

HEALTH AND SAFETY PLAN

SOIL AND GROUNDWATER SITE ASSESSMENT

Former DFSP Morro Bay
3300 Panorama Drive
Morro Bay, California

SUBMITTED TO:

**Central Coast Regional Water Quality Control Board
Site Cleanup Program**

895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401

ATTN: Sarah Treadwell, Engineering Geologist

FOR:

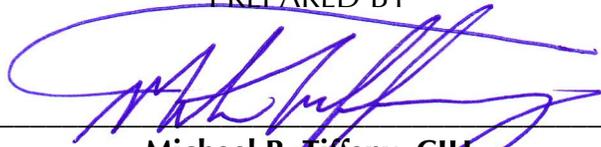
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ACG JOB NO. 11612-1202

July 28, 2020

PREPARED BY



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Certified Industrial Hygienist No. 5056

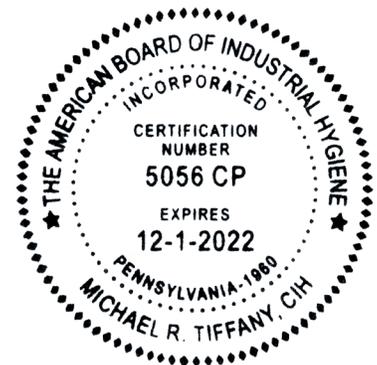


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INTRODUCTION

The purpose of this Health and Safety Plan is to provide site-specific health and safety requirements as part of the soil and groundwater site assessment workplan prepared for the former Defense Fuel Support Point (DFSP) (the Facility) located at 3300 Panorama Road in the city of Morro Bay in San Luis Obispo County, California. The Facility included a 10-acre former bulk jet fuel (JP-5) tank farm containing two 125,000-barrel above ground storage tanks (ASTs), one water storage tank, and one pumping station. An offshore mooring station was used to transfer JP-5 in Estero Bay through a pipeline (loading line) to ASTs located on the Facility. From there, JP-5 was transferred through 98 miles of pipeline to the Lemoore Naval Air Station (NAS) in Lemoore, California.

The Facility was closed in 1991 and designated a closed Central Coast RWQCB Military Cleanup site. Multiple subsurface site assessments were carried out by the US Navy at the Facility prior to purchase of the property by the current owners, resulting in low-risk closure for groundwater contamination in 1997. The current owner demolished the ASTs, removed aboveground and underground piping, and removed the pumping equipment in 2018, under permit from the County of San Luis Obispo Public Health Department Environmental Health Services Division (EHS). The objective of the soil and groundwater site assessment is to evaluate the current condition of previously identified impacts, to assess areas not previously investigated due to the presence of the tanks and other infrastructure, and to provide information to support a Human Health Risk Assessment (HHRA) in order to obtain a site closure for unrestricted use.

The purpose of this Health and Safety Plan is to provide site-specific safety requirements for surface soil sampling and subsurface exploration using hydraulic-push and hollow-stem drilling as part of the soil and groundwater site assessment.

Preparation of this Health and Safety Plan is not intended to relieve any contractor, their representatives, or any other professionals from their duties and responsibilities with respect to overall site safety for the project. Specifically, this Health and Safety Plan covers environmental health & safety considerations with respect to impacted soil which may be encountered during the subsurface assessment. All personnel working within the exclusion zone are responsible for observing all additional health and safety requirements as mandated by Cal-OSHA, the Department of Building and Safety, and all other pertinent health and safety rules governing work activities to be conducted at a construction site.

OBJECTIVE

The overall work objective of this site-specific Health and Safety Plan is to provide for proper identification, safe handling, and mitigation of petroleum and lead contaminated soil which may be encountered during hydraulic-push and hollow-stem drilling as part of a subsurface site assessment at the Facility. To achieve this objective, the following must be accomplished.

- ◆ Monitor the work areas periodically for flammable, explosive, or toxic concentrations of gas.
- ◆ Provide for proper identification of contaminated soils.
- ◆ Provide for proper handling and disposal of contaminated soils.



SAFETY MANAGEMENT

The Site Safety Officer (SSO) will ensure that all contractor personnel comply with all applicable regulations and requirements of this plan. The SSO will coordinate and cooperate with the owner's representative. The SSO will be supported as necessary by the Certified Industrial Hygienist. Basic requirements are:

Personnel shall be physically able (and mentally willing) to comply with safety requirements.

A copy of this plan shall be kept at the job site and made available to each individual who will work at the site.

All contractors and sub-contractors working at the site should have and comply with the following:

- ◆ A general company Health and Safety plan.
- ◆ The site-specific Health and Safety plan.

These plans should also include and/or address as a separate plan, the following:

- ◆ A worker Hazard Communication program
- ◆ A Medical Exposure Monitoring Program
- ◆ A Hearing Conservation Program

A tail gate meeting shall be held to review the Health and Safety plan at the start of work and periodically as needed.

Unsafe acts shall be stopped when discovered.

Required safety equipment shall be onsite and shall be checked to verify completeness and function prior to being put into service.

Any change in site conditions, such as the discovery of previously undefined areas of contamination, will be reviewed by the SSO and the site-specific Health and Safety plan will be amended if necessary.

SAFETY/TRAINING REQUIREMENTS

Personnel engaging in onsite activities will be properly trained for those activities. All personnel who use respiratory protective equipment will be properly trained in its use and properly fitted to their assigned respirators. All persons entering the exclusion zone or engaging in direct support activities are to have 40 hours of Health and Safety training for hazardous waste operations (HAZWOPER).



KEY PERSONNEL

<p>Project Manager Responsible for overall management of the project.</p>	<p>Michael Tiffany, CIH Analytical Consulting Group, Inc. 2300 Knoll Drive Unit L Ventura, CA 93003 (805) 340-2617 cell mtiffany@analyticalconsultinggroup.com</p>
<p>Certified Industrial Hygienist (CIH) Responsible for approval & implementation of the HSP.</p>	<p>Michael Tiffany, CIH Analytical Consulting Group, Inc. 2300 Knoll Drive Unit L Ventura, CA 93003 (805) 340-2617 cell mtiffany@analyticalconsultinggroup.com</p>
<p>Site Safety Officer Responsible for daily oversight and monitoring of site safety.</p>	<p>Michael Tiffany, CIH Analytical Consulting Group, Inc. 2300 Knoll Drive Unit L Ventura, CA 93003 (805) 340-2617 cell mtiffany@analyticalconsultinggroup.com</p>
<p>AIHA-Accredited Analytical Laboratory Responsible for analysis of samples and associated quality control procedures.</p>	<p>SGS Galson 6601 Kirkville Road East Syracuse, NY 13057 (888) 432-5227</p>
<p>Emergency Number for Fire, Police, and Ambulance: 911</p>	

DESCRIPTION OF WORK

The purpose of the soil and groundwater site assessment work covered by this plan is to identify the status of subsurface petroleum hydrocarbons contamination in the form of JP-5 Jet Fuel and BTEX and surface soil lead contamination. The subsurface investigation will utilize truck-mounted hollow-stem auger and skid-mounted hydraulic-push drill rigs to collect soil and groundwater samples from borings. Surface soil samples will be collected using a hand trowel. The surface and subsurface sampling activities will cause minor disturbance of soil potentially contaminated with JP-5, BTEX, lead, or naturally-occurring asbestos (NOA).

The Facility formerly contained aboveground tanks and piping previously containing JP-5, a refined petroleum hydrocarbon product. Low-level petroleum impacts have been detected and assessed in the Facility’s soil and groundwater. Lead-based paint (LBP) and lead-containing paint (LCP) were present on ASTs, pipelines, and pumping equipment. Lead may be present in site soils due to weathering and chipping of LBP or from the tank demolition process.



HAZARD EVALUATION

POTENTIAL HAZARDS

During performance of activities related to this project, there is the potential to encounter a variety of chemical and physical hazards. These include:

- ◆ Exposure to hazardous chemicals due to airborne emissions or skin contact with contaminated soil.
- ◆ Underground utilities: Electrical, flammable gas or liquid, and pressurized gas or liquid
- ◆ Heavy equipment: drilling equipment used for borings and probe placement.
- ◆ Noise: heavy equipment may create excessive noise.

Potential job hazards for field conditions and activities in this project include exposure to toxic, irritating, or flammable substances arising from soil gas seepage, petroleum-contaminated soil and groundwater, lead contaminated soil, and NOA. The general job hazard analysis is summarized in the following **TABLE I**.

TABLE I - HAZARD EVALUATION

Hazard	Evaluation	General Protective Measures
Exposure to hydrocarbon vapors exceeding the PEL	Volatile hydrocarbon vapors are unlikely to exceed action levels at the site.	Monitor vapor levels continuously during drilling and sampling. Use water spray to suppress vapor generation and disperse vapor accumulation.
Direct contact with petroleum hydrocarbons in soil	Possible skin exposure to workers during drilling.	PPE including gloves, long sleeves, long pants. Frequent hand/face washing.
Fire or explosion due to hydrocarbon vapors	Hydrocarbon vapors are likely to be present in soil at the site. Concentrations exceeding the LEL are unlikely.	Monitor gas levels during drilling. Control ignition sources when excavating boreholes. Use water spray or flooding to disperse or control gas accumulation as necessary.
Direct contact with lead from paint debris in soil	Very unlikely during boring process. Levels will not exceed the Action Level for worker exposure.	PPE, including gloves, clothing. Require frequent washing of hands/face; disposable coveralls if levels are high. Do not create dust.
Naturally Occurring Asbestos	Exposure very unlikely during drilling. Will not exceed the PEL of 0.1 f/cc for an 8-hr TWA.	Do not create excessive dust.
Equipment-related injuries.	Heavy equipment includes standard construction equipment such as trucks and drilling rigs.	Safety measures will be reviewed during site briefing; open pits will be barricaded; personnel will not enter excavations deeper than 5 ft.
Heat Stress.	Heat related illness is possible in especially when wearing PPE.	Increase fluid intake; implement a work/rest regimen; monitor worker core temperature if conditions warrant (i.e. ambient > 100°F).
Solar radiation.	Outdoor work involves hazards with overexposure to the sun year round.	Outdoor workers will be encouraged to use sunscreen and/or clothing that minimizes the amount of skin exposed.
Slip, trips, and falls.	These hazards are always present on construction sites.	Good housekeeping and footwear that is appropriate for the conditions. Fall protection for work in elevated locations.



CHEMICALS OF CONCERN (COCS)

The primary contaminants which may be encountered during the site assessment are petroleum hydrocarbons in the form of JP-5 jet fuel and lead from lead-based paint. Naturally-occurring asbestos (NOA) is known to be present at the site.

The potential routes of exposure are inhalation of dust or vapor derived from contaminated soil and dermal contact with or ingestion of contaminated soil. Exposure to separate phase liquid contaminants is considered unlikely. Due to the small volumes of soil exposed during sampling, exposures near PELs are unlikely. Appropriate responses in the event that hazardous concentrations are encountered are given below.

Non-volatile or semi-volatile constituents such as lead, asbestos, and heavy hydrocarbons are unlikely to cause airborne exposures near PELs. Little airborne dust is generated during drilling and sampling. Ingestion or dermal exposures are possible but are easily controlled by PPE and personal hygiene. Compliance with the **PERSONAL HEALTH AND HYGIENE** section of this plan will protect against accidental ingestion of contaminated soil.

JP-5 Jet Fuel

JP-5 (jet propellant-5) is a kerosene-based fuel used in military aircraft. Jet A is the type of fuel used in civilian aircraft. Jet A is also used in some military aircraft. JP-5, JP-8, and Jet A fuels are colorless liquids that are flammable and smell like kerosene. JP-5 is a specifically refined type of kerosene consisting of C₉-C₁₆ alkanes (53%), cycloalkanes (31%), aromatics (16%), and alkenes (0.5%). The aromatic content of JP-5 might vary from less than 2.5% to greater than 22% by volume. The benzene content of JP-5 is typically less than 0.02%

People who accidentally ingested kerosene, which is similar in composition to JP-5, suffered harmful effects on the respiratory tract, gastrointestinal tract, and nervous system. Studies in laboratory animals found that exposure to levels higher than the levels onsite workers may encounter through dermal contact with contaminated water or soil or ingestion of contaminated water resulted in damage to the liver, decreased immune response, impaired performance on neurological tests, impaired hearing, and skin alterations.

Petroleum hydrocarbons may be irritating to the skin and mucous membranes, but significant systemic toxicity due to dermal absorption is unlikely. Prolonged or repeated dermal exposure to potentially contaminated soil or groundwater should be avoided. Nitrile gloves shall be worn when handling impacted soil.

A few studies that examined the possible association between exposure to various types of jet fuels or to kerosene and various types of cancer did not provide conclusive results due to study limitations. The U.S. Department of Health and Human Services (DHHS) and the EPA have not classified JP-5 fuel as to carcinogenicity. The International Agency for Research on Cancer (IARC) has classified JP-5, JP-8, and Jet A as Group 3 carcinogens (not classifiable as to their carcinogenicity to humans). Studies in laboratory animals exposed to JP-8 during pregnancy did not find birth defects in the newborn animals. However, some effects on muscle coordination and immune function were found in the offspring.

The National Institute for Occupational Safety and Health (NIOSH) has set a recommended limit of 100 mg/m³ for kerosene in workplace air averaged over a 10-hour workday.



JP-5 fuel can produce an explosion hazard in soil borings when high-level soil contamination is present. The LEL for JP-5 is 0.6% by volume in air (6,000 ppmv).

Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX)

Benzene

Benzene is a known human carcinogen. Prolonged skin contact with benzene or excessive inhalation of its vapor may cause headache, weakness, loss of appetite, and lassitude. Continued exposure can cause collapse, bronchitis, and pneumonia. The most important health hazards are cancer (leukemia), bone marrow effects, and injuries to the blood-forming tissue from chronic low-level exposure. The Cal-OSHA PEL is 1 ppm, and the ACGIH TLV is 0.5 ppm.

Toluene

Exposure to vapors of toluene may cause irritation of the eyes, nose, upper respiratory tract, and skin. Exposure to 200 ppm for 8 hours cause mild fatigue, weakness, confusion, tearing, and a sensation of prickling, tingling, or creeping on the skin that has no objective cause. Exposure to higher concentrations may cause headache, nausea, dizziness, dilated pupils, and euphoria, and in severe cases may cause unconsciousness and death. The liquid is irritating to the eyes and the skin. Contact with the eyes may cause transient corneal damage, conjunctive irritation, and burns if not promptly removed. Repeated and/or prolonged contact with the skin may cause drying and cracking. Toluene may be absorbed through the skin in toxic amounts. Ingestion causes irritation of the gastrointestinal tract and may cause effects resembling those from inhalation of the vapor. Chronic overexposure to toluene may cause irreversible liver and kidney injury. The Cal-OSHA PEL for toluene is 10 ppm.

Ethylbenzene

Ethylbenzene vapor is severely irritating to the eyes and to the mucous membranes of the respiratory system. Sustained inhalation of excessive levels can cause depression of the central nervous system characterized by dizziness, headache, narcosis, and coma. Skin contact with liquid ethylbenzene causes irritation; dermatitis and defatting can also develop. The acute oral toxicity of ethylbenzene is low, however, ingestion poses a serious aspiration hazard. Aspirating even a small amount into the lungs can result in extensive edema (lungs filled with fluid) and hemorrhaging of the lung tissue. No systemic effects are suspected at the levels that produce pronounced, unignorable, disagreeable skin and eye irritation. The established Permissible Exposure Level (PEL) is set well below this intolerable level. The Cal-OSHA PEL for ethylbenzene is 5 ppm.

Xylenes

Liquid xylenes are a skin irritant and causes itching, dryness, and defatting; prolonged contact may cause blistering. Inhaling xylenes can depress the central nervous system and ingesting it can result in gastrointestinal disturbance; and possibly hematemesis (vomiting blood). Effects on the eyes, kidneys, liver, lungs, and the central nervous system are also reported. Both the Cal-OSHA PEL and the ACGIH TLV are 100 ppm.



Metals

Lead

Lead in its elemental form is a heavy ductile gray metal. It does not corrode or decompose readily, and it melts at relatively low temperatures. These properties made it very useful for such things as soldering pipe joints and electrical connections. Lead compounds were widely used in paints for structural steel, heavy equipment, and pavement striping. Tetraethyl lead was added to gasoline until 1979, resulting in contamination of soil with aerielly deposited lead oxide fume near roadways.

Lead has toxic properties that make it hazardous if inhaled or ingested. The Cal/OSHA PEL for lead is 50 $\mu\text{g}/\text{m}^3$ of air as an 8-hour Time-Weighted Average (TWA). The Action Level is 30 $\mu\text{g}/\text{m}^3$. The IDLH Level (Immediately Dangerous to Life & Health) is 100 mg/m^3 .

Repeated exposure to airborne lead in excess of the PEL may produce a variety of symptoms, including: weakness, eye irritation, facial pallor, paleness of the eyes, lassitude, insomnia, anemia, tremors, malnutrition, constipation, weakness or paralysis of the wrists and ankles, abdominal pain, nephropathy, encephalopathy, gingival lead line, hypertension, anorexia, and weight loss. The target organs include the central nervous system, kidneys, eyes, blood, gingival tissue, and the gastro-intestinal tract.

Development of lead-related ailments generally takes many years of repeated exposure when the levels are low but can be more rapid if high concentrations are encountered. High-level exposures can cause acute health effects including seizures, coma, and death within hours or days. Uncontrolled burning of lead-based paint or other lead-containing materials can result in life-threatening exposure.

The lead content of the paint system on the tanks exceeded 5000 mg/kg lead before demolition. The tanks and associated piping were demolished using hydraulic shears attached to an excavator to limit paint flake and lead dust production. The soil around the tanks was covered with plastic sheeting during the demolition process to prevent contamination of the soil. The potential for lead impacted soil on site is still possible and the proper precautions should be taken to limit worker exposure during the drilling process.

Naturally Occurring Asbestos

Asbestos is found naturally in ultramafic rock, including serpentine, and is released into the air when it is broken or crushed. Asbestos may also be found in soil overlying or adjacent to asbestos containing rocks. Soil at the subject site contains low levels of naturally-occurring chrysotile asbestos, generally less than 1%. Naturally occurring asbestos (NOA) is a toxic air contaminant and, if inhaled, may result in the development of lung cancer or mesothelioma. The Cal-OSHA PEL for asbestos is 0.1 f/cc as an 8-hour TWA. The Cal-OSHA Excursion Limit for asbestos is 1.0 f/cc.

The activities covered by this Plan are expected to create very little dust. The greatest potential for dust generation occurs when moving vehicles. Previous air monitoring has shown no detectable airborne asbestos during movement of trucks and heavy equipment on the site.



PHYSICAL HAZARDS

In addition to the potential for exposure to various chemical hazards, use of heavy equipment (drill rigs), operating in hot environments, and vehicular traffic constitute additional hazards.

Drill Rig Operations

Operating around drilling equipment presents potential hazards from falling equipment, mechanical failure, being caught in machinery, etc. All personnel should follow safety procedures. Equipment shall be properly inspected on a regular basis in accordance with industry-established procedures to minimize the risk of mechanical failure.

Explosive/Flammable Environments

Elevated concentrations of jet fuel or other flammable volatile organic compounds may accumulate in or near soil borings if there is significant subsurface contamination. Explosive concentrations of these constituents could develop during drilling. During drilling the boring shall be periodically monitored with a photoionization detector (PID). Field operations will cease if concentrations exceed 10% of the LEL, and personnel will evacuate to an upwind position.

Noise Exposure

Working around large equipment often creates excessive noise. The effects of the noise can include physical damage to the ear, pain, and temporary and/or permanent hearing loss. Workers can also be startled, annoyed, or distracted by noise during critical activities. Noise monitoring will not be conducted at the subject property site to determine employee exposure to hazardous noise; however, for the purposes of this Plan, hearing protection will be worn at all times when normal conversation becomes difficult at distances of three feet or less.

Heat Stress

Excessive exposure to a hot work environment can bring about a variety of heat-induced disorders, including heat stroke, heat exhaustion, cramps, and fainting. Preventative measures in effect for this project include:

- ◆ Rest periods in shaded or air-conditioned areas when necessary.
- ◆ Drinking water in adequate quantity will be provided outside the exclusion zone.
- ◆ Site workers will be trained in heat stress recognition and prevention.

Heat stress is unlikely with acclimatized workers in Level D PPE at temperatures below 90°F. Site workers receive heat stress training as part of HAZWOPER training. If ambient temperatures exceed 90°F or if Level C PPE is donned, then additional heat stress precautions will be implemented.

Site Safety Procedures

Overhead equipment will not be operated within 25 feet of overhead powerlines unless they are de-energized.

Hazard Communication

All site personnel shall have attended a 40-hour Hazardous Waste Operations (HAZWOPER) training course and shall have read this Health & Safety Plan to familiarize themselves with site hazards.



LEVELS OF PROTECTION

For site characterization activities (drilling and other intrusive operation) and sample handling tasks, the primary level of protection will be **Modified Level D**. Upgrade to Level C PPE (air purifying respiratory protection) may be made based upon results of direct reading instrument monitoring. Should monitoring indicate that Level C is inadequate, work will cease immediately. Specific guidance will be prepared to address additional PPE requirements should this occur.

Four levels of protection are described as follows:

Level B: A NIOSH approved portable pressure demand self-contained breathing apparatus. Appropriate protective clothing: Chemical splash resistant suit (Saranex-coated Tyvek coveralls) with neoprene gloves and steel-toed neoprene boots.

Level C: A NIOSH approved half-face air-purifying respirator with dual organic vapor and/or P100 cartridges as appropriate for the hazard. Appropriate protective clothing: Tyvek coveralls with neoprene gloves and steel-toed neoprene boots.

Level C (modified): Respiratory protection as for Level C. Appropriate protective clothing: As for Level D.

Level D: Work uniform, steel-toed work boots, hard hat, and work gloves. Protective eyewear and hearing protectors where appropriate. Disposable nitrile gloves for Modified Level D.

When the potential exists for contact with chemical contaminants, but the respiratory hazard is low, the use of a Modified Level D ensemble is appropriate. Such is the case during intrusive operations (i.e., all drilling operations) and sample handling (i.e. groundwater sampling, soil sampling, and product bailing) in this project. Modified Level D consists of protective clothing to preclude hazards due to contact with contaminated materials but does not include respiratory protection.

The following protective clothing shall be worn during soil sampling, sample handling, and sampling equipment decontamination:

- ◆ Disposable nitrile gloves



AIR MONITORING

Real-time monitoring of organic vapor concentrations will be conducted with the use of a photoionization detector (PID) calibrated to isobutylene. The site safety officer in compliance with Cal-OSHA regulations will conduct personal exposure monitoring. If PID readings or other data indicate that exposures near the PEL may be present, full-shift samples will be collected in the operator's breathing zone (OBZ) using Assay Technologies 566 organic vapor sampling badges. An AIHA accredited laboratory in accordance with appropriate NIOSH or OSHA methods will analyze the samples. Analytes will be selected based on the results of field screening. If initial monitoring for 3-5 shifts shows that TWA exposures are substantially below PEL, the monitoring frequency will be reduced to one shift per week. Additional monitoring will be performed whenever a change in exposure is indicated by field screening or a change in site conditions or work practices.

Action levels for air monitoring are shown in **TABLE II** below.

TABLE II
Action Levels and Action to be Taken

Device	Reading	Location	Time Period	Action*
PID	< 50 ppm	Working face	--	Continue periodic monitoring. Level D.
PID	> 50 ppm	Working face	> 1 minute	Monitor OBZ.
PID	< 100 ppm	WBZ	--	Continue periodic monitoring. Level D.
PID	>100 ppm	WBZ	>1 minute	Upgrade to Level C (modified)
PID	> 100 ppm	WBZ	> 15 minutes	Use Assay Technologies badge to determine whether VOCs are present near PELs.
Assay Technologies 566 Badge	<PEL for carcinogens or <10x PEL for other compounds	WBZ	full shift	Continue at Level C (modified), continue periodic PID monitoring of OBZ.
Assay Technologies 566 Badge	>PEL for carcinogens or >10x PEL for other compounds	WBZ	full shift	Stop work and reassess

OBZ = Operator Breathing Zone

* Upgrade/downgrade in PPE may be made based on the results of air sampling after consulting with the SSO.

Dust concentrations will be monitored visually. If visible dust is not reaching the worker's breathing zone, lead or asbestos exposures will be substantially below the PEL. If visible dust is observed during sampling activities, control dust emissions, move upwind, or stop work.



WORK PRACTICES

The contractor will implement the following work practices to minimize employee lead exposure levels. The Onsite Supervisor will monitor the approved engineering controls to ensure compliance with the project specifications.

STANDARD WORK PRACTICES

The hazards of direct contact with contaminated material will be controlled by the use of protective gloves and/or clothing, proper decontamination procedures, and good hygiene practices, as specified under **General Safe Work Practices**.

GENERAL SAFE WORK PRACTICES

- Check out all equipment before starting work. Do not use faulty or suspect equipment.
- Make sure your protective clothing is in good condition (no holes, rips, or tears).
- Do not wipe sweat away from your face with your hands. Use a clean towel or paper towel.
- Do not smoke, eat, drink, or apply cosmetics during sampling activities, nor at any time you are in an area where contaminated material is being handled.
- Do not store food in an area where it may come in contact with hazardous materials, including dust and debris.
- Wash your hands, face, and arms as soon as possible upon exiting from the site and prior to taking rest breaks, lunch breaks, or leaving the site at the end of the workday.
- Check in and out with the Superintendent upon arrival and departure.
- Conduct tailgate safety meetings regularly to update employees and subcontractors on safety and hazard awareness measures. At every tailgate meeting, review the safe congregating location off the work site so that, in the event of an emergency, all personnel know where to gather to await further instructions.
- Notify the Superintendent immediately if there is an event that causes injury or illness.
- Follow the buddy system while working on site.
- Clean and/or change clothes and footwear when leaving the site to go home to avoid carrying any lead- or asbestos-containing dust into your vehicles and into your homes that could expose family members to lead or asbestos from the jobsite. Store the work clothes in plastic bags to prevent depositing lead- or asbestos-contaminated dust in your vehicle.
- To the extent feasible, stay upwind from operations that emit vapors, gases, dust or hazardous particles.

STOP WORK CONDITIONS

The Site Safety Officer (SSO) will check with the local weather sources daily to ensure that no wind conditions are predicted that could lead to dust generation in spite of the control measures being used. The SSO will notify relevant parties that a “stop-work” procedure is in effect if predicted wind/weather conditions prevent safe work conditions. The SSO will be on the site daily and will keep a written log to document that workers are following safe work practices.



Other incidents may present safety or environmental hazards sufficient to warrant stopping work until the condition abates or is corrected. In general, the Safety Officer will make the judgment regarding whether conditions warrant stopping work. In some cases, work will be stopped unless the CIH determines that it may be continued with additional safeguards.

EMERGENCY PROCEDURES

COMMUNICATION PROCEDURES

A site phone will be available to all workers in the event of an emergency. All emergency services can be obtained by dialing 911.

EMERGENCY EXITS

All site entrances will be left open to provide for emergency egress during the course of the work but shall be barricaded or marked to discourage the entrance of unauthorized persons.

EMERGENCY SERVICES

The address, phone number, and name of the local hospital and medical emergency room will be available from the job site foreman. **All emergency services can be obtained by dialing 911.**

EMERGENCY EQUIPMENT

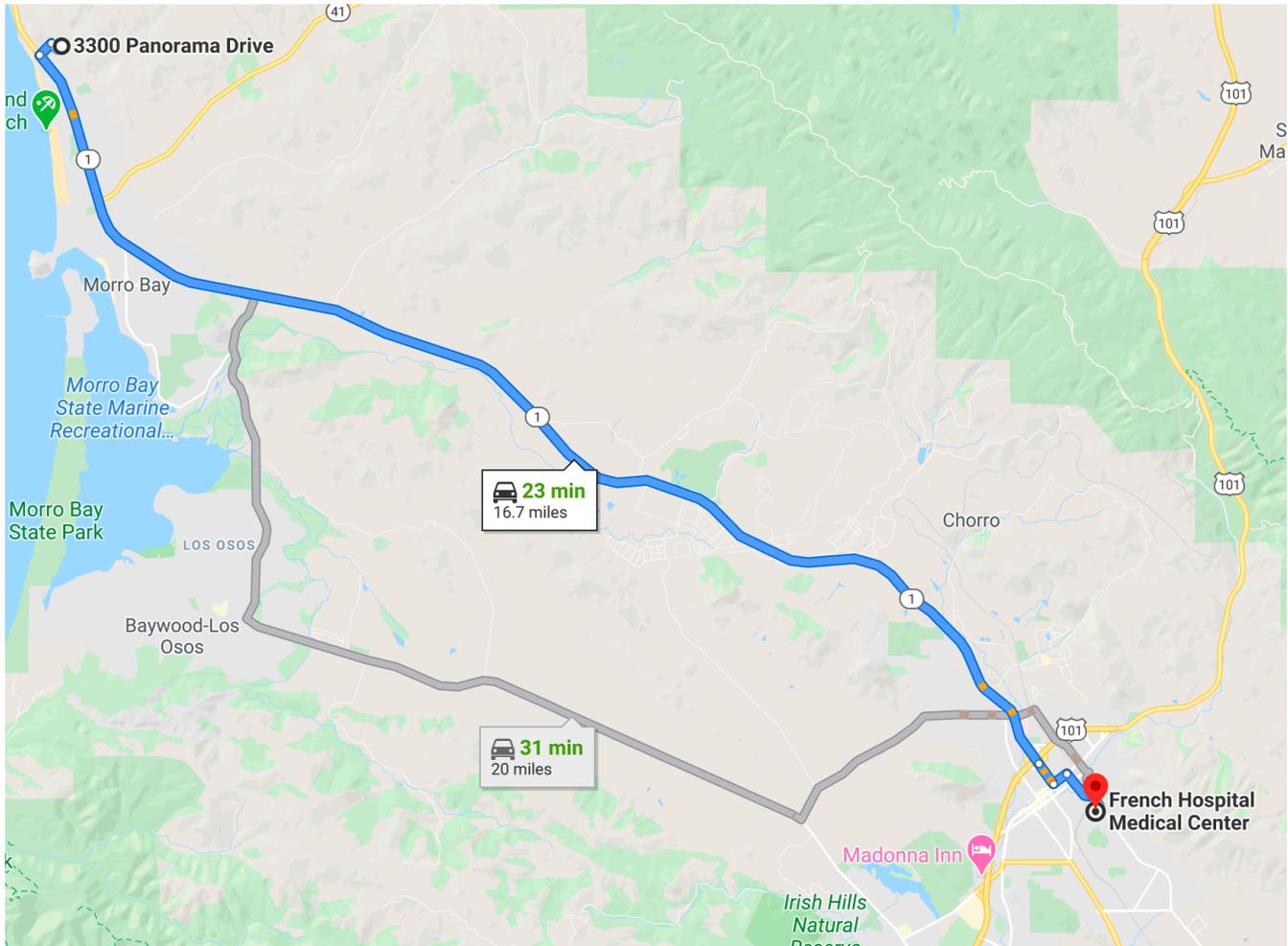
The following emergency equipment will be available onsite:

- A first aid kit.
- A fire extinguisher.



HOSPITAL MAP

French Hospital Medical Center
1911 Johnson Ave, San Luis Obispo, CA 93401
(805) 543-5353



Driving directions to French Hospital Medical Center

1. Head northwest on Panorama Drive toward Whidbey Way
2. Turn left onto Yerba Buena St
3. Turn left at the 3rd cross street onto CA-1 South, follow for 15 miles
4. Continue onto Santa Rosa St
5. Turn left onto Monterey St
6. Turn right at the 2nd cross street onto Johnson Ave
7. Turn right to stay on Johnson Ave
8. Turn right at Lizzie St

DECONTAMINATION

The need for personnel decontamination is not anticipated. Limited decontamination materials will be made available and will consist of buckets, brushes, detergent, and water. Sampling equipment will be decontaminated using a bucket and brush, detergent, and clean water rinse. Drill rods and augers will be decontaminated using a heated power washer.

EQUIPMENT

PERSONAL SAFETY EQUIPMENT

Workers shall have available personal protective safety equipment as follows:

- Respiratory protection as appropriate for the level of hazard; a NIOSH approved half-face air-purifying respirator with NIOSH approved organic vapor cartridge and/ or P100 cartridge.
- Hard hats.
- Steel-toed work boots.
- Safety glasses/chemical protective goggles.
- Disposable nitrile gloves shall be worn when monitoring and sampling.
- Leather work gloves.
- Hearing protective devices, minimum NRR = 20.
- High-visibility safety vest for work in areas of vehicular traffic.

PERSONAL AND ENVIRONMENTAL MONITORING EQUIPMENT

The following instruments will remain at the job and will be used by a qualified person as appropriate to monitor for hazardous conditions:

1. Photo-Ionization Detector (PID), Multi-RAE, MiniRAE, or equivalent, calibrated for isobutylene.
2. Personal air sampling badges – Assay Technology 566.

FACILITY SAFETY EQUIPMENT

The following safety equipment shall be continuously available at the job site in sufficient quantities:

- Clean water, soap, and towels.
- First aid kit (20 unit).
- Fire extinguisher.
- Site phone.
- Drinking water.



PERSONAL HEALTH AND HYGIENE

Personal safety and the safety of fellow workers require that all employees arrive at the job and remain mentally alert. No alcohol or drugs shall be permitted at any job site.

Washing of hands and face is required prior to eating, smoking, or leaving the site.

Parts of the body, which are contacted by toxic or irritating chemicals, should be washed immediately with soap and water.

A cut or abrasion shall be treated immediately. A qualified professional health practitioner shall be consulted if the safety manager deems it necessary.



