

Site Name: Portola Hills Northeast	Site Contact: Robert Patterson, Baldwin & Sons, Inc. Director of Environmental and Safety Compliance	Telephone: (949) 421-7398												
Location: Northeast Intersection of Glenn Ranch Road and Viejo Ridge Drive , Lake Forest, CA	Client Contact: Jose Capati, Baldwin & Sons, Inc.	Telephone: (949) 278-2490												
EPA ID No. NA	Prepared By: David Brown	Date Prepared: 5/18/2021												
Project No. 103P7616.03	Dates of Activities: 5/24/21 – 6/19/21	Emergency Response <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No												
<p>Objectives:</p> <p>Tetra Tech Team technician personnel from Strongarm Environmental will visually observe and monitor soil excavation and loading of soil into trucks for transportation to an off-site disposal facility. The technician will monitor ambient air with a photoionization detector (PID) within the breathing zone downwind from the soil excavation and loading activities for the detection of organic compounds in air. The technician will also monitor five TSI 8533 Dust Track DRX monitors that will be setup at upwind, downwind and crosswind locations of as far as possible from the soil excavation and loading operations along the property perimeter for visible nuisance dust and dust particles that may be detected by the Dust Track monitor devices. If readings on the Dust Track register at established action levels for dust, the technician will request that the Baldwin & Sons Site representative request that the on-site water truck(s) deliver more water to soil stockpile to enhance dust suppression activities.</p> <p>All soil excavation and loading, and instrument monitoring observation activities will be performed in compliance with CA Code of Regulations Title 8 (CCR 5192) and Title 29 CFR 1910.120. In addition, these activities will be performed in compliance with 8 CCR General Industry and 29 CFR 1910 and 29 CFR 1926 Construction regulations.</p> <p>This HASP is applicable to Tetra Tech and Strongarm Environmental personnel performing the soil excavation and soil loading air monitoring activities, Empire Equipment personnel who will be operating the soil excavation, loading, and transportation activities, and Baldwin & Sons personnel who may be present on-site during these activities. In addition to this HASP, Baldwin & Sons personnel and Empire Equipment personnel and their subcontractor hauler personnel will also refer to their company Health and Safety plans for the site-specific work that that will be performing.</p> <p>Tetra Tech's Injury and Illness Prevention Program is attached to this HASP and shall remain with the HASP. Additional Safe Work Practices are also attached to the HASP in addition to the Tetra Tech COVID-19 HASP Addendum. Baldwin & Sons personnel, Empire Equipment and their subcontractors may also refer to the referenced attached documents to this HASP for recommended safety procedures.</p> <p>Site Type: Check as many as applicable.</p> <table border="0"> <tr> <td><input checked="" type="checkbox"/> Active</td> <td><input type="checkbox"/> Landfill</td> <td><input type="checkbox"/> Inner-City</td> </tr> <tr> <td><input type="checkbox"/> Inactive</td> <td><input type="checkbox"/> Railroad</td> <td><input type="checkbox"/> Rural</td> </tr> <tr> <td><input checked="" type="checkbox"/> Secured</td> <td><input type="checkbox"/> Residential</td> <td><input type="checkbox"/> Remote</td> </tr> <tr> <td><input type="checkbox"/> Unsecured</td> <td><input type="checkbox"/> Industrial</td> <td><input checked="" type="checkbox"/> Other (<i>specify</i>) Active new home construction site.</td> </tr> </table>			<input checked="" type="checkbox"/> Active	<input type="checkbox"/> Landfill	<input type="checkbox"/> Inner-City	<input type="checkbox"/> Inactive	<input type="checkbox"/> Railroad	<input type="checkbox"/> Rural	<input checked="" type="checkbox"/> Secured	<input type="checkbox"/> Residential	<input type="checkbox"/> Remote	<input type="checkbox"/> Unsecured	<input type="checkbox"/> Industrial	<input checked="" type="checkbox"/> Other (<i>specify</i>) Active new home construction site.
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Project Scope of Work and Site Background

The project site is an active new home construction site located near the intersection of Glenn Ranch Road and Viejo Ridge Drive in Lake Forest, CA. Tetra Tech and Strongarm Environmental have been scoped to conduct nuisance dust monitoring during soil excavation and truck loading of approximately 20,000 cubic yards of soil from an approximately 500,000 cubic yard soil stockpile located on the project site. The soil excavation and loading activities is anticipated to occur for approximately 3 – 4 weeks. No soil excavation and loading activities are anticipated to occurring during weekends.

Tetra Tech Team technician personnel from Strongarm Environmental will visually observe and monitor for nuisance dust during soil excavation and loading of soil into trucks for transportation to an off-site disposal facility. The technician will monitor for any visible dust and also monitor ambient air with a photoionization detector (PID) within the breathing zone downwind as far away as possible from the soil excavation and loading and on-site hauling activities along the perimeter of the property for the detection of organic compounds in air. The technician will also monitor five TSI 8533 Dust Track DRX monitors that will be setup at downwind and crosswind locations as far away as possible from the soil excavation and loading operations along the perimeter of the property for visible nuisance dust and dust particles that may be detected by the Dust Track monitor devices. If readings on the Dust Track register at established action levels for dust, the technician will request that the Baldwin and Sons on-site representative to ask that the water truck(s) deliver more water to soil stockpile to enhance dust suppression activities. If necessary, the technician will don a dust mask during the air monitoring activities.

Empire Equipment operators and hauling subcontractors will perform soil excavating, loading and on-site hauling activities within the closed cabs of the equipment. Empire Equipment operators will have access to dusk masks if for any reason they need to step out of the equipment cab during active soil excavation and loading activities. On-site Baldwin & Sons personnel will also have access to dust masks should any of their daily activities require their presence on-site during active soil excavation and loading activities.

If Baldwin & Sons personnel have any safety related concerns related to the work that they are performing during the soil excavation and hauling activities they will be performing or if there is an injury, they will be instructed to contact Baldwin & Sons Director of Environmental and Safety Compliance (Robert Patterson [(949) 421-7398])

If Empire Equipment operators and hauling subcontractors have any safety related to the work that they will be performing the during the soil excavation and hauling activities or if there is an injury that is incurred on-site, they will be instructed to contact Baldwin & Sons Vice President of Site Development (Jose Capati [(949) 278-2490]).

Air monitoring will be performed at the Site during all soil disturbance activities and will include:

- Monitoring nuisance dust levels downwind and crosswind and as far as possible from the soil excavation soil loading and hauling activities along the perimeter of the Site property line. In the event that nuisance dust levels exceed the Site or community action levels presented in the chart below, the air monitoring professional will request that the on-site Baldwin and Sons representative to ask that Empire Water Truck personnel apply additional water to the soil excavation area to enhance dust suppression activities during soil excavation and loading activities until the dust levels decrease to an acceptable level.
- The Strongarm Environmental technician conducting the nuisance dust air monitoring activities will be responsible for the daily calibration of the Dust Track real-time aerosol monitors. The technician will continuously monitor the PID and Dust Track monitors to measure dust levels at 15 to 30 minute intervals throughout each day.

The technician will focus on collection and analysis of airborne dust levels and concentrations of dusts generated by excavation and hauling activities. The technician will base Site safety procedures, including dust control measures, on the Action Levels specific in the chart below:

Exposure Guidelines for Site Hazards					
Chemical Name	Odor Threshold	Cal/OSHA PEL^a	ACGIH TLV^b	Site Action Levels^c	Community Action Level (Fenceline)^d
Total Dust (Respirable Fraction)	Not Listed	5 mg/m ³	5 mg/m ³	2.5 mg/m ³	0.05 mg/m ³

Notes:

- a PELs per California OSHA Article 107, Table AC1.
 - b TLVs for Chemical Substances and Physical Agents and Biological Exposure Indices (ACGIH,1990-1991).
 - c Site Action Level is calculated as 10 percent of TLV or PEL (as measured by NIOSH methods), whichever is smaller. If a Site Action Level is equaled or exceeded, then additional dust mitigation measures will be implemented.
 - d Community action level for total dust/particulate is based on SCAQMD regulations. Site dust levels will be measured using real-time aerosol monitors
- PEL Permissible Exposure Limit
 TLV Threshold Limit Value
 ACGIH American Conference of Governmental Industrial Hygienists
 ppm parts per million
 mg/m³ milligrams per cubic meter

The following hazards are not applicable for the project:

- 1) Electrical Hazards – The site is comprised of a graded undeveloped parcel.
- 2) Lighting – No lighting features will be present on-site as work will not be conducted before or after sundown.
- 3) Confined Spaces – No confined spaces exist on site nor will soil excavations activities create a confined space environment
- 4) Heavy Equipment – Tetra Tech and Strongarm personnel will communicate with the Baldwin and Sons Site representative on a daily basis to have an understanding of their contractor’s designated basic hand communication skills. At no time will Tetra Tech or Strongarm technician personnel be permitted to be present within heavy equipment blind spots. Tetra Tech and Strongarm personnel will abide by applicable Baldwin & Sons foreman and spotter directions

In addition to the HASP approver comments below and the Tetra Tech COVID-19 HASP Addendum procedures, the additional COVID-19 Procedures will be applicable for the project and the procedures below will be shared with Baldwin & Sons and Empire Equipment operators and hauling personnel for adoption as a best practice while working at the site :

- A) Site workers will be provided with up-to-date education and training on COVID-19 risk factors
- B) Face coverings will be provided for on-site workers and are required while on-site
- C) No sharing of equipment or supplies will be permitted on-site. Disinfectant wipes will be used frequently to wipe down any common work surfaces that may exist
- D) Only EPA approved disinfectants will be used on-site
- E) Manufacturer’s instructions will be followed for disinfectant products, dilution, PPE use and contact time.
- F) Sharing of work tools and equipment will not be permitted. Anyone observed sharing tools and equipment will be removed from the site.
- G) Hand washing facilities will be provided at the site and alcohol-based hand sanitizer will be provided for site workers.

Health and Safety Approver Comments or Additional Instructions:

See attached SWP 5-55, Infectious Disease Guidance within the attached HASP Addendum. Also see the COVID-19 Response and Contingency Plan, and AHA with Procedures for Working in Areas Potentially Impacted by COVID-19 within the HASP Addendum.

It is preferred that all staff members mobilize in separate vehicles. Voluntary use of respirators with P-100 cartridges is AUTHORIZED if any Tetra Tech, Baldwin & Sons, and Empire Equipment operator employee prefers. It is recommended that all Tetra Tech, Baldwin & Sons, Empire Equipment, and hauler subcontractor personnel perform self-evaluations each day PRIOR to work. If any new symptoms or if any potential exposures have occurred, the employee should STAY HOME or in the hotel. Maintain a supply of soap and water, alcohol-based hand sanitizer (ABHS), AND sanitizing wipes in the vehicle. Maintain social distancing from everyone, including the client and your coworkers. DO NOT shake hands or touch anyone. DO NOT touch your face. DO wash your hands with soap and water for at least 20 seconds or use ABHS PRIOR to donning and AFTER doffing Nitrile gloves. You may prefer to wear two pair of Nitrile gloves and keep the inner pair on continuously while replacing the outer pair after completing a sampling event

Health and Safety Plan Approver Signature:  , Tetra Tech Safety Manager

Date: 5/19/2021

Initial Isolation and Protective Action Distances (for emergency response operations only): Use the 2012 Emergency Response Guidebook (ERG) as appropriate

Initial Isolation Distance: This zone should extend in all directions; 660 feet for unknown hazards and 0.5 mile for tanker truck or rail car incidents.

NOTE: Keep a maximum distance away for unknown sites until the identity of the materials is determined.

Subsequent Isolation and Protection Action Zones Based on Air Monitoring Results:

NOTE: Distance at sites with unknown hazards should be increased, if necessary, based on air monitoring results.

Wind Speed and Direction (Approach from upwind) Forecasted Weather conditions		Temperature (°F)	Relative Humidity (%)	Probability of Precipitation (%)	Weather Forecast (such as partly cloudy, snow, etc.)
Speed (mph): LIGHT	From Direction: VARIABLE	70°F	Medium	0%	Sunny, Partly Cloudy

On-Site Supplies: First Aid Kit Fire Extinguisher Air Horn Oral Thermometer Noise Dosimeter

Known or Anticipated Site Hazards or Concerns: (Hazards covered by existing Safe Work Practices are listed on the next page)

<input type="checkbox"/> Work on active roadway	<input type="checkbox"/> Overhead utilities	<input type="checkbox"/> Energized electrical systems
<input type="checkbox"/> Onsite laboratory	<input type="checkbox"/> Buried Utilities	<input type="checkbox"/> Portable hand tool use
<input type="checkbox"/> Explosion or fire hazard	<input type="checkbox"/> Surface or underground storage tanks	<input type="checkbox"/> Portable electrical tool use
<input type="checkbox"/> Oxygen deficiency	<input checked="" type="checkbox"/> General slips, trips, falls	<input type="checkbox"/> Machine guarding
<input type="checkbox"/> Unknown or poorly characterized chemical hazards	<input checked="" type="checkbox"/> Uneven, muddy, rugged terrain	<input checked="" type="checkbox"/> Portable fire extinguisher use
<input type="checkbox"/> Inorganic chemicals	<input type="checkbox"/> Lift (man lift, cherry picker) use	<input type="checkbox"/> Driving commercial vehicles
<input checked="" type="checkbox"/> Organic chemicals	<input type="checkbox"/> Industrial truck (forklift) use	<input checked="" type="checkbox"/> Driving personal vehicles
<input type="checkbox"/> Chemical warfare materiel	<input type="checkbox"/> Wood or metal ladder use	<input type="checkbox"/> Scientific diving operations
<input type="checkbox"/> Compressed Gas Cylinders	<input type="checkbox"/> Dangerous goods shipped by air	<input checked="" type="checkbox"/> Injury and Illness Prevention Program (California only)
<input type="checkbox"/> Asbestos	<input type="checkbox"/> Elevated work (over 6' high)	<input type="checkbox"/> Ergonomics (California only)
<input type="checkbox"/> Respirable particulates	<input type="checkbox"/> Heavy equipment use or operation	<input type="checkbox"/> Work in strip or shaft mines
<input type="checkbox"/> Respirable silica	<input checked="" type="checkbox"/> Construction work	<input type="checkbox"/> Client-specific safety requirements (attach to HASP)
<input type="checkbox"/> Blasting and explosives	<input checked="" type="checkbox"/> Excavation or trenching	<input type="checkbox"/> ATV use
<input type="checkbox"/> Non-ionizing radiation (lasers, radiofrequencies, UV)	<input type="checkbox"/> Benching, shoring, bracing	<input type="checkbox"/> Methamphetamine lab
<input type="checkbox"/> Ionizing radiation (alpha, beta, gamma, etc.)	<input type="checkbox"/> Scaffold use	<input type="checkbox"/> Working over or near water
<input checked="" type="checkbox"/> Heat stress	<input type="checkbox"/> High noise	<input type="checkbox"/> Mold
<input checked="" type="checkbox"/> Cold stress	<input type="checkbox"/> Grinding operations	<input checked="" type="checkbox"/> <i>Other (insert)</i> COVID -19 Procedures described in the HASP Addendum.

Explosion or Fire Potential: High Medium Low Unknown

Chemical Products Tetra Tech, Inc. Will Use or Store On Site: (Attach a Material Safety Data Sheet [MSDS] for each item.)

- | | | | |
|--|--|--|---|
| <input type="checkbox"/> Alconox or Liquinox | <input type="checkbox"/> Calibration gas (Methane) | <input type="checkbox"/> Hydrogen gas | <input type="checkbox"/> Isopropyl alcohol |
| <input type="checkbox"/> Hydrochloric acid (HCl) | <input type="checkbox"/> Calibration gas (Isobutylene) | <input type="checkbox"/> Household bleach (NaOCl) | <input type="checkbox"/> HazCat Kit |
| <input type="checkbox"/> Nitric acid (HNO ₃) | <input type="checkbox"/> Calibration gas (Pentane) | <input type="checkbox"/> Sulfuric acid (H ₂ SO ₄) | <input type="checkbox"/> Mark I Kits (<i>number?</i>) _____ |
| <input type="checkbox"/> Sodium hydroxide (NaOH) | <input type="checkbox"/> Calibration gas (4-gas mixture) | <input type="checkbox"/> Hexane | <input type="checkbox"/> Other (<i>specify</i>) _____ |

WARNING: Eyewash solution shall be readily available on ALL projects where corrosives (acids or bases) are used, including sample preservatives

Applicable Safety Programs and Safe Work Practices (SWP). Attach to HASP:

- DCN 4-03 Demolition and Decontamination
- DCN 4-05 Trenching and Excavation Safety
- DCN 4-08 Asbestos Protection Program
- DCN 4-09 Haulage and Earth Moving
- DCN 4-10 Lead Protection Program
- SWP DCN 5-01 General Safe Work Practices
- SWP DCN 5-02 General Safe Work Practices HAZWOPER
- SWP DCN 5-03 Safe Work Practices for Office Employees
- SWP DCN 5-04 Safe Drilling Practices
- SWP DCN 5-05 Safe Direct Push (GeoProbe) Practices
- SWP DCN 5-06 Working Over or Near Water
- SWP DCN 5-07 Use of Heavy Equipment
- SWP DCN 5-08 Special Site Hazards (Firearms, Remote Sites, Mines, aircraft, etc.)
- SWP DCN 5-09 Safe Electrical Work Practices
- SWP DCN 5-10 Fall Protection Practices
- SWP DCN 5-11 Portable Ladder Safety
- SWP DCN 5-12 Drum and Container Handling Practices
- SWP DCN 5-13 Flammable Hazards and Ignition Sources
- SWP DCN 5-14 Spill and Discharge Control Practices
- SWP DCN 5-15 Heat Stress
- SWP DCN 5-16 Cold Stress
- SWP DCN 5-17 Biohazards
- SWP DCN 5-18 Underground Storage Tank Removal Practices
- SWP DCN 5-19 Safe Lifting Procedures
- SWP DCN 5-22 Hydrographic Data Collection
- SWP DCN 5-23 Permit-Required Confined Space Entry Practices
- SWP DCN 5-24 Non-Permit-Required Confined Space Entry Practices
- SWP DCN 5-26 Prevention of Sun Exposure
- SWP DCN 5-27 Respirator Cleaning Practices
- SWP DCN 5-28 Safe Use Practices for Use of Respirators
- SWP DCN 5-29 Respirator Qualitative Fit Testing Procedures
- SWP DCN 5-30 Laboratory Soil Testing Safe Work Practices

Tasks Performed At Job Site that are NOT Covered by SWPs

NOTE: Many AHA's can be found on the Health & Safety intranet site at:
<http://home.ttemi.com/C18/Activity%20Hazard%20Analysis%20Docum/default.aspx>

Attach Activity Hazard Analysis (AHA) for each non-covered task

- (non-covered task)
- (non-covered task)
- (non-covered task)
- (non-covered task)
- (non-covered task)

Tetra Tech Employee Training and Medical Requirements:
Basic Training and Medical

- Initial 40 Hour Training
- 8-Hour Supervisor Training (one-time)
- Current 8-Hour Refresher Training
- Current Medical Clearance (including respirator use)
- Current First Aid Training
- Current CPR Training
- Current Respirator Fit-Test

Other Specific Training and Medical Surveillance Requirements

- Confined Space Training
- Level A Training
- Radiation Training
- OSHA 10-hour Construction Safety Training
- OSHA 30-hour Construction Safety Training
- Asbestos Awareness Training
- Asbestos B-Reader X-Ray
- Blood Lead Level and ZPP Pre, during and Post-Project
- Urinary Arsenic Level Pre and Post-Project
- Other _____
- Other _____

Materials Present or Suspected at Site	Highest Observed Concentration (specify units and sample medium)	Exposure Limit (specify ppm or mg/m ³)	IDLH Level (specify ppm or mg/m ³)	Primary Hazards of the Material (explosive, flammable, corrosive, toxic, volatile, radioactive, biohazard, oxidizer, or other)	Symptoms and Effects of Acute Exposure	Photoionization Potential (eV)
Naturally occurring Total Petroleum Hydrocarbons – Diesel Range Organics in soil	201 mg/kg in stockpile soil sample collected by Geocon (April 2021)	PEL = NE REL = NE TLV = NE [Skin] Hazard <input type="checkbox"/>	NE	Volatile	Potential respiratory irritation, irritation to eyes and skin.	NE
Naturally occurring volatile organic compounds	1.7 mg/kg 1,2,4-Trimethylbenzene in stockpile soil sample collected by Tetra Tech, (April 2021)	PEL = NE REL = 25 ppm TLV = NE [Skin] Hazard <input type="checkbox"/>	NE	Flammable	Potential respiratory irritation, irritation to eyes and skin.	8.27
		PEL = REL = TLV = [Skin] Hazard <input type="checkbox"/>				
		PEL = REL = TLV = [Skin] Hazard <input type="checkbox"/>				
		PEL = REL = TLV = [Skin] Hazard <input type="checkbox"/>				
		PEL = REL = TLV = [Skin] Hazard <input type="checkbox"/>				
		PEL = REL = TLV = [Skin] Hazard <input type="checkbox"/>				
		PEL = REL = TLV = [Skin] Hazard <input type="checkbox"/>				

Specify Information Sources: NIOSH Pocket Guide to Hazardous Chemicals, 2019 and American Conference of Governmental Industrial Hygienists (ACGIH). "Threshold Limit Values and Biological Exposure Indices for 2009."

Note: In the Exposure Limit column, include Ceiling (C) and Short-Term Exposure Limits (STEL) if they are available. Also, use the following short forms and abbreviations to complete the table above.

A = Air
CARC = Carcinogenic
eV = Electron volt
U = Unknown

IDLH = Immediately dangerous to life or health
mg/m³ = Milligram per cubic meter
NA = Not available
NE = None established

PEL = Permissible exposure limit
ppm = Part per million
REL = Recommended exposure limit
S = Soil

TLV = Threshold limit value

Note: If no contingency level of protection is selected, all employees covered under this plan must evacuate the immediate site area if air contaminant levels require upgrading PPE. Level A field work requires a Level 3 HASP. This information is available on the chemical hazards page of this HASP.

Field Activities Covered Under this HASP:

Task Description	Level of Protection ¹		Date of Activities
	Primary	Contingency	
1 Fugitive dust and VOC monitoring during soil excavation and soil load activities within soil stockpile area	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input checked="" type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input checked="" type="checkbox"/> D	5/24/21 – 6/19/21
2	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	
3	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	
4	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	
5	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	

Site Personnel and Responsibilities (include subcontractors):

Employee Name and Office Code / Location	Task(s)	Responsibilities
David Brown	Project Manager - Oversight	<ul style="list-style-type: none"> Project Manager: Manages the overall project, makes site safety coordinator (SSC) aware of pertinent project developments and plans, and maintains communications with client as necessary. Additionally, For projects lasting longer than one consecutive week on-site, the PM is responsible for conducting one field audit using Form AF-1.
Strongarm Environmental Technician	Nuisance Dust Monitoring	<ul style="list-style-type: none"> Field Team Leader: Directs field activities, makes site safety coordinator (SSC) aware of pertinent project developments and plans, and maintains communications with the Project Manager and the client as necessary Site Safety Coordinator (SSC): Ensures that appropriate personal protective equipment (PPE) is available, enforces proper use of PPE by on-site personnel and subcontractors; suspends investigative work if personnel are or may be exposed to an immediate health hazard; implements and enforces the HASP; identifies and controls site hazards when possible; communicates site hazards to all personnel; and reports any deviations observed from anticipated conditions described in the health and safety plan to the health and safety representative. Alternate Site Safety Coordinator (if any) Field Personnel: Completes tasks as directed by the project manager, field team leader, and SSC, and follows the HASP and all SWPs and guidelines established in the Tetra Tech, Inc., Health and Safety Manual. Tetra Tech-hired subcontractor personnel on site (a subcontract SSC MUST be identified by name): Completes tasks as outlined in the project scope of work in accordance with the contract. Participates in all Tetra Tech on-site safety meetings and follows all procedures and guidelines established in this HASP, as well as the company health and safety plan and program.

Note:

- See next page for details on levels of protection

NOTE: Contingency level of protection section should be completed only if the upgraded level of protection is immediately available at the job site. If no contingency level of protection is denoted, all employees covered under this HASP must evacuate the immediate site area if air contaminant levels would require an upgrade of PPE.

Protective Equipment: (Indicate type or material as necessary for each task.)

Task	Primary Level of Protection (A,B,C,D)	PPE Component Description (Primary)	Contingency Level of Protection (A, B, C, D)	PPE Component Description (Contingency)
1	D	Respirator type: Dust Mask Cartridge type (if applicable):NA CPC material: NA Glove material(s): Nitrile Boot material: Puncture Resistant Leather Other: Safety eyewear, hard hat, safety vest, steel toe boots	D	Respirator type: Cartridge type (if applicable): CPC material: Same as Primary Glove material(s): Boot material: Other:
2		Respirator type: Cartridge type (if applicable): CPC material: Glove material(s): Boot material: Other:		Respirator type: Cartridge type (if applicable): CPC material: Glove material(s): Boot material: Other:
3		Respirator type: Cartridge type (if applicable): CPC material: Glove material(s): Boot material: Other:		Respirator type: Cartridge type (if applicable): CPC material: Glove material(s): Boot material: Other:
4		Respirator type: Cartridge type (if applicable): CPC material: Glove material(s): Boot material: Other:		Respirator type: Cartridge type (if applicable): CPC material: Glove material(s): Boot material: Other:
5		Respirator type: Cartridge type (if applicable): CPC material: Glove material(s): Boot material: Other:		Respirator type: Cartridge type (if applicable): CPC material: Glove material(s): Boot material: Other:

Respirator Notes:

Respirator cartridges may only be used for a maximum time of 8 hours or one work shift, whichever is less, and must be discarded at that time. For job sites with organic vapors, respirator cartridges may be used as described in this note as long as the concentration is less than 200 parts per million (ppm), the boiling point is greater than 70 °Celsius, and the relative humidity is less than 85 percent. If any of these levels are exceeded, a site-specific respirator cartridge change-out schedule must be developed and included in the HASP using Tetra Tech Form RP-2 (Respiratory Hazard Assessment Form)

Notes:

All levels of protection must include eye, head, and foot protection.

CPC = Chemical protective clothing

Thermoluminescent Dosimeter (TLD) Badges must be worn during all field activities on sites with radiation hazards. TLDs must be worn under CPC.

Monitoring Equipment: All monitoring equipment on site must be calibrated before and after each use and results recorded in the site logbook				
Instrument (Check all required)	Task	Instrument Reading	Action Guideline	Comments
<input type="checkbox"/> Combustible gas indicator model:	<input type="checkbox"/> 1	0 to 10% LEL	Monitor; evacuate if confined space	
	<input type="checkbox"/> 2	10 to 25% LEL	Potential explosion hazard; notify SSC	
	<input type="checkbox"/> 3			
	<input type="checkbox"/> 4			
	<input type="checkbox"/> 5	>25% LEL	Explosion hazard; interrupt task; evacuate site; notify SSC	
<input type="checkbox"/> Oxygen meter model:	<input type="checkbox"/> 1	>23.5% Oxygen	Potential fire hazard; evacuate site	
	<input type="checkbox"/> 2	23.5 to 19.5% Oxygen	Oxygen level normal	
	<input type="checkbox"/> 3			
	<input type="checkbox"/> 4	<19.5% Oxygen	Oxygen deficiency; interrupt task; evacuate site; notify SSC	
	<input type="checkbox"/> 5			
<input type="checkbox"/> Radiation survey meter model:	<input type="checkbox"/> 1	Normal background	Proceed	Annual exposure not to exceed 1,250 mrem per quarter Background reading must be taken in an area known to be free of radiation sources.
	<input type="checkbox"/> 2	Two to three times background	Notify SSC	
	<input type="checkbox"/> 3			
	<input type="checkbox"/> 4	>Three times background	Radiological hazard; interrupt task; evacuate site; notify RSO	
	<input type="checkbox"/> 5			
<input checked="" type="checkbox"/> Photoionization detector model: <input type="checkbox"/> 11.7 eV <input checked="" type="checkbox"/> 10.6 eV <input type="checkbox"/> 10.2 eV <input type="checkbox"/> 9.8 eV <input type="checkbox"/> Other (specify): _____	<input type="checkbox"/> 1	Any response above background to 5 ppm above background	Level B is recommended Level C ^a may be acceptable	These action levels are for unknown gases or vapors. After the contaminants are identified, action levels should be based on the specific contaminants involved.
	<input type="checkbox"/> 2	> 5 to 500 ppm above background	Level B	
	<input type="checkbox"/> 3			
	<input type="checkbox"/> 4	> 500 ppm above background	Level A	
	<input type="checkbox"/> 5			
<input type="checkbox"/> Flame ionization detector model:	<input type="checkbox"/> 1	Any response above background to 5 ppm above background	Level B is recommended Level C ^a may be acceptable	These action levels are for unknown gases or vapors. After the contaminants are identified, action levels should be based on the specific contaminants involved.
	<input type="checkbox"/> 2	>5 to 500 ppm above background	Level B	
	<input type="checkbox"/> 3			
	<input type="checkbox"/> 4	>500 above background	Level A	
	<input type="checkbox"/> 5			
<input type="checkbox"/> Detector tube models:	<input type="checkbox"/> 1	Specify: < 1/2 the PEL	Specify:	The action level for upgrading the level of protection is one-half of the contaminant's PEL. If the PEL is reached, evacuate the site and notify a safety specialist
	<input type="checkbox"/> 2	> 1/2 the PEL		
	<input type="checkbox"/> 3			
	<input type="checkbox"/> 4			
	<input type="checkbox"/> 5			
<input type="checkbox"/> Other (specify):	<input type="checkbox"/> 1	Specify:	Specify:	
	<input type="checkbox"/> 2			
	<input type="checkbox"/> 3			
	<input type="checkbox"/> 4			
	<input type="checkbox"/> 5			

Notes:

eV= electron volt

LEL=Lower explosive limit

mrem=Millirem

PEL=Permissible exposure limit

ppm=Part per million

a. Level B is required when chemical hazards are present, but are uncharacterized. Level C may be acceptable for certain tasks in some situations. If you are uncertain, consult your RSO.

Project-Specific Industrial Hygiene Requirements	Emergency Contacts:	Telephone No.																		
<p>OSHA-Regulated Chemicals*: <i>Check any present on the job site in any medium (air, water, soil)</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> No chemicals below are located on the job site <input type="checkbox"/> Friable Asbestos <input type="checkbox"/> Silica, crystalline <input type="checkbox"/> alpha-Naphthylamine <input type="checkbox"/> Methyl chloromethyl ether <input type="checkbox"/> 3,3'-Dichlorobenzidine (and its salts) <input type="checkbox"/> bis-Chloromethyl ether <input type="checkbox"/> beta-Naphthylamine <input type="checkbox"/> Benidine <input type="checkbox"/> 4-Aminodiphenyl <input type="checkbox"/> Ethyleneimine <input type="checkbox"/> beta-Propiolactone <input type="checkbox"/> 2-Acetylaminoflourene <input type="checkbox"/> 4-Dimethylaminoazobenzene <input type="checkbox"/> N-nitrosomethylamine <input type="checkbox"/> Vinyl chloride <input type="checkbox"/> Inorganic arsenic <input type="checkbox"/> Lead <input type="checkbox"/> Chromium (VI) <input type="checkbox"/> Cadmium <input checked="" type="checkbox"/> Benzene <input type="checkbox"/> Coke oven emissions <input type="checkbox"/> 1,2-Dibromo-3-chloropropane <input type="checkbox"/> Acrylonitrile <input type="checkbox"/> Ethylene oxide <input type="checkbox"/> Formaldehyde <input type="checkbox"/> Methylenedianiline <input type="checkbox"/> 1,3-Butadiene <input type="checkbox"/> Methylene chloride <p>* NOTE: Many states, including California and New Jersey, have chemical-specific worker protection requirements and standards for many chemicals and known or suspected carcinogens.</p>	<p>CORE Occupational Incident Intervention 855-683-9006</p> <p>Tetra Tech EMI 24-hour Anonymous Hazard Reporting Line 866.383.8070</p> <p>U.S. Coast Guard National Response Center 800.424.8802</p> <p>InfoTrac 800.535.5053</p> <p>Poison Control 800.222.1222</p> <p>Fire department 911</p> <p>Police department 911</p> <p>Personnel Call-Down List:</p> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Job Title or Position:</th> <th style="text-align: left;">Name</th> <th style="text-align: left;">Cell Phone:</th> </tr> </thead> <tbody> <tr> <td>Regional Safety Officer</td> <td>Dave Brown</td> <td>619-446-7261</td> </tr> <tr> <td>Project Manager:</td> <td>Dave Brown</td> <td>619-446-7261</td> </tr> <tr> <td>Field Team Leader:</td> <td></td> <td></td> </tr> <tr> <td>Site Safety Coordinator (SSC):</td> <td></td> <td></td> </tr> <tr> <td>Subcontractor SSC:</td> <td>Strongarm Environmental</td> <td>562-404-6656</td> </tr> </tbody> </table>	Job Title or Position:	Name	Cell Phone:	Regional Safety Officer	Dave Brown	619-446-7261	Project Manager:	Dave Brown	619-446-7261	Field Team Leader:			Site Safety Coordinator (SSC):			Subcontractor SSC:	Strongarm Environmental	562-404-6656	
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Field Team Leader:																				
Site Safety Coordinator (SSC):																				
Subcontractor SSC:	Strongarm Environmental	562-404-6656																		
	<p>Medical and Site Emergencies:</p> <p>Signal a site or medical emergency with three blasts of a loud horn (car horn, fog horn, or similar device). Site personnel should evacuate to the area of safe refuge designated on the site map.</p> <p>Hospital Name: Saddleback Medical Center Address: 24451 Health Center Drive Laguna Hills, CA 92653</p> <p>General Phone: 949-837-4500</p> <p>Emergency Phone: 911 Ambulance Phone: 911</p> <p>Hospital called to verify emergency services are offered? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/></p> <p>Step-by-step Route to Hospital: (see Page 13 for route map)</p>																			

Decontamination Procedures The site safety coordinator oversees implementation of project decontamination procedures and is responsible for ensuring they are effective.		Emergency Response Planning During the pre-work briefing and daily tailgate safety meetings, all on-site employees will be trained in the provisions of emergency response planning, site communication systems, and site evacuation routes.
<p>Personnel Decontamination</p> <p>Level D Decon - <input type="checkbox"/> Wet <input checked="" type="checkbox"/> Dry</p> <p>Level C Decon - <input type="checkbox"/> Wet <input type="checkbox"/> Dry</p> <p>Level B Decon – Briefly outline the level B decontamination methods to be used on a separate page attached to this HASP.</p> <p>Level A Decon – A Level 3 HASP is required. Notify your regional health and safety representative and health and safety director.</p> <p>Equipment Decontamination</p> <p>All tools, equipment, and machinery from the Exclusion Zone (hot) or Contamination Reduction Zone (warm) are decontaminated in the CRZ before they are removed to the Support Zone (cold). Equipment decontamination procedures are designed to minimize the potential for hazardous skin or inhalation exposure, cross-contamination, and chemical incompatibilities.</p> <p>Respirator Decontamination</p> <p>Respirators are decontaminated in compliance with SWP 5-27 and should be included with this HASP.</p> <p>Waste Handling for Decontamination</p> <p>Procedures for decontamination waste disposal meet all applicable local, state, and federal regulations.</p>	<p>Decontamination Equipment</p> <p><input type="checkbox"/> Washtubs</p> <p><input type="checkbox"/> Buckets</p> <p><input type="checkbox"/> Scrub brushes</p> <p><input type="checkbox"/> Pressurized sprayer</p> <p><input type="checkbox"/> Detergent (Alconox)</p> <p><input type="checkbox"/> Solvent [Type]</p> <p><input type="checkbox"/> Household bleach solution</p> <p>Concentration/Dilution: _____</p> <p><input type="checkbox"/> Deionized water</p> <p><input type="checkbox"/> Disposable sanitizer wipes</p> <p><input type="checkbox"/> Facemask sanitizer powder</p> <p><input type="checkbox"/> Wire brush</p> <p><input type="checkbox"/> Spray bottle</p> <p><input type="checkbox"/> Tubs / pools</p> <p><input type="checkbox"/> Banner/barrier tape</p> <p><input type="checkbox"/> Plastic sheeting</p> <p><input type="checkbox"/> Tarps and poles</p> <p><input checked="" type="checkbox"/> Trash bags</p> <p><input type="checkbox"/> Trash cans</p> <p><input type="checkbox"/> Duct tape</p> <p><input checked="" type="checkbox"/> Paper towels</p> <p><input type="checkbox"/> Folding chairs</p> <p><input type="checkbox"/> Other</p>	<p>In the event of an emergency that necessitates evacuation of a work task area or the site, the following procedures will take place.</p> <ul style="list-style-type: none"> • The Tetra Tech SSC will contact all nearby personnel using the on-site communications to advise the personnel of the emergency. • The personnel will proceed along site roads to a safe distance upwind from the hazard source. • The personnel will remain in that area until the SSC or an authorized individual provides further instructions. <p>In the event of a severe spill or a leak, site personnel will follow the procedures listed below.</p> <ul style="list-style-type: none"> • Evacuate the affected area and relocate personnel to an upwind location. • Inform the Tetra Tech SSC, a Tetra Tech office, and a site representative immediately. • Locate the source of the spill or leak, and stop the flow if it is safe to do so. • Begin containment and recovery of spilled or leaked materials. • Notify appropriate local, state, and federal agencies. <p>In the event of severe weather, site personnel will follow the procedures listed below.</p> <ul style="list-style-type: none"> • Site work shall not be conducted during severe weather, including high winds and lightning. • In the event of severe weather, stop work, lower any equipment (drill rigs) and evacuate the affected area. • Severe weather may cause heat or cold stress. Refer to SWPs 5-15 and 5-16 for information on both. <p>All work-related incidents must be reported. According to TtEMI's reporting procedures, for non-emergency incidents you should:</p> <ul style="list-style-type: none"> • Notify CORE Incident Intervention at 855.683.9006 • Notify your Project Manager or Regional Safety Officer (RSO) via phone immediately. • Complete a "Tetra Tech Incident Report" (Form IR) within 24 hours and send it to your RSO. If an injury or illness has occurred, the Form IR-A and the WorkCare HIPAA form must be completed at the same time the Form IR is completed.

Site Map

Glenn Ranch Rd & Viejo Ridge Dr

Intersection

Directions Save Nearby Send to your phone Share

Lake Forest, CA 92679

Add a missing place

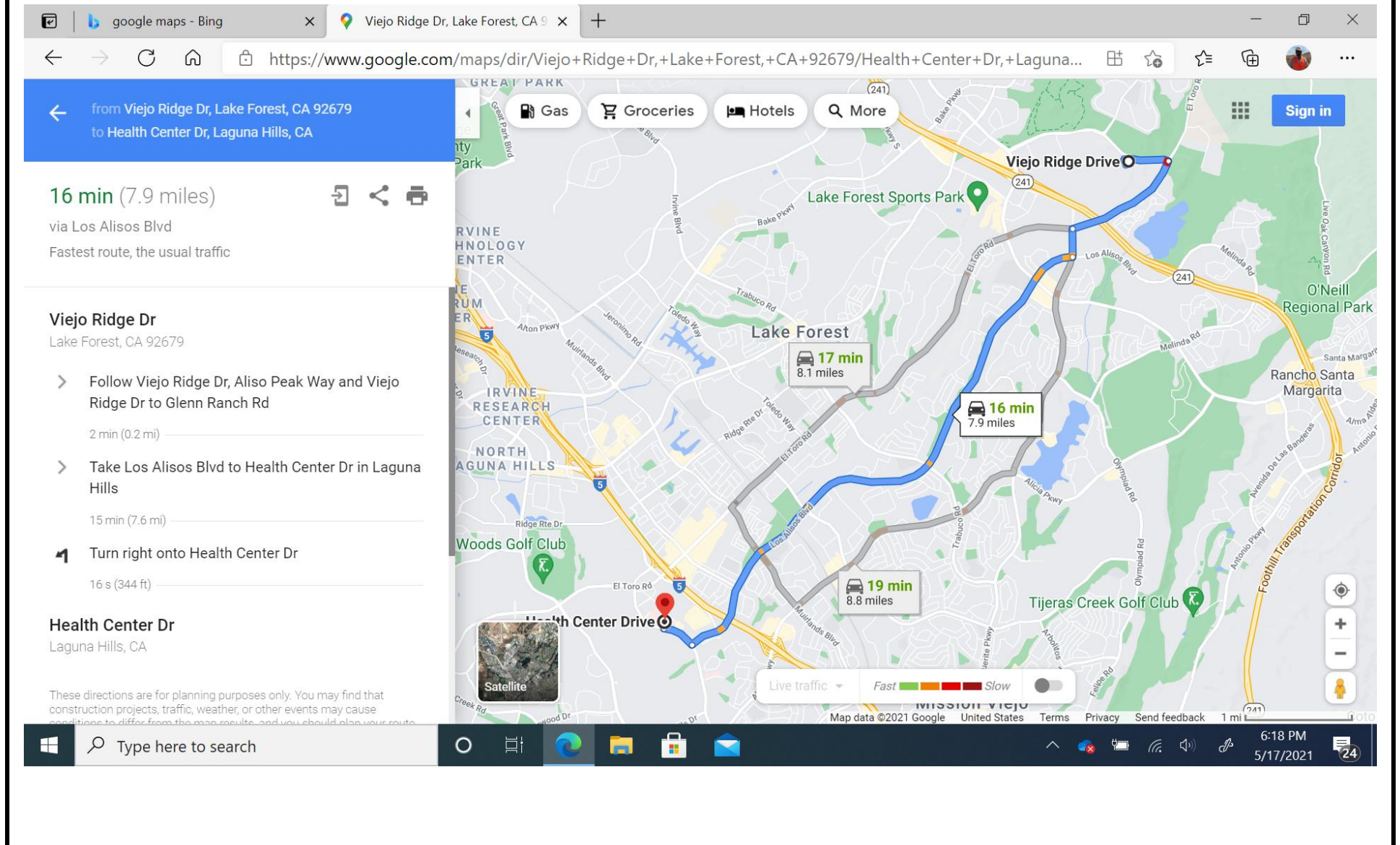
Add your business

Photos

Map data ©2021 United States Terms Privacy Send feedback 500 ft

6:24 PM 5/17/2021

Hospital Route Map (attach or insert):



Note: A dry-run should be conducted to establish a physical location associated with the map included in the HASP. Verbal verification from the hospital emergency room should also be obtained to ensure that the hospital will accept chemically contaminated patients.

Emergency Contacts

WorkCare - For issues requiring an Occupational Health Physician; assistance is available 24 hours per day, 7 days per week.

InfoTrac - For issues related to incidents involving the transportation of hazardous chemicals; this hotline provides accident assistance 24 hours per day, 7 days per week

U.S. Coast Guard National Response Center - For issues related to spill containment, cleanup, and damage assessment; this hotline will direct spill information to the appropriate state or region

Poison Control Center – For known or suspected poisoning.

Limitations:**The Level-Two HASP is not appropriate in some cases:**

- Projects involving unexploded ordnance (UXO), radiation sources as the primary hazard, or known chemical/biological weapons site must employ the Level 3 HASP
- Projects of duration longer than 90 days may need a Level 3 HASP (consult your RSO)

Decontamination:

Decontamination Solutions for Chemical and Biological Warfare Agents^a: PPE and equipment can be decontaminated using 0.5 percent bleach (1 gallon laundry bleach to 9 gallons water) for biological agents (15 minutes of contact time for anthrax spores; 3 minutes for others) followed by water rinse for chemical and biological agents. In the absence of bleach, dry powders such as soap detergents, earth, and flour can be used. The powders should be applied and then wiped off using wet tissue paper. Finally, water and water/soap solutions can be used to physically remove or dilute chemical and biological agents. Do not use bleach solution on bare skin; use soap and water instead. Protect decontamination workers from exposure to bleach.

Decontamination for Radiological and Other Chemicals: Primary decontamination should use Alconox and water unless otherwise specified in chemical specific information resources. The effectiveness of radiation decontamination should be checked using a radiation survey instrument. Decontamination procedures should be repeated until the radiation meter reads less than 100 counts per minute over a 100-square-centimeter area when the probe is held 1 centimeter from the surface and moving slower than 2.5 centimeters per second.

Decontamination Corridor: The decontamination setup can be adjusted to meet the needs of the situation. The decontamination procedures can be altered to meet the needs of the specific situation when compound- and site-specific information is available.

Decontamination Waste: All disposable equipment, clothing, and decontamination solutions will be double-bagged or containerized in an acceptable manner and disposed of with investigation-derived waste.

Decontamination Personnel: Decontamination personnel should dress in the same level of PPE or one level below the entry team PPE level.

All investigation-derived waste should be left on site with the permission of the property owner and the EPA on-scene coordinator. In some instances, another contractor will dispose of decontamination waste and investigation-derived waste. DO NOT place waste in regular trash. DO NOT dispose of waste until proper procedures are established.

Notes:

- ^a Source: Jane's Information Group. 2002. *Jane's Chem-Bio Handbook*. Page 39.



TETRA TECH, INC.
DAILY TAILGATE SAFETY MEETING FORM

Date: _____ Time: _____ Project No.: _____

Client: _____ Site Location: _____

Site Activities Planned for Today: _____

Weather Conditions: _____

Safety Topics Discussed	
Protective clothing and equipment:	
Chemical and physical hazards:	
Emergency procedures:	
Equipment hazards:	
Other:	
Attendees	
Printed Name	Signature

Meeting Conducted by:

Name

Signature



TETRA TECH EM INC.
HEALTH AND SAFETY PLAN AMENDMENT

Site Name: _____

Amendment Date: _____

Purpose or Reason for Amendment: _____

Required Additional Safe Work Practices or Activity Hazard Analyses: _____

Required Changes in PPE: _____

Action Level Changes: _____

AMENDMENT APPROVAL

RSO or Designee	_____	_____	_____
	Name	Signature	Date

Site Safety Coordinator	_____	_____	_____
	Name	Signature	Date

Date presented during daily site safety meeting: _____