site-specific training in the use of equipment, as well as safety precautions, will be provided during the pre-field safety meeting. The training will be repeated for any worker not present for the initial training. The safety meeting will review the work scheduled for the Site, expected hazards, special conditions, equipment locations, Material Safety Data Sheets (MSDS) and generic hazardous substances information and required safety procedures and equipment. Daily, pre-shift "tailgate" meetings will summarize the health and safety plan and review any new revisions to the site safety plan. Written attendance and meeting records of all safety meetings will be maintained with the project file.

All personnel on site will receive the following instructions:

- Keep hands away from face while they might be contaminated.
- Do not eat, drink, or smoke while hands might be contaminated.
- Stay well clear of heavy machinery while in operation unless involved in its operation.

5.2 Mechanical Hazards

The following procedures shall be followed during all phases of the operation to reduce those risks associated with mechanical equipment:

- Stay well clear of drill rods and augers while they are rotating and being hoisted. Extreme care is to be exercised when steel cables are being used to lift the drilling apparatus from the ground.
- Stand clear of the operating circle of excavators, backhoes, etc.
- Equipment maintenance schedules are the responsibility of each individual contractor. Equipment is to be checked daily. Any equipment deemed to be in an unsafe state of repairs, or operated in an unsafe manner shall be shut down until corrective action is taken. Equipment safety features, such as back-up alarms, shall be checked daily.

5.3 Electrical Hazards

The following procedures shall be followed during all phases of operation, in order to reduce those risks associated with electrical hazards:

• USA will be contacted prior to site activities to locate the presence of underground cables, utility lines, pipes, and storage vessels.



- The local power company shall be contacted, in order to verify the minimum allowable clearance from high-voltage power lines. Under no circumstances will any person, piece of equipment, or phase of operation come within 10 feet of overhead power lines.
- If the work area is unavoidably close to buried or overhead power lines, the power shall be turned off, with the circuit breaker locked and tagged out.
- All electrical equipment is to be properly grounded, and under no circumstances are
 any modifications to be made to any piece of electrical equipment. All electrical
 equipment is to be inspected daily for damaged leads or plugs. Any piece of
 equipment that is damaged shall not be used on the Site, and shall be removed from
 the Site for disposal or repair.
- If splicing wires must connect electrical equipment, the source shall be de-energized first; the breaker box locked out and appropriately tagged by the person who is to perform the splicing operation. All connections are to be appropriately taped. Once the splicing operation is complete, the person who performed the splice shall bring the source back into operation.
- Each person that has cause or need to use a piece of electrical equipment shall ensure that he/she is fully familiar with the equipment's operation and features.

5.4 Chemical Hazards

To reduce the possibility of injury due to chemical hazards, personnel shall wear those pieces of Personal Protective equipment as specified by the task, in section 6.0 (Personal Protective Equipment).

The likelihood of exceeding the OSHA PELs (Table 1) during the performance of the work outlined in this plan is considered to be low due to the ventilated conditions and low concentrations of constituents previously documented at the Site. However, half-face air purifying respirators with organic vapor cartridges, fit-tested for each employee present, will be available on site. If warranted by OVM readings, periodic air monitoring will be conducted during the on-site work with Sensidyne- or Dreager-type detector tubes and pump, which will provide immediate information on airborne benzene concentrations. Should the testing methods indicate potentially hazardous concentrations of airborne contaminants, or if any of the symptoms are noted or observed in any of the on-site personnel, corrective action will be taken, including using respirators, if necessary.

ECON and Blankinship & Associates (2007) developed a flow chart that depicts complete exposure pathways for on-site trench workers (outdoor air) of the adjacent site to the north of the Site, which has similar subsurface conditions and is also impacted with hydrocarbons in subsurface soil and groundwater (Appendix B). The flow chart Exposure pathways and potential receptors discussed below are based on this flow chart, with the exclusion of exposure pathways for building occupants (indoor and outdoor air), of which there currently are none.

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5.4.1 Pathways C1 and C2: Soil Ingestion

During excavation activities at the Site, it is possible that adult on-site workers could accidentally ingest soil or groundwater during their activities. Workers will be made aware of the potential hazard and will be advised to wear personal protective equipment and to wash hands before eating or drinking.

5.4.2 Pathways C3 and C4: Dermal Absorption

Site workers will be required to wear personal protective equipment (PPE) such as gloves, coveralls, Tyvek, or like material to limit or prevent contact with soil.

5.4.3 Pathways C6 and C7: Ingestion of Groundwater by On-site Worker

The water underlying the Site is not used for municipal, domestic, industrial process, industrial service or agricultural water supply or to replenish surface water. Water beneath the Site will not be used as a source of drinking water and therefore no receptors will be exposed by this route.

If groundwater is encountered during excavation activities, it is unlikely to appear potable as a result of mixing with silt and dirt created during excavation activities. As a result, it is highly unlikely that workers will be inclined to drink the water.

5.4.4 Outdoor Air Inhalation by On-site Worker

In accordance with the soil and groundwater management plan, dust control measures will be in place during excavation activities at the Site. The on-site worker is therefore not expected to be exposed to COCs in airborne dust at the Site.

5.5 Acoustical Hazards

In order to prevent hearing impairment, the use of earplugs or earmuffs shall be required for all personnel when heavy equipment is in use at the Site. However, should any personnel develop pain in the ear due to work-site noise, they shall immediately don a set of earplugs or muffs. Noise levels will also be controlled to conform to local ordinances.

5.6 Biological Hazards

In order to reduce the risk of biological contamination, PPE (Section 6.0) shall be worn for each specific task. This protective equipment shall be removed, and hands and face washed prior to contact with the mouth, by the hands, for such purposes as eating, drinking, or smoking. Smoking shall only be permitted in designated areas.

5.7 Heat Stress

If the ambient temperature exceeds 80°F, workers will be observed for signs of heat stress. Breaks will be taken if any worker exhibits symptoms of heat stress. The breaks will last until symptoms are relieved and/or the pulse of the worker is less than 110 beats per minute. As a preventative measure, workers will be instructed to drink fluids to keep hydrated. For severe heat stress, a health-care professional will examine workers as soon as possible.



All personnel entering the work area should be familiar with the signs and symptoms of heat stress. These include:

- Heat Exhaustion—Dizziness, light-headedness, slurred speech, rapid pulse, confusion, fainting, fatigue, copious perspiration, cool skin that is sometimes pale and clammy, and nausea.
- Heat Stress—Hot, dry, flushed skin; delirium, and comma (in some cases).

5.8 Elevated Work

Some work tasks may require workers to access work areas above the ground. In these instances, a stairway, ladder, ramp, or personal hoist will be provided. Activities will use general safe access and fall protection safety in accordance with California Code of Regulations (CCR) Tile 8.

Ladders will be inspected before each use. Broken or damaged ladders will be tagged and not used. Ladders will be chosen as appropriate to the load, size and task requirements. Ladder inspection, use, and care will follow safe work practices identified by the manufacturer.

5.9 Excavation Hazards

Spoil piles and equipment will be placed at least 2 feet from the edges of open excavations. Utilities will be located before excavating begins. A Cal/OSHA Trench and Excavation Permit will be acquired and available on site for all excavations and trenches greater than 4 feet deep into which employees may enter to do work. Workers will not enter excavations containing groundwater unless a dewatering plan signed by a professional engineer is in effect. Any signs of previously disturbed soil, or vibrations from adjacent machinery or traffic, will be monitored as the excavation proceeds. Excavations and trenches deeper than 5 feet will require protective systems (e.g. sloping, shoring, trench boxes) to be in place. Whenever possible, situations involving entry into an excavation of any depth will be avoided.

5.10 Confined Space Hazards

When work is to be done in an area where the natural circulation of fresh air or the ability to readily escape the site is restricted, that site shall be considered a confined space, and the following guidelines shall be followed:

- Personnel shall monitor the levels of oxygen, combustible gasses, and organic vapors
 prior to entering. Under no circumstances shall the space be metered if the following
 levels are exceeded:
 - 1. Oxygen content is less than 19.5%
 - 2. Combustible gas level is greater than 3% of the LEL.
 - 3. Total hydrocarbons are greater than the action levels defined in Table 3 of this section, if all air contaminants have not been identified.
- Personnel shall monitor the levels of oxygen, combustible gasses, and organic vapors continuously while inside the confined space. If the values stated in the above are exceeded, the space shall be evacuated immediately.



At least one additional person, who shall be present for the express purpose of monitoring the personnel in the space, shall be within sight and call of those personnel within the space, while remaining outside of the space proper. This person shall have, readily available to him; all rescue equipment necessary to remove personnel who may require extraction from the space and the Site. This equipment shall include, but not be limited to, respiration equipment of the same level as those used by the personnel in the space, first aid equipment, including compresses, harness, and all the extraction equipment.

Portable fans or blowers shall be used to introduce fresh air into the confined space. These fans or blowers shall be located on the upwind side of the space. The space shall not be entered until values of oxygen, organic vapors, and combustible gasses are brought below and measured below their respective action levels.

No personnel shall enter any unshored or unsupported excavation with a depth greater than 5 feet, or with unstable geological conditions.

5.11 Miscellaneous

The following miscellaneous safe working practices will be followed at all times:

- The site safety officer will account for all employees at the beginning and the end of each shift.
- Eating, drinking, chewing gum or tobacco, and smoking are prohibited during work operations, unless on break in a designated area.
- Contact with contaminated media will be minimized.
- Equipment and vehicles will not block roadways or exits from any building.
- Drummed material will be handled with equipment specifically designed for drums (drum slings and/or drum dollies).
- Workers will not stand near excavator bucket swing areas or earthmoving equipment, under elevated loads or ladders, or near the edges of excavations.

6.0 PERSONAL PROTECTIVE EQUIPMENT

The following modified **Level** D PPE will be used as necessary for site activities within work areas:

- Impervious clothing (gloves, Tyvek) shall be worn unless the Site Safety and Health Officer does not believe necessary. If hazardous materials (i.e. exposure to COCs) are encountered, employees will have the option, depending on the activity, to wear cotton/polyester, Nomex, or Tyvek coveralls large enough to fit over work clothing with sleeves and legs unrolled.
- Chemical-resistant, leather, electrical resistant or felt work gloves shall be worn depending upon the hazard.
- Safety glasses, goggles, or face shields, unless wearing a full-face respirator.



- Steel-toe/shank boots and boot covers if boots are not chemical resistant or materials cannot be adequately decontaminated (leather boots are typically appropriate when working with/on contaminated materials).
- Hard hat with high-voltage and impact resistance (Class B and/or E).
- High-visibility reflectorized safety vest when working with or near mobile equipment, vehicular traffic, locations with poor visibility (i.e. fog) and night operations.

Each worker will be responsible for maintaining his or her own PPE.

The level of protection can be increased by the site safety officer. Depending on the outcome of air monitoring readings, appropriate respiratory protection may be required if sufficient engineering controls cannot be established.

7.0 DECONTAMINATION

The type, level, and context of contamination at the Site do not warrant personal decontamination procedures beyond washing hands and removing disposable clothing on site. Disposable items and decontamination rinseate will be disposed of in the appropriate manner.



Air Monitoring Records

Date	Time	Sample Area – A Personal – P	Equipment Contaminants of Concern	Measurements





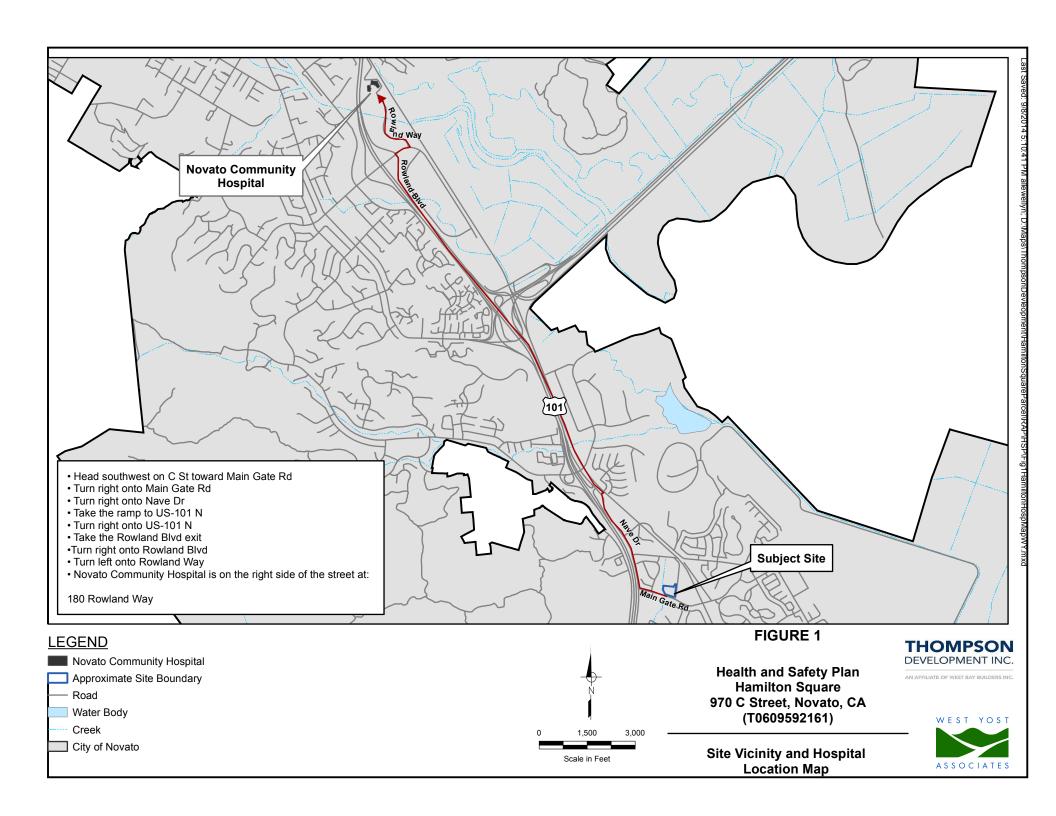
Site Safety Review	Meeting		
Date:	Time:	Project Number:	
Site Location			
	1	Attendees	

Site Safety Officer:

Name	Signature

APPENDIX A

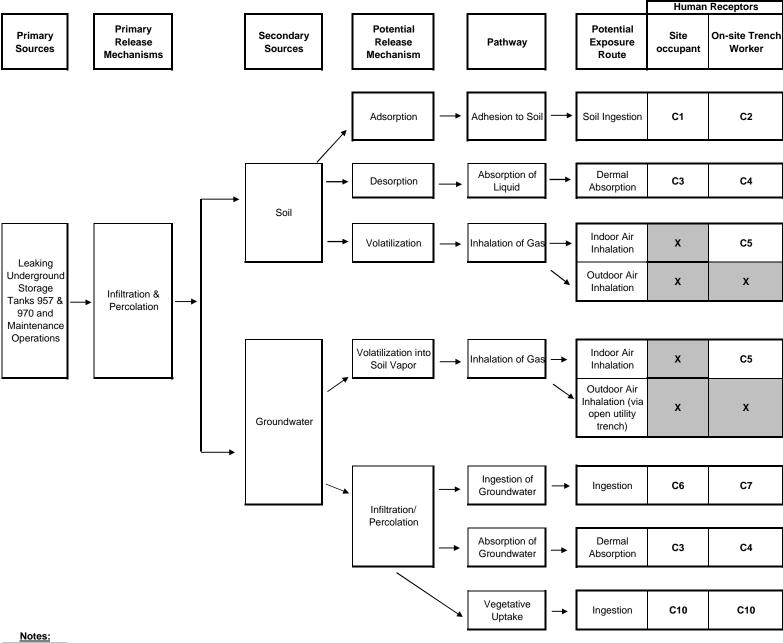
Directions to Hospital



APPENDIX B

Exposure Pathway Flow Chart

Plate 2. Conceptual Site Model Hamilton Air Force Base Parcels 1A and 1B



[&]quot;X" Indicates Complete Exposure Pathway to be Considered in PEA.

[&]quot;C" indicates that pathway is considered, but incomplete, and therefore not considered. Explanation presented in Section 9.0.

APPENDIX C

Musco Health and Safety Plan



MUSCO EXCAVATORS, INC.

2526 Greenvale Court Santa Rosa, CA 95401 (707)579-0250 • (707)575-7389 Contractor's License 634117

HEALTH AND SAFETY PLAN

FOR

Over Excavation

LOCATED AT

970 C Street Novato, California

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1.0 INTRODUCTION

Personnel involved in Field Investigations and Remediation at sites where Hazardous wastes may be present are potentially exposed to a variety of hazards including:

- * Inhalation of toxic airborne contaminants.
- * Skin contact with contaminated soil and water.
- * Presence of flammable / combustible vapors.
- * Oxygen-Deficient atmospheres.
- * Heat stress due to protective clothing and environmental conditions.
- * Physical standards inherent to field operation (e.g., working near heavy equipment or at remote locations.)

Adequate planning is needed prior to performing work at these sites to minimize the risk of employee injury or illness.

1.1 Purpose

The purpose of the Health and Safety Plan for this particular site is to provide personnel protection standards and mandatory safety practices, procedures, and contingencies while performing the tasks outlined in the Scope of Work. This Health and Safety Plan addresses the following regulations and guidance:

- * Occupational Safety and Health Administration (OSHA) Standards for General Industry. 29 CFR (especially 29CFR 1910. 120 "Hazardous Waste Operations and Emergency Response.")
- * OSHA Standards for Construction Industry, 29 CFR 1926.
- * National Institute of Occupational Safety and Health (NIOSH), OSHA, U.S. Environmental Protection Agency (EPA), and the U.S. Coast Guard "Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities," October 1985.

1.2 Responsibilities

The chain of command for safety and health-related issues during investigations, remediation, and tank removal activities at the site is delineated below. Musco Excavators, Inc. is to be in overall control of the Health and Safety activities at the site. Property owner and Musco Excavators, Inc. must approve any modification in this Health and Safety Plan.

All Musco Excavators, Inc. and subcontractor personnel must follow the requirements of this Health and Safety Plan. Any unsafe conditions must be promptly reported to the Site Safety and Health Officer (SSHO), who will be Bryan Musco, or his appointed, qualified person.

The SSHO responsibilities include:

- * Reviewing and confirming any changes in personal protective clothing or respiratory protective requirements.
- * Reviewing all Health and Safety Documentation.
- * Reviewing all on-site ambient air monitoring results.
- * Providing site-specific training, as required, to all personnel assigned to work at the site.
- * Stopping work when unacceptable Health Safety Risk exists.
- Providing a Health and Safety briefing to all site visitors.
- * Supervising decontamination to ensure complete decontamination of all personnel, tools and equipment.
- * Supervising the distribution, use, maintenance, and disposal of personnel protective clothing and equipment.

1.3 List of Personnel with 40-hour OSHA, 20 CFR for this Project

Bryan Musco, Duarte Silva & Kyle Passot

2.0 RISK ANALYSIS

This section assesses the chemical and physical hazards that are known to exist at the site and those that may be created by the remediation efforts. Table 2 summarizes the hazards associated with each of these

tasks. The hazard analysis has been divided into three critical areas:

- * Exposure: Expected frequency of exposure to a hazard;
- Probability: Likelihood of an injury upon exposure to a hazard;
- * Consequence: Probable degree of injury or effect an injury will have on the effectiveness of a team member.

An explanation of the letters denoting the degrees of exposure, and consequence is provided at the end of the table.

Contaminants most likely to become encountered during field operations at the site are the Petroleum Hydrocarbons and Metals listed in Table 1. A list of the occupational exposure limits and signs and symptoms of exposure is also listed in Table 1.

Most work required in this project might potentially expose personnel to materials that may contain any or all of these contaminants. Any personnel entering the site shall be informed of all hazards associated with these contaminants.

The physical hazards expected to be present during site investigation activities include:

- * Saw Cutting
- * Snapping Cables, Slings and Rope
- * Drilling Equipment
- Moving Equipment
- * Heavy Equipment
- Sharp Objects
- Loose Foundations
- * Open Pits or Ditches
- * Excessive Noise
- * Fire/Explosions
- * Buried Utility Lines
- * Energized Overhead and Underground Power Lines
- * Heat Stress

3.0 PROCEDURES TO MITIGATE HAZARDS

This section describes those procedures to be followed in order to ensure the avoidance of operational hazards, as discussed previously. These hazards include mechanical, electrical, chemical, acoustical, biological, and temperature hazards. Those hazards associated with confined spaces are not anticipated to occur, and are not discussed.

3.1 Mechanical Hazards

The following procedures shall be followed during all phases of the operation to reduce those risks associated with mechanical equipment:

- * Stay well clear of drill rods and augers while they are rotating and being hoisted. Extreme care is to be exercised when steel cables are being used to lift the drilling apparatus from the ground.
- * Stand clear of the operating circle of excavators, backhoes, etc.
- * Equipment maintenance schedules are the responsibility of each individual contractor. Equipment is to be checked daily. Any equipment deemed by a Musco Excavators, Inc. employee to be in an unsafe state of repairs, or operated in an unsafe manner shall be shut down until corrective action is taken. Equipment safety features, such as back-up alarms, shall be checked daily.

3.2 Electrical Hazards

The following procedures shall be followed during all phases of operation, in order to reduce those risks associated with electrical hazards:

* Underground Service Alert (1-800-422-4133) will be contacted prior to site activities to locate the presence of underground cables, utility lines, pipes, and storage vessels at the proposed sites where soils borings will be placed.

- * The local power company shall be contacted, in order to verify the minimum allowable clearance from high-voltage power lines. Under no circumstances will any person, piece of equipment, or phase of operation come within 10 feet of overhead power lines.
- * If the work area is unavoidably close to buried or overhead power lines, the power shall be turned off, with the circuit breaker locked and tagged out.
- * All electrical equipment is to be properly grounded, and under no circumstances are any modifications to be made to any piece of electrical equipment. All electrical equipment is to be inspected daily for damaged leads or plugs. Any piece of equipment that is damaged shall not be used on the site, and shall, in fact, be removed from the site for disposal or repair.
- * If splicing wires must connect electrical equipment, the source shall be de-energized first; the breaker box locked out and appropriately tagged by the person who is to perform the splicing operation. All connections are to be appropriately taped. Once the splicing operation is complete, the person who performed the splice shall bring the source back into operation.
- Each person that has cause or need to use a piece of electrical equipment shall ensure that he/she is fully familiar with the equipment's operation and features.

3.3 Chemical Hazards

To reduce the possibility of injury due to chemical hazards, personnel shall wear those pieces of Personal Protective equipment as specified by the task, in section 5.0 (Personal Protective Equipment.) Air monitoring shall be conducted to evaluate respiratory and explosion hazards. The instruments and action levels to be used are listed in Table 3. The Musco Excavators, Inc. employee conducting each field task shall be responsible for performing the specified air monitoring. In order to ensure the protection of off-site public health, site perimeter air monitoring for volatile organic will be performed (see Section 6.0, Perimeter Monitoring.) If airborne levels of contaminants consistently exceed 5ppm background levels at the perimeter of the site, the work will be stopped; the suspected source of the contamination will be covered to eliminate emissions. A decision will then be made as to how to proceed with the work and how to more fully characterize and reduce the airborne emissions.

3.4 Acoustical Hazards

In order to prevent hearing impairment, the use of earplugs or earmuffs shall be required for all personnel when heavy equipment is in use at the site. However, should any personnel develop pain in the ear due to work-site noise; they shall immediately don a set of earplugs or muffs. Noise levels will also be controlled to conform to local ordinances.

3.5 Biological Hazards

In order to reduce the risk of biological contamination, Personal Protective Equipment, described in Section 5.0, shall be worn for each specific task. This protective equipment shall be removed, and hands and face washed prior to contact with the mouth, by the hands, for such purposes as eating, drinking, or smoking. Smoking shall only be permitted in those areas designated by SSHO.

3.6 Heat Stress

All personnel entering the work area should be familiar with the signs and symptoms of heat stress. These include:

- * Heat Exhaustion--Dizziness, light-headedness, slurred speech, rapid pulse, confusion, fainting, fatigue, copious perspiration, cool skin that is sometimes pale and clammy, and nausea.
- * Heat Stress--Hot, dry, flushed skin; delirium, and comma (in some cases.)

Resting frequently in a shaded area and consuming large quantities of fresh, potable water can prevent heat stress. If heat exhaustion symptoms are observed, the person will be required to rest in a shaded area and consume liquids. If symptoms are widespread and observed frequently, an appropriate work/rest regimen will be instituted. This may involve limiting the work period so that after one minute of rest, a person's heart rate (HR) does not exceed 110 beats per minute.

If the HR is higher than 110 beats per minute, the next work period should be shortened by 33 percent, while the length of the rest period stays the same. If the HR is 110 beats per minute at the beginning of the next rest period, the following work cycle should be shortened by 33 percent. Resting HR should be determined prior to start of on-site activities. A healthy individual's resting HR is usually 60 to 70 beats per minute. If symptoms of heat stress are observed, the victim will be transported to the nearest hospital immediately. Workers should not hesitate to seek medical attention if heat stress is suspected.

3.7 Confined Space Hazards

When work is to be done in an area where the natural circulation of fresh air or the ability to readily escape the site is restricted, that site shall be considered a confined space, and the following guidelines shall be followed:

- * Personnel shall monitor the levels of oxygen, combustible gasses, and organic vapors prior to entering. Under no circumstances shall the space be metered if the following levels are exceeded:
 - 1. Oxygen content is less than 19.5%
 - 2. Combustible gas level is greater than 3% of the LEL.
 - 3. Total hydrocarbons are greater than the action levels defined in Table 3 of this section, if all air contaminants have not been identified.
- * Personnel shall monitor the levels of oxygen, combustible gasses, and organic vapors continuously while inside the confined space. If the values stated in the above are exceeded, the space shall be evacuated immediately.
- * At least one additional person, who shall be present for the express purpose of monitoring the personnel in the space, shall be within sight and call of those personnel within the space, while remaining outside of the space proper. This person shall have, readily available to him; all rescue equipment necessary to remove personnel who may require extraction from the space and the site. This equipment shall include, but not be limited to, respiration equipment of the same level as those used by the personnel in the space, first aid equipment, including compresses, harness, and all the extraction equipment.
- * Portable fans or blowers shall be used to introduce fresh air into the confined space. These fans or blowers shall be located on the upwind side of the space. The space shall not be entered until values of oxygen, organic vapors, and combustible gasses are brought below and measured below their respective action levels.
- * No personnel shall enter any unshored or unsupported excavation with a depth greater than 5 feet, or with unstable geological conditions.

4.0 TRAINING

4.1 Site Workers

All personnel who will perform on site tasks shall be trained by U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) standard, 29 CFR 1910.120, Hazardous Waste Operations and Emergency Response. Training will include:

- * A minimum of 40 hours initial instruction off site is required for those personnel conducting invasive fieldwork at the site. Proof of training shall be required to be present at the site.
- * A minimum of 3 days of actual field experience under the direct supervision of a trained, experienced supervisor.
- * Regulatory officials at the site shall be required to have completed at least 24 hours of initial instructions, and shall present training certification as requested.
- * A minimum of 8 hours of refresher training annually.
- First Aid and CPR training.
- * Additional training, which addresses any unique or special hazards.

All personnel entering the site shall be requested to present proof of current training. Failure to present such certification shall result in removal from the site.

4.2 On Site Management and Supervisors

On site management and supervisors shall receive at least 8 additional hours of specialized training on managing such operations.

4.3 Pre-entry Orientation Session

Prior to entering the site, personnel shall attend a daily pre-entry orientation session presented by the SSHO, which addresses the following issues. All personnel shall verify attendance of this daily meeting by signing the Safety and Health Plan Review Record (Appendix A.)

4.4 Degree and Nature of Potential Health and Safety Hazards

The health effects and hazards of the chemicals identified or suspected to be on the site shall be discussed. The physical and chemical properties of the contaminants. The most likely route of exposure and possible

adverse consequences of working on the site if proper safety procedures are not observed or if protective fails or is improperly worn shall be reviewed. Other hazards, which are unique to site operations, shall be presented.

4.5 Personal Protective Equipment

Personnel shall be instructed in the use, care, maintenance, limitations, and fitting of personnel protective equipment. Respirator training shall conform to ANSI Z88.2 (1980) and OSHA 29 CFR 1910.134. Personnel shall not be fit tested or issued a respirator if facial hair interferes with the face-to-face piece seal of the respirator.

Qualitative fit testing shall be performed annually. Records of the fit testing shall be maintained. Positive/negative fit testing shall be performed by the user each time a respirator is donned.

4.6 Decontamination Procedures

The procedures, materials, equipment, and facilities specific to the site will be discussed during the morning briefing by the SSHO.

4.7 Accepted Practices

Specific safe work practices, which must be adhered to during the site operations will be discussed. This will include procedures for entering and exiting the site, and accepted and unaccepted practices within the personnel decontamination area.

4.8 Emergency Procedures

Procedures for responding to emergencies as specified in the Emergency Response Plan shall be covered.

5.0 PERSONAL PROTECTIVE EQUIPMENT

All respiratory protective equipment must be approved by the National Institute for Occupational Safety and Health (NIOSH) /Mine Safety and Health Administration (MSHA.) The minimum protective equipment requirements for each site task shall be Level D. However, should airborne monitoring indicate organic vapors consistently in excess of 1-2 ppm, the level of protection shall be upgraded to Level C1. If monitoring indicates organic vapors consistently in excess of 5 ppm, the level of protection shall be up graded to Level C2.

5.1 Levels of Protection

Level D Protection

The following personal protection equipment is required to be worn by all on-site personnel:

- * Poly/cotton reusable coveralls or long sleeve shirts and long pants
- * Steel toe boot/shoes
- Earplugs or muffs
- * Hardhat
- * Nitrile gloves (if contact with potentially contaminated soil or water is expected)
- Safety glasses
- Neoprene or butyl rubber boots or latex boot covers (if contact with potentially contaminated soil or water is expected)

Level C1 Protection

One-half or full face respirator with high efficiency organic vapor cartridges with dust filter

Level C Protection

- * Cloth coveralls
- * Steel-toed boots with waterproof covers, or steel-toed rubber boots
- * Hardhat
- Ear plugs or ear muffs
- * Nitrile gloves
- * Safety glasses
- * Full-face respirator with high efficiency organic vapor cartridges with dust filter

5.2 Maintenance and In-Use Inspection of Protective Equipment

Effective use of protective equipment requires that the equipment be properly used, maintained, and

inspected periodically during the day. Procedures will be presented during pre-entry training.

5.3 Gloves/Body coverings

Gloves and coveralls will be regularly inspected and replaced if torn. Coveralls will be laundered daily at a minimum. Reusable gloves will be decontaminated whenever exiting work areas.

5.4 Respirators

Site conditions are not anticipated to require respiratory protection, therefore, no respirators are expected to be necessary. However, respirators shall be inspected and checked daily for leaks both visually and with negative and positive pressure checks on the wearer. Respirator cartridges will be replaced daily or more frequently if excessive resistance develops. All respirator maintenance will be performed by the SSHO. The type of respirators used will be equipped with high efficiency organic vapor cartridges and dust filters.

Respirator exterior will be wet-wiped whenever exiting work areas, as specified in Section 8. Respirators will be rinsed with a solution containing a sanitizer recommended by the respirator manufacturer. Respirators will be hung to drip dry and, if not used daily, will be placed inside plastic bags for protection against dust.

6.0 ENVIRONMENTAL MONITORING

6.1 Real Time Air Monitoring

A total volatile organics instrument shall be used to periodically monitor airborne concentrations of contaminants on site. A photo ionization detector (PID) (e.g., hNu or OVM) or equivalent and explosimeter/oxygen meter will be used to screen excavated soils for volatile organic compound contamination. The PID will also be used to measure and record employee breathing zone levels of organic vapors and gasses.

The monitoring program may be increased, reduced, or modified by the SSHO, based on site conditions and monitoring results. All monitoring will be accomplished under the direction of the SSHO, who will interpret the results.

The air-monitoring program will include sufficient monitoring of air quality in work zones and other on-site areas to asses levels of employee exposure, determine that the work zone designations are valid, and verify that the respiratory protection being worn by personnel is adequate. The air-monitoring program is also designed to ensure that contaminants are not migrating off site to minimize exposure of nearby populations and/or workers. Air monitoring shall be conducted at 15 minute intervals, unless it is determined that air monitoring may occur at less frequent intervals. These less frequent intervals would be the result of ambient air movement (wind,) or through the reduction of the air threat through verification monitoring. Such changes to plan will be logged.

Monitoring shall be conducted:

- * When work begins on a different portion of the site.
- * When contaminants other than those previously identified are being handled.
- * When a different type of operation is initiated.
- * If a sufficient reasonable interval has passed so that exposures may have significantly increased.

Measurements shall be taken at the anticipated source and in the breathing zone of site personnel.

Instruments shall only be used by employees who have been trained in the proper operation, use limitation, and calibration of the monitoring instrument and who have demonstrated the skills necessary to operate the instrument.

6.2 Perimeter Monitoring

Monitoring shall be conducted at least two times each day, with a total volatile organics direct-reading instrument, at location upwind and downwind at the perimeter of the site. Measurements shall also be taken periodically downwind of each active sampling site to assess the potential for off-site migration. If airborne levels of contamination exceed background levels for a sustained period of time at the perimeter of the site, the work area shall be expanded to encompass all area subjected to the elevated levels. If airborne levels of contaminants exceed background levels by 5 ppm at the perimeter of the site, the work will be stopped, the suspected source of the contamination (borehole or production well) will be covered to eliminate emissions.

If airborne levels of contaminants exceed background levels, a decision will then be made as to how to proceed with the work and how to more fully characterize the airborne emissions.

6.3 Field Instruments

Two types of PID vapor analyzers are available for on-site screening during field operations: hNu Model PI 101 and/or Thermo Environmental Instruments 580A or 580B.

The Gastech Flammable Gas Detector shall be used to measure explosion/oxygen levels. Equivalent instruments may be used.

Calibration of instruments will be performed prior to field use on a daily basis. Calibration methods as specified in manufacturers-supplied manuals for each instrument will be followed. A two-point calibration is performed on portable gas analyzers using hydrocarbon-free air as the zero point and a manufactured calibration gas as the high point. A gas-analyzed instrument is considered to be accurate if readings of the standards are within 20 percent of the actual concentration of standard gas.

6.4 Record Keeping Requirements

The result of air monitoring readings shall be recorded on standard air monitoring data forms. A calibration and maintenance log for each instrument shall also be maintained. Records shall also be kept of all significant events, addendum's, or changes to level of protection.

6.5 Heat Stress Monitoring

Ambient temperatures at the site combined with the requirements for PPE use may contribute to heat stress. When ambient temperatures reach or exceed 70 degrees Fahrenheit, body temperatures will be monitored using fever strips or oral thermometers and heart rates will be monitored when heat stress conditions may occur. Work-rest regimens will be adjusted accordingly. (See Section 3.6)

7.0 SITE CONTROL

A check-in and checkout system will be used to control and record each employee and piece of equipment inside the site boundaries. Only personnel identified as "authorized" will be permitted to enter the site. A Master list of authorized personnel will be available and will only include personnel who have received the appropriate training and certification required by this Health and Safety Plan and OSHA requirements.

7.1 Work Zones

Work zones are designated to prevent employees, visitors, and the surrounding environment from exposure to contamination during all aspects of site remediation activities. All work zones and support areas will be established by Musco Excavators, Inc. Movement of personnel and equipment between zones and on and off site will be controlled by means of designated access points. Minimum personnel protective equipment for work in each zone is described in Section 5.0.

7.2 Work Areas

The work areas encompass the surface areas around the boundary of the property. It is anticipated that this will be a Level D area and be utilized during invasive operations.

7.3 Safe Work Practices

Safe work practices, which must be followed by all site workers, include:

- * Eating, drinking, chewing gum or tobacco, and smoking are prohibited in the work and decontamination areas.
- * Do not sit or kneel in areas of obvious contamination.
- * Hands and face must be thoroughly washed upon leaving the work area.
- * Repair or replace immediately any defective PPE.
- * Personnel must not take prescription drugs unless specifically approved by a qualified physician.
- * If respirators are required, facial hair that interferes with the face-to-face piece fit of the respirator will not be permitted.
- * Contact lenses will not be permitted to be worn when the potential for chemical splash exists or when full face-piece respirators are required.
- * Personnel on the site must use the buddy system; visual contact must be maintained between team members at all times.

7.4 Daily Start-Up and Shutdown Procedures

The following protocols will be followed daily prior to start of work activities:

- * The SSHO will review site conditions to determine if modifications of work and safety plans are needed.
- * Personnel will be briefed and updated on any new safety procedures.
- * All safety equipment will be checked for proper function.
- * The SSHO will ensure that first aid equipment is readily available.
- The SSHO will indicate appropriate air monitoring.

The following protocol will be followed at the end of daily operations and before breaks:

* All personnel will proceed through appropriate decontamination procedure and facilities.

8.0 DECONTAMINATION

8.1 General

Employees will be trained in decontamination procedures that will be implemented when employees, or equipment enter work or decontamination areas. Decontamination will be performed to minimize potential contamination of the equipment and the spread of contamination from one zone to another.

8.2 Personnel

If it becomes necessary to upgrade the level of protection from Level D to Level c or above, no worker, except under emergency situations, will leave the work area without going through the proper decontamination sequences.

Before leaving the work area, personnel will wash boots and outer gloves at the decontamination area. The wash solution will be a simple detergent and water solution. Outer disposable clothing will be removed and placed in 6-mil plastic bags for disposal. Exterior surfaces of respirators will be wet-wiped, then respirators will be removed and placed in a plastic bag for temporary storage and cleaning.

8.3 Respirator Decontamination

When required, respirators will be cleaned daily by the individuals to whom they have been assigned. Each individual will be responsible for cleaning and maintaining his/her own respirator.

A washbasin or sink, with solution containing sanitizer recommended by the manufacturer, will be provided in the decontamination area for final rinsing of respirators at the end of the day. Respirators will then be hung to drip dry and, if not used daily, will be placed inside plastic bags for protection against contamination. Respirator cartridges will be changed at least daily of more frequently if sampling data indicate potential saturation concentrations exist or breathing resistance becomes difficult. The SSHO will also spot check respirators to ensure that they all remain clean and are properly maintained and stored.

8.4 Equipment Decontamination

If in Level C or above, all equipment being used in the work area will be subject to complete decontamination procedures before the equipment is removed from these areas. Equipment and vehicles which contact potentially contaminated soil will be decontaminated using a steam cleaner or hot water pressure washer. Wastewater will be contained in all holding tank or drums for further disposal at an appropriate facility. All contaminated items will be carefully inspected and/or decontaminated to the satisfaction of the SSHO before being taken off site.

9.0 EMERGENCY RESPONSE PLAN

On site emergencies will ultimately be handled by off-site emergency support personnel. Initial response and first aid treatment, however, will be available on site.

In case of a hazardous material emergency, the senior supervisor on site will assume full control and direction of the emergency response as the Incident Commander. The Incident Commander will work with the SSHO to identify and evaluate hazards. All emergency responders and communications will be coordinated and controlled through the Incident Commander.

9.1 Emergency Equipment

Emergency equipment for the work areas will be kept in the decontamination area. The equipment will include:

- * Portable emergency eye wash with a capacity for providing clean water at a rate of at least 0.4 gallons per minute for a 15-minute period.
- * Two 20-lb multipurpose (ABC-rated) fire extinguishers.
- * An adequately stocked first aid kit.

Another adequately stocked first-aid kit and an emergency siren will be available in the support area.

9.2 Pre-Emergency Planning

Prior to start of work, Musco Excavators, Inc. will contact local authorities to inform them of the start date and anticipated scope of work. First aid kits at least one Musco Excavators, Inc. employee trained in first aid and cardiopulmonary Resuscitation (CPR) will be on site at all times during remedial activities.

9.3 Emergency Recognition and Prevention

Emergency conditions that may be anticipated at the site include:

- * Medical emergency
- * Heavy equipment accident
- * Discovery of unanticipated buried hazards
- * Poisonous snakes and spiders
- * Overexposure of personnel to on site contaminants
- * Heat Stress

To ensure that hazard recognition and accident prevention protocols are being maintained, personnel must follow the requirements of the Health and Safety Plan.

9.4 Operations Shutdown

Operations shutdown may be mandated by Musco Excavators, Inc. on recommendation from the SSHO or by the emergency response Incident Commander. Conditions warranting work stoppage will include:

- * Uncontrolled fire
- Uncovering potentially dangerous buried material
- * Any condition immediately dangerous to life and health or the environment
- * Heat stress illness exhibited by the crew
- * Air contaminant concentrations in excess of the protection factors afforded by the respirators in use.

When any of these conditions exist, operations will be stopped and the site secured. All personnel will leave the work area until the Incident Commander has determined that operations may resume.

9.5 Fire and Explosion Response Procedures

Fire on site can be started by natural events, work activities, or the activities of others. There shall be a multipurpose (ABC-rated) fire extinguisher on hand at all times. Personnel will be instructed in the use of these fire extinguishers and to attempt control of only very small fires. The procedure for using a fire extinguisher is to pull the safety pin, point at the base of the flames, and discharge the extinguisher by sweeping the flames from a distance of about 6 feet. The extinguisher operator should move in as the flames are being put out. Musco Excavators, Inc. will inform the local fire district immediately in case of any fire when its support will be required.

9.6 Evacuation From Work Areas

If an on-site emergency occurs, the Incident Commander will sound the site emergency alarm. All workers will meet at a predesignated area located in the support area. An Employee head-count will be performed to ensure all workers are accounted for.

In case of an emergency, evacuated employees may be decontaminated rapidly by removing exterior clothing. If the worker is critically injured in the work area, the worker may be removed immediately from the area--DO NOT take the time to decontaminate the injured worker; seek medical attention immediately.

Musco Excavators, Inc. Page 13 of 20

9.7	Emergency	/ Medical	Treatment	and	First .	Aid
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Only minor injuries will be treated on site. They will be treated with the first-aid kit available on site.

For major injuries, contact 911. The phone number for the hospital, fire, and ambulance is 911. A complete list of emergency telephone numbers and route to nearest hospital is provided in Appendix B.

This Health and Safety Plan has been prepared by:

MUSCO EXCAVATORS, INC.	
Bryan H. Musco	April 20, 2015
	Date
President	
Title	

APPENDIX A

SITE SAFETY AND HEALTH PLAN REVIEW RECORD

	Street, Novato, California	d I baya baan bulatad ay Occ	makuma layat asal dan
ave read the Healtr exposure likely as a an.	n and Safety Plan for this site and a result of participation in this pro	o I have been briefed on the pject. I agree to conform to al	nature, level, and deg I the requirements of t
me	Signature	Affiliation	Date

APPENDIX B

EMERGENCY TELEPHONE NUMBERS

Ambulance	911
CAL OSHA District Office 3419 Broadway Street, #H8, American Canyon, CA	707-649-3700
Fire Department (Emergency)	911
Musco Excavators, Inc. – Bryan Musco	707-579-0250 (Office) 707-975-6885 (Cell)
Poison Control Center	1-800-222-1222
Police Department	911
San Francisco Bay Regional Water Quality Control 1515 Clay Street, Suite 1400, Oakland, CA 94612	510-622-2300

Hospitals

Novato Community Hospital (Sutter Health) – 180 Rowland Way, Novato, CA 94945 415-209-1300

DIRECTIONS ARE ATTACHED (Appendix C)

APPENDIX C

DIRECTIONS TO HOSPITAL

Novato Community Hospital (Sutter Health) 180 Rowland Way Novato, CA 94945 415-209-1300

1. Head southwest on C Street toward Main Gate Road	72 ft
2. Turn right onto Main Gate Road	
3. Turn left onto Nave Drive	5 mi
4. Merge onto US-101 N via the ramp to Eureka	1 mi
5. Merge onto US-101 N	3.1 mi
6. Take the Rowland Blvd exit	
7. Turn right onto Rowland Blvd	410 ft
4. End at 180 Rowland Way	

TABLE 1
CHEMICAL CONTAMINANTS

MATERIAL	LEL/UEL (%)	TLV_TWA (ppm)	Odor Threshol (ppm)	ld ACUTE EXPOSURE SYMPTOMS
Benzene	0.339/7.1	1	4.68	Fever-Convulsions–confusion- dizziness–drowsiness– headache-nausea–respiratory system irritation-skin irritation- tremors-vomiting-weakness
Ethylbenzene	0.0/6.7	100	0.25-200.00	Fever-abdominal pain-dizziness- drowsy-headache-nausea- respiratory system irritation-skin irritation-unconsciousness- vomiting-weakness
Toluene	1.3/7.1	100	0.17-40	Confusion-dizziness-drowsiness-headache-nausea-respiratory system irritation-skin irritation-tremors-unconscious-vomiting-weakness-fever
Xylene	1.1/7.0	100	0.5-200	Dizziness-drowsy-headache- nausea-respiratory system irritation-skin irritation- unconscious-vomiting-fever
Lead	Explosions of dust in confined areas can occur	50 UG/M3	N/A	Convulsions-pains in abdominal area-dizziness-diarrhea-tremors-weakness-fever
Gasoline	1.4/7.6	300	<1	Confusion-dizziness-drowsiness- fever-headache-nausea- respiratory system irritation – skin irritation-unconsciousness
Methylene Chloride	12/NA	50	25-320	Fever-headache-nausea- respiratory system irritation-skin irritation- weakness

TABLE 2
HAZARD ANALYSIS

Job Hazard	Exposure	Probability	Consequence
<u>Drilling</u>			
Drill Rig Mechanical Noise	A A	C C	A-D E
Buried Utilities Electrical Chemical Exposure Fire and Explosion Dust Tank Removal/Excavation	C A D B	C B D	A-D A-E A-D D-E
Heavy Equipment, Including Crane Excavator, Loader, Backhoe Mechanical Noise Chemical Exposure Biological Exposure Fire and Explosion Dust Saw Cutting Tank Lifting Soil Slope Failure	A C A D D B C C D	C C B D D D	A-D E A-E A-D A-D D-E A-E A-D
Soil and Ground Water Sampling Chemical Exposure Biological Exposure	A D	B-D D	A-E B-D
Decontamination			
Steam Cleaner Mechanical Electrical Generator Mechanical Electrical Chemical Exposure	В В С В В	D D D D	B-D A-D C-D A-D A-E
Biological Exposure	D	D	A-D

EXPLANATIONS

<u>Exposure:</u> The frequency of exposure to the hazard event.

A = Continuously B = Frequently

C = Occasionally

D = Seldom

<u>Probability:</u> The likelihood that an injury will occur upon exposure to the hazard event.

A = Certain or almost certain

B = Likely, not unusual, 50/50 chance of occurring

C = Unusual, would generally occur less than 50% of the time

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D = Improbable, very low chance of occurrence

<u>Consequence:</u> The degree of injury resulting from exposure to the hazard event of significant enough degree to cause an injury.

- A = Fatality
- B = Serious injury, including chemical exposure, requiring hospitalization
- C = Moderate injury, including chemical exposure, requiring on-site first aid treatment
- D = Minor injury, including chemical exposure, requiring on-site first aid treatment
- E = Chemical, acoustical, or other exposure above the Threshold Limit Value (TLV) or other recommended standard that may not produce immediate acute effects, especially for chronic toxicants

TABLE 3

AIR MONITORING INSTRUMENTATION AND ACTION LEVELS

<u>Hazard</u>	Instrument	Reading	Location	<u>Action</u>
Respiratory	PID/Draeger Tube	1-2 ppm	Breathing	Don Respirator (Modified D)
Respiratory	PID/Draeger Tube	5ppm	Breathing	Don Level Ć
Respiratory	PID/Draeger Tube	10 ppm	Breathing	(Protection) Leave Area
Explosion Explosion	Combust. Gas Meter Combust. Gas Meter	10% LEL 20% LEL	Ambient Air Ambient Air	Vent Area Leave Area
Oxygen Deficiency	Oxygen Meter	19.5%	Oxygen Ambient Air	Leave Area

Apparent exposure level above the background ambient air concentration. Background levels may change due to factors such as weather and location of work site.

High efficiency organic vapor cartridges with dust filters shall be used.

As each chemical constituent is identified through soil and surface water testing, specific action levels will be determined. These site-specific action levels and any modifications to safety procedures presented in this plan shall be incorporated in future revisions. It is presently anticipated that chemical hazards will warrant the division of the work site into work, decontamination area prior to entering the support area. The support and decontamination area will be upwind of the work site. No visitors shall be allowed to approach the work site unless they are properly trained and under the supervision of delegated Musco Excavators, Inc. personnel.