

**SITE-SPECIFIC  
HEALTH AND SAFETY PLAN  
(HASP)**

CLIENT: Advanced Geoservices

SITE ADDRESS: Various Locations  
Los Angeles, CA

ICS PROJECT NO.: 14-2091

DATE PREPARED: December 3, 2014

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**SITE-SPECIFIC HEALTH AND SAFETY PLAN APPROVALS**

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## **ATTACHMENTS**

- Attachment 1 Site Maps
- Attachment 2 Health and Safety Forms
- Attachment 3 Job Hazard Analysis
- Attachment 4 Hospital Route Map

## 1.0 GENERAL INFORMATION

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### 1.1 INTRODUCTION

This Health & Safety Plan (HASP) addresses those activities associated with the scope of work stated in the HASP and will be implemented by the Site Safety Officer (SSO) during site work. **Compliance with** this HASP is required of all persons and third parties who enter Innovative Construction Solutions' (ICS) and or subcontractors work areas. Assistance in implementing this HASP can be obtained from the SSO and Project Manager, and/or the Health and Safety Director (HSD). The content of this HASP may change or undergo revision based upon additional information made available to health and safety (H&S) personnel, monitoring results or changes in the scope of work. Any changes proposed must be reviewed by H&S staff and are subject to approval by the HSD and Project Manager.

This site specific HASP has been prepared for the use of Innovative Construction Solutions (ICS) and its employees and supplements the Health and Safety training that each ICS employee receives. The health and safety guidelines in this HASP were prepared specifically for this site. Due to the potentially hazardous nature of the site covered by this HASP and the activity occurring on the site, it is not possible to discover, evaluate, and provide protection for all possible hazards which may be encountered. This HASP is written for the specific site conditions, purposes, dates, and personnel specified and must be amended if these conditions change.

This HASP is not intended to be **used by** any other contractor or personnel of any such contractor. This HASP may not address the specific health and safety needs or requirements of any other such contractor and its employees. Neither this HASP nor any part of it should be used on any other site.

ICS expressly disclaims any and all guarantees or warranties, express or implied, that the HASP will meet the needs or requirements of any such contractor or its employees. ICS, therefore, cannot and does not assume any liability by the use or reuse of the HASP by any client, contractor or their employees or agents. Any reliance on the HASP will be at the sole risk and liability of such party.

**1.2 ACKNOWLEDGMENT**

I acknowledge having reviewed this Health & Safety Plan; understand its contents; have been afforded the opportunity to ask questions and have them answered; and agree to abide by it. Additionally, I am current in the training and medical surveillance requirements specified in 8 CCR 5192 and 29 CFR 1910.120, Hazardous Waste Operations and Emergency Response.

*(Please Print Clearly)*

NAME / SIGNATURE	DATE	COMPANY AFFILIATION
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*Use additional pages as necessary (keep all pages with HASP)*

## 2.0 PROJECT INFORMATION

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### 2.1 SCOPE OF WORK

***This scope is superseded by the plans and specifications and shall not be relied on for project implementation.***

#### **I. Preconstruction and Mobilization Activities**

- Prepare site-specific Health and Safety Plan prior to the implementation of the proposed removal activities. The SSHSP will address all aspects of the demolition, soil handling, transportation, personal protection, and partial restoration. JSAs will be included for all work tasks and a Daily Tailgate Safety Meeting will be conducted each morning and if any unscheduled work is conducted where the Team needs to address a new scope.
- Generate and apply for any applicable Grading permitting through the City of Los Angeles and/or the City of Maywood
- Update the existing ICS established waste profile at the Republic Services, LaPaz County, Arizona disposal site to include an additional properties and supporting analytical
- ICS will coordinate with AGS for the 800 call-number prior to starting the work and coordinate appropriate signage for the work area
- Make notification to the State of California, Division of Occupational Safety and Health (Cal-OSHA) with respect to the excavation/trenching activities as required under the ICS Annual T-1 Trench Permit No.: 2014-904686
- Visit site to mark work area in white paint for Underground Service Alert utility marking
- ICS will provide landscape inventory to both AGS and residents (if authorized)
- ICS will conduct photo documentation of the pre-remediation site conditions and landscaping prior to mobilization and excavation activities
- ICS will photo document the entire project and provide Advanced Geo Services copies of all pictures taken.
- Notify USA at least 48 hours prior to initiating excavation activities
- Mobilization 40-HAZWOPER trained personnel whom have completed the Title 17 – California Department of Public Health – Lead Worker/Supervisor Training and submit training certificates as well as medical and pulmonary certifications for using respiratory protection if needed
- Provide any applicable South Coast Air Quality Management District certificates for utilization of equipment (HEPA vacuums) as described on the SCAQMD – Form 400-A
- Furnish and set-up support facilities (lavatory and wash basin)
- Lay down visqueen/plywood sheeting at loading areas to prevent cross contamination and street and sidewalk damage

- Erosion & Sediment (E&S) Control and/or Water Management measures will be implemented, on an as-needed basis, during soil remediation activities. These measures include:

*E&S Control Measures:*

- Straw wattles (9" diameter) will be placed at the perimeter of excavation areas to contain sediment and prevent water runoff.
- 6-mil plastic sheeting will be used to cover open work areas that do not contain impacted soil (i.e., non-impacted work areas).
- A HEPA-vacuum will be used to collect residual soil on all non-impacted work areas throughout the day and prior to daily demobilization.
- Snow fence (min. 3' height) will be placed around all excavation areas, unless a fence already exists, that are left open overnight.

*Water Management Measures:*

- Each property will have a line of double stacked sand bags across the entire entrance (i.e., driveway) to prevent water from running off the property.
- Perimeter sand bags will also be used to prevent water from leaving the property.
- If truck loading takes place in the street, a water containment area will be set-up around the truck to collect any water that is generated or if wet decontamination is required. The water containment area will consist of 6-mil plastic, sandbags and/or straw wattles.
- Straw wattles and/or sandbags will be overlapped with plastic and placed along any open area where water could escape.
- Water absorbent powder and/or water absorbent booms will be used to prevent water leaving the property. A 55 gallon poly drum with a hand pump will be used to transfer water from the ground into the drums.
- Sand bags and non-woven geotextile fabric will be used to cover down gradient storm drain inlets along the street of each property.

**II. Landscape Removal Activities**

- Landscaping / vegetation will be removed from the excavation areas.
- All landscaping / vegetation removed from excavation areas will be transported and disposed of at Republic Services, LaPaz County, Arizona disposal site under the existing waste profile

**III. Impacted Soil Excavation and Loading Activities**

- Excavate and stockpile/direct load heavy metal impacted soil from the twelve proposed properties as requested by AGS. Excavation will be conducted by hand excavation by

manual and electric means and light mechanical equipment. ICS's planned personnel and equipment will include but not be limited to the following:

- Mini-Excavator (rubber tracked)
  - Skid Steer Loader (rubber tracked or tired)
  - Skip Loader (rubber tired)
  - Boom Lift or Forklift (rubber tired)
  - Superintendent / Foreman (1-2)
  - Operators (2-4)
  - Technicians (5-10)
  - Small Tools and Supplies (i.e. hand carts/wheel barrows, visqueen, plywood)
- 
- **Note:** moisture conditioning of all excavated soil will be conducted on a continuous basis such that **NO** dust is generated or visible during excavation, transferring or loading into the subject waste transport
  - Impacted soil will be loaded into staged end-dump style transports for all properties. If roll-off containers are required due to circumstances beyond ICS's control, ICS will gain approval from AGS prior to utilization of this type of transportation effort
  - ICS will have available straw waddle, sandbags, and silt fence to control onsite water from leaving or entering the excavation area
  - ICS will barricade the nearby storm drains to ensure no water enters the storm drain system adjacent to the work area
  - ICS will utilize standard Hepa Vacuum machine to remove and contain any possible lead impacted dust from equipment, driveways and/or sidewalks within the work area (achieving 99.97% capturing efficiency as required in the IMWP)
  - Provide the necessary Level C/D PPE when handling impacted soil
  - Make available the necessary 6-mil visqueen sheeting for use during loading of interim transfer mechanisms and/or direct loading activities of the waste transports
  - Utilize 4 x 8 plywood sheeting to prevent any surface damage to properties (if necessary)
  - Assist AGS in obtaining confirmation samples of the excavations as needed (assumed to be completed during ongoing site activities)
  - During and post excavation activities, ICS will utilize visqueen sheeting and snow fence to make the excavation area safe and cover excavation with visqueen sheeting and sand-bags while awaiting confirmatory sample results.

#### **IV. Transportation and Disposal Activities**

- Loading area to be established using visqueen sheeting, and plywood sheeting (as needed)

- Misting and reduced drop heights will be used to control dust during loading of waste haulers
- Once the subject transport is loaded, ICS personnel will place a single sheet of visqueen over the load of impacted soil prior to tarping. ICS will attempt to use as many “auto-tarping” transports as possible for this project. Any elevated work over 4-feet high will comply with applicable OSHA regulations and will follow requirements established in this HASP.
- Provide manifesting for each load exiting the project site
- Execute the appropriate waste manifest (Uniform Waste Manifest) for the subject waste material by Owner and transporter and retain Generator’s “Initial” copy (the Generator’s initial copy of any hazardous waste manifest will be consolidated and forwarded to AGS)
- Inspect each load prior to exiting the site to ensure the transport is tarped, properly manifested, and no particulate matter is located on the exterior of the vehicle
- Once the loads have been delivered to the subject disposal site and received, ICS will provide all parties with a copy of the executed manifest copy & weight ticket for each load received for disposal at the designated disposal site
- A designated crew member will act as flag man to assist with transport entry, loading and site exiting as well as any end of day sweeping

## **V. Backfill and Restoration Activities**

- Import an AGS approved import fill from a local quarry source and place the subject fill material into the excavation and compact utilizing standard compaction equipment
- ICS to provide analytical on backfill to meet residential screening values (DTSC) requirements prior to import
- ICS will place imported screened fill soil import in applicable lifts and moisture condition to backfill excavation areas to 3-inches below surrounding grade and wheel roll and hand tamp to achieve suitable compaction
- ICS will spread “Premium Top Soil” on former lawn areas to promote lawn re-vegetation if elected by the subject homeowner
- All plant installation will be completed after backfill activities
- Perform a general site cleaning and perform a final HEPA vacuuming of all paved surfaces prior to demobilization from the site

## **VI. Demobilization**

After completion of excavation and backfill activities, ICS will demobilize from the location and remove any equipment or temporary facilities mobilized during the pre-construction phase of the project.

## **2.2 UTILITY CLEARANCE**

1. To be performed using USA, site utility maps, and or a geophysical survey.
2. USA Notification to be conducted by ICS, 48 hours prior to job start.

*See Attachment 2 for Utility Clearance Forms*

### 3.0 HEALTH AND SAFETY RISK ANALYSIS

#### 3.1 NON-CHEMICAL HAZARD SUMMARY

Field staff must review job-specific work plan and coordinate with project manager to verify that all up-front logistics are completed prior to starting work including, but not limited to, permitting, access agreements, and notification to required contacts (e.g. site managers, inspectors, clients, subcontractors, etc.). A tailgate safety meeting must be performed and documented at the beginning of each work day. Safe Performance Self Assessment (SPSA) procedures must be used during field activities. Weather conditions (heat, cold, rain, and lightning) must also be considered.

An Activity Hazard Analysis (AHA) has been completed for the project (See Attachment 3). In the event site conditions change a blank AHA has been included for completion in the field. All Hot Work activities must be pre-approved by the SSO and or HSD.

Table 3-1 presents a summary assessment of non-chemical hazards.

**Table 3-1 Assessment of Non-Chemical Hazards**

Non-Chemical Hazard		Yes	No	Task No. (s)
1.	Electrical - overhead lines (if heavy equipment is used)	X		II,III
2.	Underground utilities	X		III
3.	Coring Equipment		X	
4.	Drilling Equipment (Geoprobe™, Hollow Stem Auger, etc)		X	
5.	Heavy Equipment	X		II-V
6.	Machinery		X	
7.	Heat Exposure	X		II-VI
8.	Cold Exposure	X		II-VI
9.	Confined Spaces (includes excavations/trenches > 4-feet)		X	
10.	Explosive Atmosphere		X	
11.	Noise	X		II-VI
12.	Ionizing Radiation		X	
13.	Non-ionizing Radiation	X		II-VI
14.	Fire	X		II-VI
15.	Vehicle Traffic	X		II-VI
16.	Meteorological	X		II-VI

Non-Chemical Hazard		Yes	No	Task No. (s)
17.	Excavations/Holes/Ditches/Trenches	X		III,V
18.	Steep Grades		X	
19.	Slippery Surfaces	X		II,III,IV
20.	Uneven Terrain/ Unstable Surfaces	X		II,III,IV
21.	Elevated Surfaces		X	
22.	Poor Lighting		X	
23.	Hazards to the Public	X		II-VI
24.	Munitions and Explosives of Concern		X	

### 3.2 ASSESSMENT OF NON-CHEMICAL HAZARDS

#### 3.2.1 Overhead Obstructions/Lines

Before the start of work, all work areas and mobilization pathways will be evaluated to determine if overhead obstructions (OHOs) are present. OHOs include electrical and communications lines, piping, bridges, and crosswalks. Determinations must be made if high clearance equipment or trucks with beds that can be raised (e.g., dumps, roll-off containers) will be used on the project. All equipment (e.g., drill rig, excavator) must remain a safe (minimum 20-foot) distance from overhead power lines. If project work will be performed within 20-feet of OHOs regardless of line type or voltage, the HSD must approve the job scope and JHA.

Extra precautions will be exercised when drilling or working near overhead electrical lines. As stated in *California Code of Regulations (CCR), Title 8, Section 2946 Table 2*, the minimum clearance required from energized overhead high-voltage lines for boom-type lifting or hoisting equipment is as follows:

<u>Nominal Voltage</u> (Phase to Phase)	<u>Minimum Required</u> Clearance (Feet)
0 to 600	10
over 600 to 50,000	10
over 50,000 to 75,000	11
over 75,000 to 125,000	13
over 125,000 to 175,000	15

over 175,000 to 250,000	17
over 250,000 to 370,000	21
over 370,000 to 550,000	27
over 550,000 to 1,000,000	42
over 1,000,000	Established by utility owner/operator or by a professional engineer in electrical power transmission/distribution

### 3.2.2 Underground Utilities

Hazards include underground utilities which may be impacted when conducting intrusive activities (i.e. excavation, sampling, drilling). Impact may result in the release of electrical energy, high pressure water, high pressure air/steam, natural gas, or sewage. The ICS SSO is the responsible on-site individual and must ensure that each of the following addressed:

- Locate and mark all underground utilities through inspection and identification by the appropriate utility representative and or client representative.
- Assume all lines are “live” until shut-off is verified by an appropriate utility representative.
- Inspect buildings adjacent to area of planned activity to identify cues which indicate the potential for underground and aboveground utility service (i.e. natural gas valves, underground tunnels, water valves or metering pits, compressed air or gas lines)
- In the event that a utility representative will not mark utilities within the site fence line, identify the utility feed location and observe visual cues identified above. Intrusive work must be conducted in a slowly and carefully, especially during the first 3-4 feet (depth at which most utilities will be located)

### 3.2.3 Coring Equipment

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### 3.2.4 Drilling Equipment

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### 3.2.5 Heavy Equipment

Evaluate the use of heavy equipment in operations such as site clearing, grading, drilling and excavation or lifting. Controls should include equipment alarms, use of qualified operators, equipment inspections, and any specific OSHA regulatory requirements.

Machinery and mechanized equipment will only be operated by a competent qualified individual. Equipment will be inspected daily; tests will be made at the start of each shift to ensure that the braking and operating systems are in proper working condition.

Seats and seatbelts shall be available to and in use by all operators and passengers. Stationary machinery and equipment will be placed on a firm foundation and secured (outriggers) prior to operation.

Mechanized equipment will be shut down prior to and during fueling operations. Communication will be maintained with operator prior to approaching and while working adjacent to all heavy equipment.

Communication between operator and ground personnel using either radios or hand signals. Communication methods shall be determined prior to beginning work activities. Barriers or blockades will be placed around the bodies of articulating equipment. Individuals will not walk or otherwise travel beneath a load (bucket, etc.)

### **3.2.6 Machinery**

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### 3.2.7 Heat Exposure

Workers who are exposed to extreme heat or work in hot environments may be at risk of heat stress. Exposure to extreme heat can result in occupational illnesses and injuries. Heat stress can result in heat rashes, heat cramps, heat exhaustion, or heat stroke. Heat can also increase the risk of injuries in workers as it may result in sweaty palms, fogged-up safety glasses, and dizziness. Burns may also occur as a result of accidental contact with hot surfaces or steam. Workers at risk of heat stress include outdoor workers and workers in hot environments such as firefighters, bakery workers, farmers, construction workers, miners, boiler room workers, factory workers, and others. Workers at greater risk of heat stress include those who are 65 years of age or older, are overweight, have heart disease or high blood pressure, or take medications that may be affected by extreme heat.

<b>Suggested Frequency of Physiological Monitoring for Fit and Acclimatized Workers<sup>a</sup></b>		
<b>Adjusted Temperature (see notes below)</b>	<b>For workers with normal work clothes, conduct monitoring...</b>	<b>For workers wearing impermeable protective clothing conduct monitoring...</b>
90°F or above	After each 45 minutes of work	After each 15 minutes of work
87.5°-90°F	After each 60 minutes of work	After each 30 minutes of work
82.5°-87.5°F	After each 90 minutes of work	After each 60 minutes of work
77.5°-82.5°F	After each 120 minutes of work	After each 90 minutes of work
72.5°-77.5°F	After each 150 minutes of work	After each 120 minutes of work

Notes:  
<sup>a</sup> Assumes work levels of 250 kilocalories/hour (e.g., a moderate work level). Consider increasing the frequency for heavy work rates.  
<sup>b</sup> Adjusted Air Temperature: Calculate the adjusted air temperature (ta adj) by using this equation:  $ta\ adj\ ^\circ F = ta\ ^\circ F + (13 \times \% \text{ sunshine})$ .  
 Measure the air temperature (ta) with a standard thermometer, with the bulb shielded from radiant heat.  
 Estimate the percent sunshine by judging what percent time the sun is not covered by clouds that are thick enough to produce a shadow.  
 100 percent sunshine = no cloud cover and a sharp, distinct shadow;  
 0 % sunshine = no shadows  
<sup>c</sup>For the purpose of this chart, a normal work ensemble consists of cotton coveralls or other cotton clothing with long sleeves and pants.  
 Adapted from: NIOSH/OSHA/USCG/EPA Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities, Chapter 8 (1985).

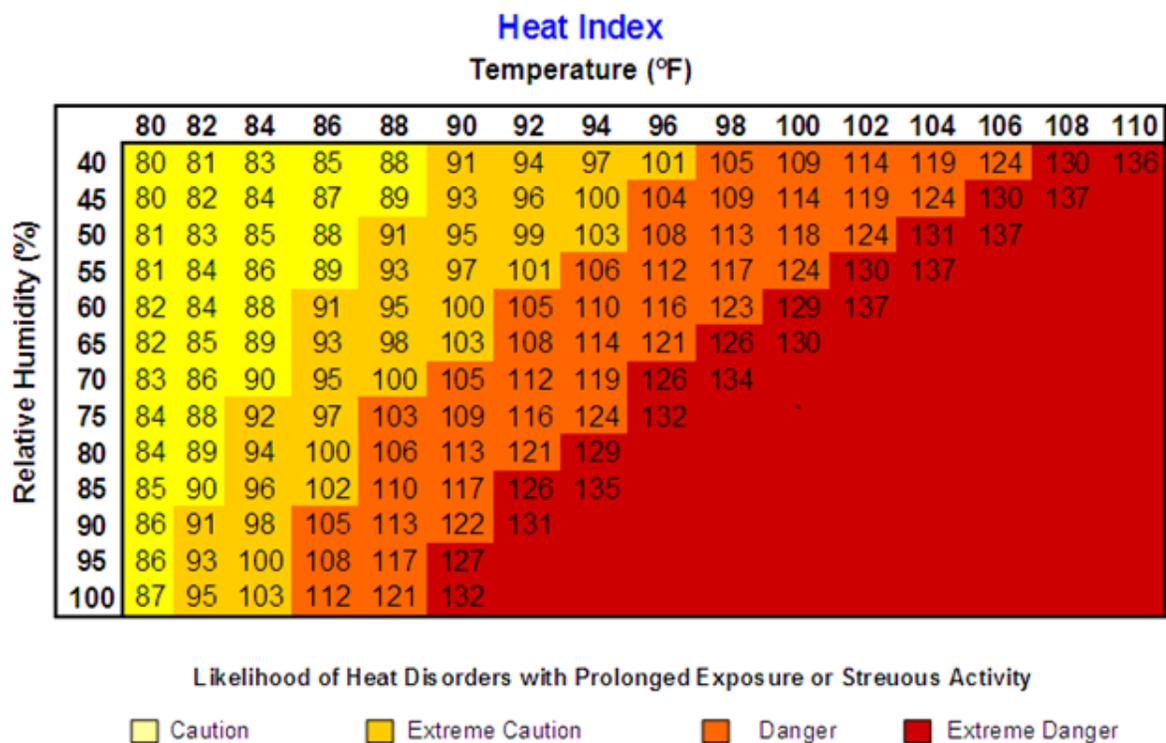
Illness	Symptoms	First Aid*
<b>Heat stroke</b>	<ul style="list-style-type: none"> <li>■ Confusion</li> <li>■ Fainting</li> <li>■ Seizures</li> <li>■ Excessive sweating or red, hot, dry skin</li> <li>■ Very high body temperature</li> </ul>	<ul style="list-style-type: none"> <li>■ Call 911</li> </ul> <p>While waiting for help:</p> <ul style="list-style-type: none"> <li>■ Place worker in shady, cool area</li> <li>■ Loosen clothing, remove outer clothing</li> <li>■ Fan air on worker; cold packs in armpits</li> <li>■ Wet worker with cool water; apply ice packs, cool compresses, or ice if available</li> <li>■ Provide fluids (preferably water) as soon as possible</li> <li>■ Stay with worker until help arrives</li> </ul>
<b>Heat exhaustion</b>	<ul style="list-style-type: none"> <li>■ Cool, moist skin</li> <li>■ Heavy sweating</li> <li>■ Headache</li> <li>■ Nausea or vomiting</li> <li>■ Dizziness</li> <li>■ Light headedness</li> <li>■ Weakness</li> <li>■ Thirst</li> <li>■ Irritability</li> <li>■ Fast heart beat</li> </ul>	<ul style="list-style-type: none"> <li>■ Have worker sit or lie down in a cool, shady area</li> <li>■ Give worker plenty of water or other cool beverages to drink</li> <li>■ Cool worker with cold compresses/ice packs</li> <li>■ Take to clinic or emergency room for medical evaluation or treatment if signs or symptoms worsen or do not improve within 60 minutes.</li> <li>■ Do not return to work that day</li> </ul>
<b>Heat cramps</b>	<ul style="list-style-type: none"> <li>■ Muscle spasms</li> <li>■ Pain</li> <li>■ Usually in abdomen, arms, or legs</li> </ul>	<ul style="list-style-type: none"> <li>■ Have worker rest in shady, cool area</li> <li>■ Worker should drink water or other cool beverages</li> <li>■ Wait a few hours before allowing worker to return to strenuous work</li> <li>■ Have worker seek medical attention if cramps don't go away</li> </ul>
<b>Heat rash</b>	<ul style="list-style-type: none"> <li>■ Clusters of red bumps on skin</li> <li>■ Often appears on neck, upper chest, folds of skin</li> </ul>	<ul style="list-style-type: none"> <li>■ Try to work in a cooler, less humid environment when possible</li> <li>■ Keep the affected area dry</li> </ul>

\* Remember, if you are not a medical professional, use this information as a guide only to help workers in need.

This guidance is online at [http://www.osha.gov/SLTC/heatillness/heat\\_index](http://www.osha.gov/SLTC/heatillness/heat_index)

### Thermal Stress Monitoring

When permeable work clothes are worn (street clothes or clothing ensembles over street clothes), physiological monitoring may be required. Regularly observe workers for signs and symptoms of heat stress and implement physiological monitoring as indicated below. This should start when the heat index reaches 80°F (27°C) [see Heat Index Table below], or sooner if workers exhibit symptoms of heat stress indicated in the table above. These heat index values were devised for shady, light wind conditions; exposure to full sunshine can increase the values by up to 15°F (8°C). Also, strong winds, particularly with very hot, dry air, can be extremely hazardous.



Heat Index	Possible Heat Disorders	Minimum Frequency of Physiological Monitoring
80°F - 90°F (27°C - 32°C)	Fatigue possible with prolonged exposure and/or physical activity	Observe Workers for signs of heat stress and implement physiological monitoring if warranted.
90°F - 105°F (32°C - 41°C)	Sunstroke, heat cramps, or heat exhaustion possible with prolonged exposure and/or physical activity	Every 2 hours, or sooner, if signs of heat stress are observed.
105°F - 130°F (41°C - 54°C)	Sunstroke, heat cramps, or heat exhaustion likely, and heat stroke possible with prolonged exposure and/or physical activity.	Every 60 minutes or sooner if signs of heat stress are observed.
130°F or Higher (54°C or Higher)	Heat/Sunstroke highly likely with continued exposure.	Every 30 minutes or sooner if signs of heat stress are observed.
Source: National Weather Service		

### Physiological Monitoring and Associated Actions

When physiological monitoring is required, the following will be performed:

- The heart rate should be measured by the radial pulse for 30 seconds, as early as possible in the resting period.
- The heart rate after one minute rest period should not exceed 120 beats per minute (bpm).
- If the heart rate is higher, the next work period should be shortened by 33 percent, while the length of the rest period stays the same.
- If the pulse rate still exceeds 120 bpm at the beginning of the next rest period, the following work cycle should be further shortened by 33 percent.
- Continue this procedure until the rate is maintained below 120 bpm, or 20 bpm above resting pulse.
- Alternately, the body temperature can be measured, either oral or aural (ear), before the workers have something to drink.
- If the oral or aural temperature exceeds 99.6°F (37.6°C) at the beginning of the rest period, the following work cycle should be shortened by 33 percent.
- Continue this procedure until the oral or aural (ear) temperature is maintained below 99.6°F (37.6°C). While an accurate indication of heat stress, oral temperature is difficult to measure in the field, however, a digital aural (aural) thermometer is easy to obtain and inexpensive to purchase.

### Water

Water is a key preventive measure to minimize the risk of heat related illnesses. All ICS employees shall have access to potable drinking water meeting the requirements of

Sections 1524, 3363, and 3457, as applicable. Where the supply of water is not plumbed or otherwise continuously supplied, water shall be provided in sufficient quantity at the beginning of the work shift to provide one quart per employee per hour for drinking for the entire shift. Employers may begin the shift with smaller quantities of water if they have effective procedures for replenishment during the shift as needed to allow employees to drink one quart or more per hour. The frequent drinking of water, as described in (e), shall be encouraged.

### **Access to Rest and Shade**

Access to rest and shade or other cooling measures are important preventive steps to minimize the risk of heat related illnesses. Employees suffering from heat illness (see below) or believing a preventative recovery period is needed, shall be provided access to an area with shade that is either open to the air or provided with ventilation or cooling for a period of no less than five minutes. Such access to shade shall be permitted at all times. Cooling measures other than shade (e.g., use of misting machines) may be provided in lieu of shade if it can be demonstrated that these measures are at least as effective as shade in allowing employees to cool (company truck with air conditioning).

The rest and shade area(s) for this project has been identified as:

**Primary:        ICS Company Vehicle(s); ICS Canopies**  
**Locations will vary day to day as the vacant site has no buildings**

### **ICS' Heat Illness Prevention Plan**

A copy of ICS' Cal/OSHA approved Heat Illness Prevention Plan is located in the ICS service truck.

**Additional guidance from Cal/OSHA can be found online at:**

<http://www.dir.ca.gov/dosh/heatillnessinfo.html>

### 3.2.8 Cold Exposure

Workers who are exposed to extreme cold or work in cold environments may be at risk of cold stress. Extreme cold weather is a dangerous situation that can bring on health emergencies in susceptible people, such as those without shelter, outdoor workers, and those who work in an area that is poorly insulated or without heat. What constitutes cold stress and its effects can vary across different areas of the country. In regions relatively unaccustomed to winter weather, near freezing temperatures are considered factors for "cold stress." Whenever temperatures drop decidedly below normal and as wind speed increases, heat can more rapidly leave your body. These weather-related conditions may lead to serious health problems.

- **Hypothermia**

When exposed to cold temperatures, your body begins to lose heat faster than it can be produced. Prolonged exposure to cold will eventually use up your body's stored energy. The result is hypothermia, or abnormally low body temperature. A body temperature that is too low affects the brain, making the victim unable to think clearly or move well. This makes hypothermia particularly dangerous because a person may not know it is happening and will not be able to do anything about it

#### **Early Symptoms**

- Shivering
- Fatigue
- Loss of coordination
- Confusion and disorientation

#### **Late Symptoms**

- No shivering
- Blue skin
- Dilated pupils
- Slowed pulse and breathing
- Loss of consciousness

#### **First Aid**

Take the following steps to treat a worker with hypothermia:

- Alert the supervisor and request medical assistance.
- Move the victim into a warm room or shelter.
- Remove their wet clothing.
- Warm the center of their body first—chest, neck, head, and groin—using an electric blanket, if available; or use skin-to-skin contact under loose, dry layers of blankets, clothing, towels, or sheets.
- Warm beverages may help increase the body temperature.
- Do not try to give beverages to an unconscious person.

After their body temperatures has increased, keep the victim dry and wrapped in

a warm blanket, including the head and neck.

If the victim has no pulse, begin CPR.

- **Cold Water Immersion**

Cold water immersion creates a specific condition known as immersion hypothermia. It develops much more quickly than standard hypothermia because water conducts heat away from the body 25 times faster than air. Typically people in temperate climates don't consider themselves at risk from hypothermia in the water, but hypothermia can occur in any water temperature below 70°F. Survival times can be lengthened by wearing proper clothing (wool and synthetics and not cotton), using a personal flotation device (PFD, life vest, immersion suit, dry suit), and having a means of both signaling rescuers (strobe lights, personal locator beacon, whistles, flares, waterproof radio) and having a means of being retrieved from the water. Below you will find links with information about cold water survival and cold water rescue.

- **Frostbite**

Frostbite is an injury to the body that is caused by freezing. Frostbite causes a loss of feeling and color in the affected areas. It most often affects the nose, ears, cheeks, chin, fingers, or toes. Frostbite can permanently damage body tissues, and severe cases can lead to amputation. In extremely cold temperatures, the risk of frostbite is increased in workers with reduced blood circulation and among workers who are not dressed properly.

**Symptoms**

Symptoms of frostbite include:

- Reduced blood flow to hands and feet (fingers or toes can freeze)
- Numbness
- Tingling or stinging
- Aching
- Bluish or pail, waxy skin

**First Aid**

Workers suffering from frostbite should:

- Get into a warm room as soon as possible.
- Unless absolutely necessary, do not walk on frostbitten feet or toes-this increases the damage.
- Immerse the affected area in warm-not hot-water (the temperature should be comfortable to the touch for unaffected parts of the body).
- Warm the affected area using body heat; for example, the heat of an armpit can be used to warm frostbitten fingers.
- Do not rub or massage the frostbitten area; doing so may cause more damage.
- Do not use a heating pad, heat lamp, or the heat of a stove, fireplace, or

radiator for warming. Affected areas are numb and can be easily burned.

- **Trench Foot**

Trench foot, also known as immersion foot, is an injury of the feet resulting from prolonged exposure to wet and cold conditions. Trench foot can occur at temperatures as high as 60 degrees F if the feet are constantly wet. Injury occurs because wet feet lose heat 25-times faster than dry feet. Therefore, to prevent heat loss, the body constricts blood vessels to shut down circulation in the feet. Skin tissue begins to die because of lack of oxygen and nutrients and due to the buildup of toxic products.

**Symptoms**

Symptoms of trench foot include:

- Reddening of the skin
- Numbness
- Leg cramps
- Swelling
- Tingling pain
- Blisters or ulcers
- Bleeding under the skin
- Gangrene (the foot may turn dark purple, blue, or gray)

**First Aid**

Workers suffering from trench foot should:

- Remove shoes/boots and wet socks.
- Dry their feet.
- Avoid walking on feet, as this may cause tissue damage.

- **Chilblains**

Chilblains are caused by the repeated exposure of skin to temperatures just above freezing to as high as 60 degrees F. The cold exposure causes damage to the capillary beds (groups of small blood vessels) in the skin. This damage is permanent and the redness and itching will return with additional exposure. The redness and itching typically occurs on cheeks, ears, fingers, and toes.

**Symptoms**

Symptoms of chilblains include:

- Redness
- Itching
- Possible blistering
- Inflammation
- Possible ulceration in severe cases

**First Aid**

Workers suffering from chilblains should:

- Avoid scratching
- Slowly warm the skin
- Use corticosteroid creams to relieve itching and swelling

Keep blisters and ulcers clean and covered.

### **3.2.9 Confined Space**

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### **3.2.10 Explosive Atmosphere**

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### **3.2.11 Noise**

ICS is required to control employee exposure to occupational noise levels of 85 decibels (measured on the A scale [slow response] referred to as dBA) and above by implementing a hearing conservation program that meets the requirements of the Cal/OSHA Occupational Noise Exposure standard T8 CCR 5096-5100 and or 29 CFR 1910.95. A noise assessment may be conducted by the RHSM or designee based on potential to emit noise above 85 dBA and also considering the frequency and duration of the task.

- Areas or equipment emitting noise at or above 90dBA shall be evaluated to determine feasible engineering controls. When engineering controls are not feasible, administrative controls can be developed and appropriate hearing protection will be provided.
- Areas or equipment emitting noise levels at or above 85 dBA, hearing protection must be worn.
- Employees exposed to 85 dBA or a noise dose of 50% must participate in the Hearing Conservation program including initial and annual (as required) audiograms.
- The RHSM will evaluate appropriate controls measures and work practices for employees who have experienced a standard threshold shift (STS) in their hearing.
- Hearing protection will be maintained in a clean and reliable condition, inspected prior to use and after any occurrence to identify any deterioration or damage, and damaged or deteriorated hearing protection repaired or discarded.
- In work areas where actual or potential high noise levels are present at any time, hearing protection must be worn by employees working or walking through the area.
- Areas where tasks requiring hearing protection are taking place may become hearing protection required areas as long as that specific task is taking place.
- High noise areas requiring hearing protection should be posted or employees must be informed of the requirements in an equivalent manner and a copy of the OSHA standard 29 CFR 1910.95 shall be posted in the workplace.

### **3.2.12 Ionizing Radiation**

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### **3.2.13 Non-Ionizing Radiation**

Currently the only source of non-ionizing radiation identified as part of this scope of work is ultraviolet light (sun light). Should another source be identified an addendum to this HASP will be issued and discussed as part of the daily tailgate meetings and as part of any applicable JHA.

Health effects regarding ultraviolet (UV) radiation are confined to the skin and eyes. Overexposure can result in many skin conditions, including erythema (redness or sunburn), photoallergy (skin rash), phototoxicity (extreme sunburn acquired during short exposures to UV radiation while on certain medications), premature skin aging, and numerous types of skin cancer. Implement the following controls to avoid sunburn.

#### **Limit Exposure Time**

- Rotate staff so the same personnel are not exposed all of the time.
- Limit exposure time when UV radiation is at peak levels (approximately 2 hours before and after the sun is at its highest point in the sky).
- Avoid exposure to the sun, or take extra precautions when the UV index rating is high.

#### **Provide Shade**

- Take lunch and breaks in shaded areas.
- Create shade or shelter through the use of umbrellas, tents, and canopies.
- Fabrics such as canvas, sailcloth, awning material and synthetic shade cloth create good UV radiation protection.
- Check the UV protection of the materials before buying them. Seek protection levels of 95 percent or greater, and check the protection levels for different colors.

#### **Clothing**

- Reduce UV radiation damage by wearing proper clothing; for example, long sleeved shirts with collars, and long pants. The fabric should be closely woven and should not let light through.
- Head protection should be worn to protect the face, ears, and neck. Wide-brimmed hats with a neck flap or “Foreign Legion” style caps offer added protection.
- Wear UV-protective sunglasses or safety glasses. These should fit closely to the face. Wrap-around style glasses provide the best protection.

### Sunscreen

- Apply sunscreen generously to all exposed skin surfaces at least 20 minutes before exposure, allowing time for it to adhere to the skin.
- Re-apply sunscreen at least every 2 hours, and more frequently when sweating or performing activities where sunscreen may be wiped off.
- Choose a sunscreen with a high sun protection factor (SPF). Most dermatologists advocate SPF 30 or higher for significant sun exposure.
- Waterproof sunscreens should be selected for use in or near water, and by those who perspire sufficiently to wash off non-waterproof products.
- Check for expiration dates, because most sunscreens are only good for about 3 years. Store in a cool place out of the sun.
- No sunscreen provides 100 percent protection against UV radiation. Other precautions must be taken to avoid overexposure.

### 3.2.14 Fire

#### Fire Extinguishers and General Fire Prevention Practices

- Fire extinguishers shall be provided so that the travel distance from any work area to the nearest extinguisher is less than 100 feet. When any flammable or combustible liquid is being used, an extinguisher must be within 50 feet. Extinguishers must:
  - be maintained in a fully charged and operable condition;
  - be visually inspected each month; and
  - undergo a maintenance check each year.
- The area in front of extinguishers must be kept clear.
- Post “Exit” signs over exiting doors, and post “Fire Extinguisher” signs over extinguisher locations, as necessary.
- Combustible materials stored outside should be at least 10 feet from any building.
- Solvent waste and oily rags must be kept in a fire resistant, covered container until removed from the site.
- Keep areas neat. ***Housekeeping is important.***

#### Dispensing of Flammable/Combustible Liquids

- Areas in which flammable or combustible liquids are dispensed in quantities greater than 5 gallons (shall be separated from other operations by at least 25 feet
- Drainage away from storm drains or surface waters or other means of containment shall be provided to control spills.
- Adequate natural or mechanical ventilation shall be provided to maintain the concentration of flammable vapor at or below 10 percent of the lower flammable limit.
- Dispensing of flammable liquids from one container to another shall be done only when containers are electrically interconnected (bonded).
- Dispensing flammable or combustible liquids by means of air pressure on the

container or portable tanks is prohibited.

- Dispensing devices and nozzles for flammable liquids shall be of an approved type.

### 3.2.15 Vehicle Traffic

Control measures include warning signs, flagmen, traffic stoppage and control, and unloading procedures. Internal traffic control plans should include ways to restrict the number of vehicles on site, the flow of vehicles accessing the site and driving through the site, haul roads, speed controls, subcontractor employee parking areas, merging of site traffic with local vehicle traffic, pedestrian controls in traffic zones, access by emergency and rescue vehicles and operator controls.

Although driving a vehicle may be second nature to many individuals, there are many hazards and controls that need to be identified. Fatigue and distractions are two hazards that many individuals do not think about on a regular basis. Operating off-road vehicles such as an All-Terrain Vehicle (ATV) also require training.

### 3.2.16 Meteorological

(from NOAA)

#### **Lightning and Thunderstorm Safety on the Job**

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**Some workers are at greater risk than others.** People who work outdoors in open spaces, on or near tall objects, with explosives or with conductive materials such as metal have a greater exposure to lightning risks. Workers in these occupations face the most risk:

- Logging
- Explosive handling or storage
- Heavy equipment operation
- Plumbing and pipe fitting
- Construction and building maintenance
- Farming and field labor
- Telecommunications field repair
- Power utility field repair

**When thunderstorms threaten, don't start anything you can't quickly stop.** Pay attention to the daily forecasts ([www.nws.noaa.gov](http://www.nws.noaa.gov)) so you know what to expect during the day. Also pay attention to early signs of thunderstorms: high winds, dark clouds, rain, distant thunder or lightning. If these conditions exist, do not start a task you cannot quickly stop.

**Know your company's lightning safety warning program.** Businesses that have high risk functions, such as explosive storage or field repairs, should have a formal lightning warning policy that meets two basic requirements:

1. Lightning danger warnings can be issued in time for everyone to get to a safe location
2. [Access to a safe place](#)

**Assess your lightning risk and take appropriate actions.** During thunderstorms no place outside is safe. If you can hear thunder, lightning is close enough to strike. Stop what you are doing and seek safety in a substantial building or a hard-topped metal vehicle.

**Know what objects and equipment to avoid during a thunderstorm.**

- Stay off and away from anything tall or high, including rooftops, scaffolding, utility poles and ladders.
- Stay off and away from large equipment such as bulldozers, cranes, backhoes, track loaders and tractors.
- Do not touch materials or surfaces that can conduct electricity, including metal scaffolding, metal equipment, utility lines, water, water pipes and plumbing.
- Leave areas with explosives or munitions.

**If a co-worker is struck by lightning.** Lightning victims do not carry an electrical charge, are safe to touch, and need urgent medical attention. Cardiac arrest is the immediate cause of death for those who die. Some deaths can be prevented if the victim receives the proper first aid immediately. Call 9-1-1 and perform CPR if the person is unresponsive or not breathing. Use an Automatic External Defibrillator if one is available.

### 3.2.17 Excavations/Holes/Ditches/Trenches

The requirements in this section shall be followed whenever excavation is being performed. Below are the hazard controls and safe work practices to follow when working around or performing excavation.

- A spotter shall be used during excavation to assist the operator when his view is obstructed to watch for excavation operational hazards.
- Do not enter the excavations unless completely necessary, and only after the excavation competent person has completed their daily inspection and has authorized entry. An inspection shall be conducted by the competent person prior to the start of work, as needed throughout the shift, after every rainstorm, and after any hazard increasing occurrence. Documentation of the inspection must be maintained onsite at all times.
- Follow all excavation entry requirements established by the excavation competent person and any excavation permit being used.
- Sloping, benching, shoring, shielding, or other protective systems are required to protect personnel from cave-ins **except** when the excavation is made entirely in stable rock or is less than 5 feet deep and there is no indication of possible cave-in, as determined by the excavation competent person. Protective systems for excavations deeper than 20 feet must be designed or approved by a registered

- professional engineer (PE).
- Trenches greater than 4-feet deep shall be provided with a ladder, stairway, or ramp positioned so that the maximum lateral travel distance is no more than 25 feet.
  - The atmosphere of excavations greater than 4 feet deep shall be tested prior to entry when a hazardous atmosphere exists or could reasonably be expected to exist, such as excavating landfills, hazardous waste dumps; or areas containing sewer or gas utility systems, petroleum distillates, or areas where hazardous substances are stored nearby.
  - Spoil piles, material, and equipment must be kept at minimum of 2 feet from the edge of the excavation, or a retaining device must be used to prevent the material from falling into the excavation. Stockpiles are to be covered in plastic sheeting and secured using sand bags. Sand bag containment should be employed around open excavations to avoid surface runoff from draining into open excavations.
  - Excavations shall not be entered when:
    - Protective systems are damaged or unstable;
    - Objects or structures above the work location may become unstable and fall into the excavation;
    - The potential for a hazardous atmosphere exists, unless the air has been tested and found to be at safe levels; or
    - Accumulated water exists in the excavation, unless precautions have been taken to prevent excavation cave-in.
  - The excavation self-assessment checklist shall be used to evaluate excavations prior to entry.

### **3.2.18 Steep Grades**

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### **3.2.19 Slippery Surfaces**

- Be aware of changes in elevation and changes in walking surfaces.
  - Walk, don't run through work areas.
  - Warn others that a hazard exists by placing signs or cones or by isolation with caution tape or barricades.
  - Clean up, correct, remove or report unsafe conditions such as broken concrete, piping, and other hazards that could result in a slip/trip/fall injury.
- Notify superintendent and clean up any and all puddles and or mud.

### 3.2.20 Uneven Terrain/Unstable Surfaces

May include uneven surfaces and terrain; changes in grade; and excessive ground cover or vegetation. This also increases risk for vehicle and foot passage. Clear vegetation in heavy traffic (vehicle, foot) areas, where possible. Mark excessively rough areas and minimize travel to and through such areas. Plan equipment placement and activities accordingly. Wear ankle high (or higher) steel-toe/shank work boots. Discuss slip/trip/fall hazards associated with daily tasks at pre-work job planning and safety meetings.

### 3.2.21 Elevated Surfaces

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### 3.2.22 Illumination/Poor Lighting

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### 3.2.23 Hazards to the Public

Although not expected, hazards to the public that could be created by this work include air contaminants generated during intrusive work, noise and other physical hazards, unexpected road blocks or closures, investigation-derived waste materials, and damage to public utilities. Procedures to eliminate any potential hazard to the community are as follows:

- **Air Contaminants:** Air monitoring will be performed during intrusive activities as presented in section 4.0. In the event that concentrations at the perimeter of the work area exceed the levels established in Table 4-1, work will stop and dust suppression measures will be taken. If necessary, the work area will be expanded to provide protection to the public.
- **Barricades:** While work activities are being performed, the work zone will be barricaded with a hardened barricade. Sampling activities in the street will require the use of rigid high visibility barricades during set up and sampling. All barricades will be used to separate the field teams from the public.
- **Stockpiles/IDW:** All soil stockpiles and IDW will be managed and staged at a separate in accordance with the approved project-specific waste management plan. All soil stockpiles will be stored on plastic sheeting and covered with plastic sheeting secured with anchors during idle periods. Only the working face of the soil stockpile

will be uncovered during active work periods. The waste will be separated and secured to prevent the public from accessing to waste material.

- **Noise, Overhead, and other Physical Hazards:** Noise and other hazards associated with the work hazards will be minimized for the general public by isolating the work area as described above

### **3.2.24 Munitions and Explosives of Concern (MEC) and/or Materials Potentially Posing an Explosives Hazard (MPPEH)**

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### 3.3 CHEMICAL HAZARDS

Chemicals of concern (COC) have been established for the site based on knowledge of current and past site operations and conditions. Known and or Potential Contaminants are listed on Table 3-2. An assessment of hazards for the COC is provided on Table 3-3.

**Table 3-2  
Known and/or Potential Contaminants**

<b>Contaminant</b>	<b>Source of Sample Data (Soil/Water/Air)</b>	<b>Maximum Concentration (mg/kg)</b>	<b>Maximum Ground Water Concentration (ug/l)</b>
Lead	Soil	>400	NA
<b>NA= Not Applicable</b>		<b>TBD = To Be Determined</b>	

**Table 3-3  
Assessment of Chemical Hazards  
(NIOSH)**

Task No.	Chemical Name* (or class)	TWA//C	Other Pertinent Limits* (Specify)	Physical Properties	Exposure Routes	Symptoms	Target Organs
II,III,IV	<b>Lead (and inorganic lead compounds)</b>	0.05/0.15 mg/m <sup>3</sup>	IDLH = 100 mg/m <sup>3</sup>	A heavy, ductile, soft, gray solid	Inhalation; Dermal; Ingestion	GI disturbances; anemia; neuromuscular dysfunction; encephalopathy	GI disturbances; anemia; neuromuscular dysfunction; encephalopathy; nephropathy; human carcinogen

- TWA = OSHA Time Weighted Average permissible exposure limit; represents the maximum allowable 8-hr. time weighted average (TWA) exposure concentration.
- C = OSHA ceiling concentration must not be exceeded during any part of the workday; if instantaneous monitoring is not feasible, the ceiling must be assessed as a 15-minute TWA exposure.
- STEL = OSHA Short-term Exposure Limit; represents the maximum allowable 15 minute TWA exposure concentration.
- TLV-STEL = ACGIH Short-term Exposure Limit; represents the maximum recommended 15 minute TWA exposure concentration.
- C = OSHA Ceiling Limit; represents the maximum exposure concentration above which an employee shall not be exposed during any period without respiratory protection.
- IDLH = Immediately Dangerous to Life and Health; represents the concentration at which one could be exposed for 30 minutes without experiencing escape-impairing or irreversible health effects.
- ( ) = ACGIH TLV Intended Change
- [SKIN] = Indicates a significant contribution of the total exposure by the cutaneous route.
- Warning = Represents the lowest concentration detectable in a given population. However, detection varies greatly with the individual.
- REL = NIOSH Recommended Exposure Limit, based on a 10-hour TWA exposure

## 4.0 HEALTH AND SAFETY FIELD IMPLEMENTATION

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### 4.1 PERSONAL PROTECTIVE EQUIPMENT (PPE) REQUIREMENTS

PPE may be upgraded or downgraded by the site industrial hygienist, HSD, or qualified Site Safety Officer based upon site conditions and air monitoring results.

*See Table 4-2 for PPE requirements.*

### 4.2 MONITORING EQUIPMENT REQUIREMENTS

Dust monitoring will be conducted, as necessary, in the event that visible dust cannot be controlled using soil conditioning and/or misting operations. If monitoring is required, contaminant source monitoring will be conducted at the worker breathing zone during site activities. Results will be recorded on Direct Reading Report form. Direct reading instrumentation shall be calibrated in accordance with manufacturing requirements, e.g., at least daily, and results of the calibration shall be documented on a form similar to the Instrument Calibration Log; refer to Attachment 2.

**Table 4-1  
Monitoring Protocols and Contaminant Action Levels**

Contaminant/ Atmospheric Condition <sup>1</sup>	Monitoring Equipment	Monitoring Protocol <sup>2</sup>	Site Action Levels <sup>3</sup>
Dust	Eyes	Visual	Not Visible: continue working Visible: Dust Suppression

<sup>1</sup> Monitoring performed at breathing zone. Monitor at the source first; if the source concentration is near or above the action level concentration, monitor in the breathing zone.

<sup>2</sup> Monitored levels will require the use of an approved respiratory protection system specified in Table 4-2. Or as a precautionary measure if dust cannot be controlled.

<sup>3</sup> **Call the Project Manager and Health and Safety Director for consultation.**

**Table 4-2  
Personal Protective Equipment (PPE) Requirements**

Job Tasks	PPE							Level of Protection	Level If Upgrade	Additional PPE for Upgrade	Monitoring Equipment
	Suit	Gloves	Feet	Head	Eye	Ear	Resp.				
Task I-VI	Std	Work	Steel	HH	Glass	Plugs	N/A	D	C		
Task II,III, IV	Tyvek	N	Steel	HH	Glass	Plugs	N/A	C		APR HEPA	Visual

<p>Personal Protective Equipment (PPE):</p> <p><b>SUIT:</b>  Std = Standard work clothes (long pants, short sleeves)  Tyvek = Uncoated Tyvek disposable coverall  Tychem = 1 piece chem.-resistant suit level A suit  PE Tyvek = Polyethylene-coated Tyvek  Chemrel = Chemrel coverall with hood  Saranex = Saranex-laminated Tyvek  Lt PVC = Light wt. PVC rain gear  Med PVC = Medium wt. PVC suit  Hvy PVC = Heavy wt. PVC coverall with hood  Road = Roadwork vest  Nomex = Nomex coveralls</p> <p><b>GLOVES:</b>  Work = Work gloves (canvas, leather) – High Visibility  Neo = Neoprene gloves  PVC = PVC gloves  N = Nitrile gloves  V = Vinyl gloves  L = Latex gloves</p>	<p>Personal Protective Equipment (PPE):</p> <p><b>FEET:</b>  Steel = ANSI approved steel toe-boots  Steel+ = Steel-toe Neoprene or PVC boots  Booties = PVC or Latex booties</p> <p><b>HEAD:</b>  HH = Hard hat</p> <p><b>EYE:</b>  Glass = Safety glasses  Goggle = Goggles  Shield = Face shield</p> <p><b>EAR:</b>  Plugs = Earplugs  Muff = Ear muffs</p>	<p>Personal Protective Equipment (PPE):</p> <p><b>RESPIRATOR:</b>  APR = Air-purifying respirator  Full APR = Full face APR  Half APR = Half face APR  PAPR = Powered Air-purifying Respirator  SAR = Airline supplied air respirator  SCBA = Self contained breathing apparatus  Escape = Escape SCBA  OV = Organic Vapor cartridge  AG = Acid gas cartridge  OV/AG = Organic vapor/Acid gas cartridge  AM = Ammonia cartridge  D/M = Dust/mist pre-filter and cover for cartridge  HEPA = High efficiency particulate air filter cartridge</p>
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### **4.3 SITE CONTROL PLAN**

Site control is established to prevent the spread of contamination at each site and to ensure that only authorized individuals are permitted into potentially hazardous areas.

The SSO will implement site control procedures including the following bulleted items.

- Establish support, contamination reduction, and exclusion zones. Delineate with flags or cones as appropriate. Support zone should be upwind of the site, where possible. Use access control at entry and exit from each work zone.
- Establish onsite communication consisting of the following:
  - Line-of-sight and hand signals;
  - Air horn; and
  - Cellular telephone or two-way radio if available.
- Establish offsite communication.
- Establish and maintain the “buddy system.”

#### **Remediation Work Area Zones**

A three-zone approach will be used to control areas where site contaminants exist. Access will be allowed only after verification of appropriate training and medical qualification. The three-zone approach shall include an Exclusion Zone (EZ), Contamination Reduction Zone (CRZ) and a Support Zone (SZ). The three-zone approach is not required for construction work performed outside contaminated areas where control of site contamination is not a concern.

Specific work control zones shall be established as necessary during task planning. Site work zones should be modified in the field as necessary, based on such factors as equipment used, air monitoring results, environmental conditions, or alteration of work plans. The following guidelines shall be used for establishing and revising these preliminary zone designations.

#### **Support Zone**

The SZ is an uncontaminated area (trailers, offices, field vehicles, etc.) that will serve as the field support area for most operations. The SZ provides field team communications and staging for emergency response. Appropriate sanitary facilities and safety and emergency response equipment will be located in this zone.

Potentially contaminated personnel/materials are not allowed in this zone. The only exception will be appropriately packaged and decontaminated materials, or personnel with medical emergencies that cannot be decontaminated.

#### **Contamination Reduction Zone**

The CRZ, also known as a Decontamination Zone, is established between the EZ and the SZ, upwind of the contaminated area where possible. The CRZ provides an area for decontamination of personnel, portable handheld equipment and tools, and heavy equipment.

In addition, the CRZ serves as access for heavy equipment and emergency support services.

### **Exclusion Zone**

The EZ is where activities take place that may involve exposure to site contaminants and/or hazardous materials or conditions. This zone shall be demarcated to prevent unauthorized entry. More than one EZ may be established if there are different levels of protection to be employed or different hazards that exist in the same work area. The EZ shall be large enough to allow adequate space for the activity to be completed, including field personnel and equipment, as well as necessary emergency equipment.

The EZ shall be demarcated with some form of physical barrier or signage. The physical barrier or signage shall be placed so that they are visible to personnel approaching or working in the area. Barriers and boundary markers shall be removed when no longer needed.

### **Other Controlled Areas**

Other work areas may need to be controlled due to the presence of an uncontrolled hazard, to warn workers of requirements, or to prevent unauthorized entry. Examples include general construction work areas, open excavations, high noise areas, vehicle access areas, and similar activities or limited access locations. These areas shall be clearly demarcated with physical barriers (fencing, cones, reinforced caution tape or rope) as necessary and posted with appropriate signage.

If lead concentrations are above the PEL, regulated areas will need to be demarcated and posted as determined by the SSO.

#### **4.4 DECONTAMINATION PROCEDURES**

*(Modify as Appropriate)*

Preventing or avoiding contamination of personnel, tools, and equipment will be considered in planning work activities at all field locations. Good contamination prevention and avoidance practices will assist in preventing worker exposure and result in a more efficient decontamination process. Procedures for contamination prevention and avoidance include the following:

- Do not walk through areas of obvious or known contamination;
- Do not directly handle or touch contaminated materials;
- Make sure there are no cuts or tears in PPE;
- Fasten all closures in suits and cover them with duct tape, if appropriate;
- Take particular care to protect any skin injuries;
- Stay upwind of airborne contamination, where possible;
- Do not eat or drink in contaminated work areas;
- Do not carry food, beverages, tobacco, or flame-producing equipment into contaminated work areas;
- Minimize the number of personnel and amount of equipment in contaminated areas to that necessary for accomplishing the work;
- Choose tools and equipment with nonporous exterior surfaces that can be easily cleaned and decontaminated;
- Cover monitoring and sampling equipment with clear plastic, leaving openings for the sampling ports, as necessary; and
- Minimize the amount of tools and equipment necessary in contaminated areas.

Depending on the specific job task, decontamination may include personnel themselves, sampling equipment, and/or heavy equipment. The specified level of protection for a task (A, B, C, or D) does not in itself define the extent of personal protection or equipment decontamination. For instance, Level C without dermal hazards will require less decontamination than Level C with dermal hazards. Heavy equipment will always require decontamination to prevent cross-contamination of samples and/or facilities. The following sections summarize general decontamination protocols.

### **Heavy Equipment**

Based on soil buildup on heavy equipment, the heavy equipment may be wet washed or a dry decontaminated using HEPA vacuum equipped with a filter rated by the manufacturer to achieve 99.97% capture efficiency for 0.3 micron particles immediately after completion of the work and prior to exiting the property.

If wet washing is required, appropriate containment will be set up to eliminate any rinseate migrating from the decontamination area. Rinse water, based on volume, will be collected and drummed or blended into soil to be transported offsite as long as the waste profile characteristics are not changed.

Heavy equipment will be decontaminated prior to personnel decontamination. PPE for all decontamination activities is to be determined by the SSO. If required PPE is greater than “Level C” protection, contact the HSD.

### **Personnel**

Personnel exiting an EZ must ensure that they are not spreading potential contamination into clean areas or increasing their potential for ingesting or inhaling potential contaminants. Personal decontamination may range from removing outer gloves as exiting the EZ, to proceeding through an outer layer doffing station including a boot and glove wash and rinse, washing equipment, etc. Equipment that has come into contact with contaminated media must also be cleaned/decontaminated when it is brought out of the EZ.

### **Decontamination Wastes**

- ▶ Spent decontamination solutions may be required to be drummed and disposed of as hazardous waste and/or solvent solutions may be required to be segregated from water rinses. Small volumes of decontamination waste may be integrated with soil being disposed of offsite, so long as the waste profile does not need to be modified.
- ▶ Decontamination shall be performed in a manner that minimizes the amount of waste generated.

### **Decontamination During Medical Emergencies**

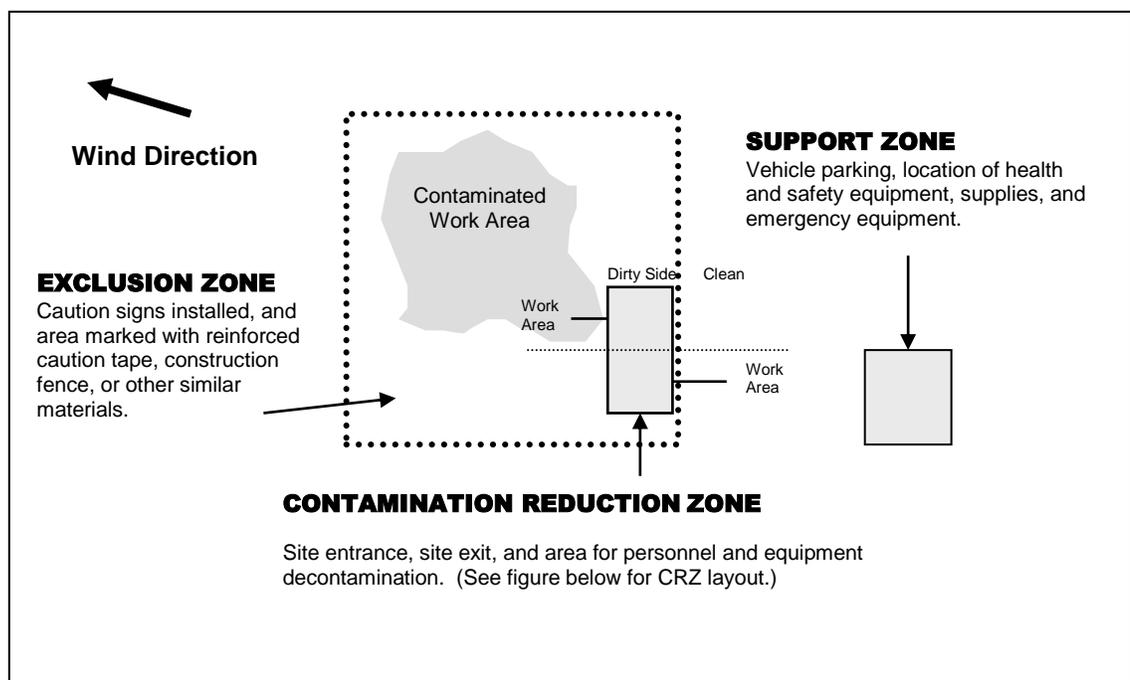
Standard personnel decontamination practices will be followed whenever possible. For emergency life saving first aid and/or medical treatment, normal decontamination procedures may need to be abbreviated or omitted. In this situation, site personnel shall accompany contaminated victims to advise emergency response personnel on potential contamination present and proper decontamination procedures.

Outer garments may be removed if they do not cause delays, interfere with treatment, or aggravate the problem. Protective clothing can be cut away. If the outer garments cannot be safely removed, a plastic barrier between the individual and clean surfaces should be used to help prevent contaminating the inside of ambulances or medical personnel. Outer garments can then be removed at the medical provider.

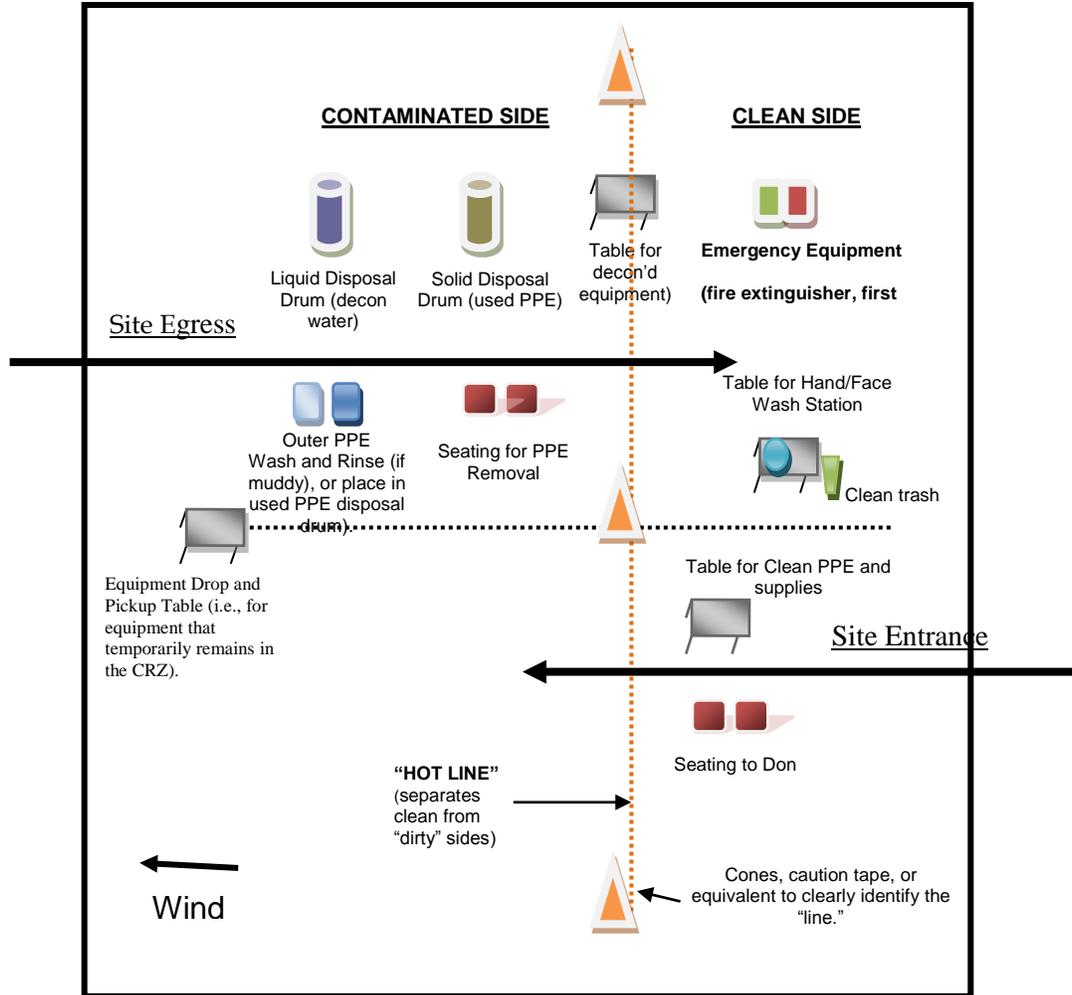
### Diagram of Personnel-Decontamination Line

The following figure illustrates a conceptual establishment of work zones, including the decontamination line. Work zones are to be modified by the SSO to accommodate task-specific requirements.

#### Work Area - Set up appropriately based on wind direction



### Typical Contamination Reduction Zone



## **5.0 MEDICAL SURVEILLANCE PROGRAM**

---

### **5.1 GENERAL**

ICS employees, through the course of their work, visit sites and locations where exposure to hazardous substances may exist. Repeated exposures to health hazards can result in serious health problems. Therefore, it is essential that an ICS employee's state of health be determined at the time of initial exposure and then be monitored periodically to detect the first signs of a health problem.

This medical surveillance program is required by 29 CFR 1910.120 for emergency response operations for releases of, or the substantial threats of releases of, hazardous substances without regard to the location of the hazard. The purpose of this requirement is to assure the health of employees working where hazardous chemicals and substances exist are monitored and documented before placement, during employment, and at termination.

### **5.2 SCOPE**

The ICS Medical Surveillance Program covers employees who are visitors to sites and facilities where hazardous substances may exist. The medical surveillance program requirements include, but are not limited to, the following medical examinations:

- Baseline or pre-assignment,
- Annual medical monitoring, and
- Termination.

The ICS Medical Surveillance Program has been designed to:

- Establish the baseline medical condition of employees and fitness for duty,
- Determine the ability to work while wearing protective equipment (ie. respirator),
- Track the physiological conditions of employees on an established schedule and at termination of the project or employment, and
- Ensure documentation of employee exposure and medical conditions is provided and maintained as a part of the employee's medical record.

Contractors not contractually related to ICS will assume responsibility for obtaining the necessary medical monitoring for their employees and shall provide a medical clearance letter as requested.

## **5.3 TYPES OF EXAMINATIONS**

### **5.3.1 Baseline - Initial Examination**

The employee should receive a baseline or initial medical examination based on an activity hazard assessment prior to being assigned to a hazardous or potentially hazardous activity (e.g., exposure to toxic substances or radiological materials, repetitive motion, heat/cold stress). The examination should include, at a minimum, the items listed below.

- Complete medical and work history,
- Physical examination,
- Pulmonary function test (PFT),
- Blood panel, including lead
- EKG,
- Audiogram,
- Chest X-Ray

### **5.3.2 Annual - Medical Monitoring**

Employees working on hazardous waste sites, which may include chemical, physical and/or radiological hazards, should be provided with medical examinations every 12 months, unless the physician believes a shorter or longer duration is needed or required. The content of the examination is:

- Based on applicable laws and regulations,
- Determined by the physician,
- Designed to detect change from the baseline examination, and
- Designed to identify physiological changes.

Employee site-specific exposure data, parameters identified above, official dosimetry records, and a hazard assessment should be provided to the examining physician.

### **5.3.3 Termination**

A medical examination will be provided when an employee is terminated or reassigned to an area or activity where the employee is not exposed to hazardous substances or radiological constituents. The physician will determine the termination examination content. If termination occurs within six months of a periodic examination, the physician may determine that an additional examination is not necessary. Documentation of the decision not to provide a termination examination, and its basis, should be provided in the medical file for the employee.

#### **5.4 MAINTENANCE AND AVAILABILITY OF MEDICAL RECORDS**

ICS will maintain an accurate record of each employee subject to medical surveillance. This record shall include:

- A copy of the physician's written opinion as to the employees' suitability for employment in specific exposure or employee refusal to take the medical examination.
- Any medical complaint by the employee related to exposure to the toxic substance or hazardous material.
- A copy of the required information pertaining to employee exposure which the employer must provide to the physician.
- A copy of the employee's work history.

ICS shall assure that this medical record is maintained for the duration of employment plus 30 years. All records are confidential. Personnel medical records and exposure monitoring records should be maintained according to the requirements of 8 CCR 5192 and 29 CFR 1910.120 (f)(8). Access to medical records should be consistent with the requirements of 8 CCR 5192 and 29 CFR 1910.20.

## **6.0 SITE OPERATING PROCEDURES**

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### **6.1 TRAINING REQUIREMENTS FOR ON-SITE PERSONNEL**

All personnel performing on-site activities who may be exposed to chemical hazards are required to be trained in accordance with CCR, Title 8, Section 5192. As required by the specific tasks, site personnel will have completed one or more of the following:

- 40-Hour Hazardous Waste Operations (HAZWOPER) training;
- 8-Hour HAZWOPER refresher course, if initial 40-Hour HAZWOPER training was acquired more than one year prior to the start date of site operations

Personnel who are only on-site occasionally for a specific limited task (such as plan review, meetings, land surveying, geographic surveying, asphalt paving electrical work, etc.) and who are unlikely to be exposed over permissible and published exposure limits, shall be informed of the site hazards in a tail gate safety meeting.

At least one on-site manager and or supervisor shall have completed the following:

- An additional eight (8) hours of supervisor training prior to the start of site activities.
- ICS Competent Persons certification for Excavations and Trenches.
- CPR and First-Aid training.

Copies of applicable certificates will be in Attachment 3 – this will be populated after task assignment.

### **6.2 INITIAL SITE ENTRY PROCEDURES**

- ▶ Locate nearest available telephone.
- ▶ Prior to working on-site, conduct an inspection for physical and chemical hazards.
- ▶ Conduct or review utility clearance prior to start of work, if appropriate.
- ▶ Note any specialized protocols particular to work tasks associated with the project.

### **6.3 DAILY OPERATING PROCEDURES**

- Use monitoring instruments and follow designated protocol and contaminant action levels.
- Use PPE as specified above and as per specific JHA's.
- Use hearing protection when working in close proximity to loud equipment and machinery and or as specified on the JHA.
- Remain upwind of operations and airborne contaminants, if possible.
- Establish a work/rest regime when ambient temperatures and protective clothing create a potential heat stress hazard.
- Do not carry cigarettes, gum, food, drinks, etc. into contaminated areas.
- Refer to SSO and or HSD for specific safety concerns for each individual site task.
- Be alert to your own physical condition.
- All incidents and or accidents, no matter how minor, must be reported immediately to the SSO.

Refer to ICS's Illness and Injury Prevention Program (IIPP) for Code of Practices.

### **6.4 DAILY SAFETY TAILGATE MEETING**

ICS shall conduct a daily tailgate safety meeting (See Attachment 2 for Tailgate Safety Meeting Form) prior to commencing work at the site. In addition, the following minimum information will be provided to all site personnel involved with the proposed project:

- Names of personnel and alternates responsible for site safety and health
- JHA review and execution
- Hospital directions.
- General safety procedures and practices to minimize risks from hazards at the site.
- Task specific procedures and practices, which site personnel, can use to minimize risks from task specific hazards at the site.
- Instruction for safe use of engineering controls and equipment at the site.
- Instruction for safe use of personnel protective equipment at the site

- Medical surveillance requirements including recognition of symptoms and signs, which might indicate overexposure to hazards.
- Site control measures.
- Standard operating procedures for the proposed project (i.e., lock-out/tag-out).
- ICS Emergency/Contingency procedures for the site

## **6.5 SITE CONTROL MEASURES**

Site control measures include the following:

- The job site may be partitioned into three distinct work zones: support zone, contamination reduction zone, and exclusion zone. Zones will be clearly delineated using tape, barriers, signs, or whatever means are appropriate for the site.
- Workers will enter and exit the exclusion zone only through the contamination reduction zone. Gross decontamination will occur in the established corridor.
- Only authorized personnel are allowed to enter exclusion zone/contamination reduction zone.
- The SSO will be responsible for maintaining up-to-date field sketches of the actual site layout in SSO logbook, as necessary.
- Appropriate containers will be used for temporary collection of contaminated clothing and articles of PPE. The site supervisor will ensure that waste containers are clearly dated with contents identified and are managed in accordance with waste management procedures established by the RA contractor.
- Perimeter fencing around the Site and controlled access (guarded entry gate or locked gate with access code) will be maintained at all times throughout the project. In addition, secondary, interior fencing may be required around areas where deep excavations are being performed.
- Communication devices and protocols will be established prior to beginning site work.
- In event of an emergency, the SSO will alert all personnel to leave exclusion zone and await further instructions.

To the extent feasible, the buddy system will be employed to assist in the event of an emergency. If lone workers are employed at the site, the work must adhere to requirements and precautionary information discussed in Section 3.0.

## **6.6 SANITATION**

Sanitation facilities shall be provided in accordance with OSHA regulations 29 CFR 1910.120(n) and Cal-OSHA 8CCR1526 and 8CCR1527.

## **6.7 VISITOR PROCEDURES**

All on-site visitors will be escorted. In addition, visitors will be required sign in and out of the site logbook. Only visitors who meet the training and medical monitoring requirements of the Hazardous Waste and Emergency Operations regulation will be allowed to enter the exclusion zone or contamination reduction zone. Visitors entering these zones will be required to review and agree to comply with provisions of this HASP.

## 7.0 EMERGENCY RESPONSE PROCEDURES

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### 7.1 EMERGENCY INCIDENT PROCEDURES

The nature of work at contaminated or potentially contaminated work sites makes emergencies a continual possibility. Although emergencies are unlikely and occur infrequently, a contingency plan is required to assure timely and appropriate response actions. The contingency plan is reviewed at tailgate safety meetings.

#### **Emergency Incident Procedures**

If an emergency incident occurs, take the following action:

Step 1: Size-up the situation based on the available information.

Step 2: Notify the Site Safety Officer and/or Field Supervisor.

Step 3: Only respond to an emergency if personnel are sufficiently trained and properly equipped.

Step 4: As appropriate, evacuate site personnel and notify emergency response agencies, e.g., police, fire, etc.

Step 5: As necessary, request assistance from outside sources and/or allocate personnel and equipment resources for response.

Step 6: Consult the posted emergency phone list and contact key project personnel.

Step 7: Prepare an incident report. ***Forward incident report to Project Manager/Health and Safety Director within 24 hours.***

## 7.1.1 Spill Containment Procedures

All hazardous materials brought on-site by ICS are in containers less than 5 gallons in quantity, except for the following:

- Diesel Fuel for heavy equipment – stored in DOT approved 105-gallon tanks located on ICS and subcontractor service trucks

An addendum to this HASP will be issued should additional hazardous materials need to be brought on site.

The minimum spill equipment that shall be made available in the project's support zone is described below:

- Absorbent material (kitty litter or vermiculite)
- Absorbent socks and pads
- Safety goggles
- Protective gloves
- Tyvek suit
- Waste containers and labels

Additional contaminant-specific spill response information may be included in the chemical MSDS(s).

### **Non-Emergency Spill Event**

A non-emergency spill event includes incidental releases that do not pose a significant safety or health hazard where chemical hazards are known and ICS personnel can safely implement the following procedures as a first responder:

Step 1. Stop the source of the spill

Step 2. Contain the spill material. If there is a chance the spill will reach nearby drains or waterways, block them off to keep the spill away

Step 3. Contact the Site Safety Officer, ICS PM and HSD

## Emergency Spill Event

The release of an unknown hazardous material is considered an emergency spill event. ICS shall implement the following procedures during an emergency spill event:

- Step 1. Evacuate the area and go upwind
- Step 2. Warn others and direct them upwind
- Step 3. Immediately contact the Site Safety Officer who will contact the HSD for direction

## Clean-up & Disposal

- Step 1. Clean-up the spilled material wearing the proper PPE as identified in the MSDS or Table 4-2.
- Step 2. Dispose of spill debris according as directed by the HSD.

## Notification and Reporting

All spills are considered an “incident” and shall be reported internally according to ICS. Since many spills may require agency reporting within 24 hours, it is very important that internal notification occur immediately. The following summarizes required actions:

- Step 1. **Immediately** notify the SSO
- Step 2. SSO notifies the HSD and PM
- Step 3. PM notifies Client
- Step 5. Client shall determine if the incident is reportable to an agency

## Medical Emergencies

If a medical emergency occurs, take the following action:

- Step 1: Assess the severity of the injury and perform life-saving first aid/CPR as necessary to stabilize the injured person. Follow universal precautions to protect against exposure to blood borne pathogens.
- Step 2: Get medical attention for the injured person immediately. (Call 911 or consult the Emergency Contacts list which must be posted at the site).
- Step 3: Notify the Site Safety Officer and Field Supervisor immediately. The Site Safety Officer will assume charge during a medical emergency.
- Step 4: Depending on the type and severity of the injury, transport the injured employee to the nearest hospital emergency room. If the injury is not serious, then transport the injured employee to a nearby medical clinic. Consult your Health & Safety Manager for guidance, if necessary.
- Step 5: Notify the injured person's personnel office, including the Regional Manager, Project Manager, and Health and Safety Director.
- Step 6: Prepare an accident report. ***The Site Safety Officer is responsible for its preparation and submittal to the Health and Safety Director within 24 hours. Health and Safety Director fax number is (714) 893-5122.***

### 7.2 EMERGENCY ROUTES

See Hospital Route Map – Attachment 4 – Verify Route (TO BE POSTED)

### 7.3 SITE SPECIFIC REQUIREMENTS IN EVENT OF AN EMERGENCY

Call 911, contact ICS PM, evacuate to \_\_\_\_\_  
, \_\_\_\_\_ of site.

### Locate Shut-Offs - None

Gas:

Power:

Fuel:

### **Evacuation Route – Check as needed**

Identify Evacuation Route

*(evacuation route shall be discussed and determined during daily tail-gate-meeting)*

Identify Meeting Area (Perform Head Count)

### **7.4 EMERGENCY EQUIPMENT**

- First-aid kit – ICS Truck
- Emergency Eyewash Station– ICS Truck
- Emergency Personal Eyewash Bottles – in each ICS vehicle
- Fire extinguisher –in ICS equipment
- Spill kit – at ICS truck
- Full-body harness and lifeline – see HSD
- Ventilation equipment – see HSD
- Respiratory protection – see HSD

## 7.5 MATERIALS TRANSPORTATION EMERGENCY RESPONSE PLAN

A Materials Transportation Emergency Response Plan (MTERP) has been established for this project. The transportation routes are presented as Attachment 4 of this HASP.

The contact phone numbers as part of the MTERP are as follows in order of hierarchy:  
*(Phone numbers are also presented in the following Emergency Contact section)*

1. California Highway Patrol (CHP) at 911 from a cell phone.
2. The California Office of Emergency Response (CalOES) at 800-852-7550. The CalOES will make notifications to federal, state, and local agencies within the jurisdiction of the spill location.
3. ICS Project Manager at 714-893-6366. ICS will notify Advanced Geoservices at 302-250-3616. The ICS Project Manager will contact Patriot Environmental Services at 800-624-9136.

Patriot will dispatch response crews from its regional offices along the haul route ranging from Wilmington, CA to San Diego, CA, depending on spill location. ICS representatives will immediately report to spill location and act as a liaison for Client, if requested to do so. Also, ICS will be incorporated into the Incident Command System, as needed, and remain onsite until cleanup operations are complete.

**EMERGENCY CONTACTS**

**(To Be Posted)**

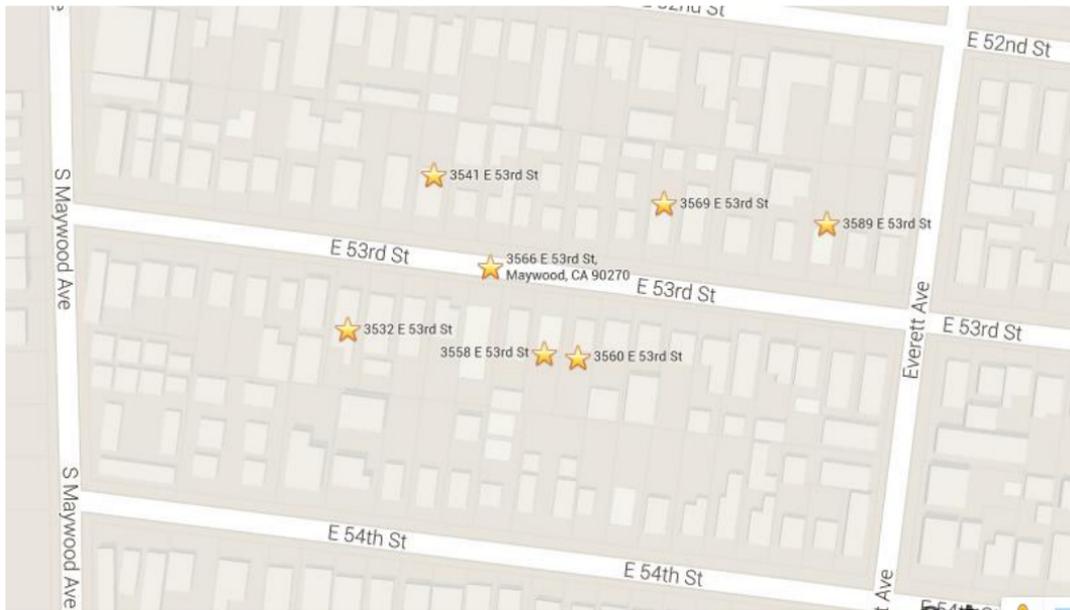
TITLE	NAME	PHONE NUMBER
<b><i>EMERGENCY</i></b>		
Police Department	Police Emergency Service	<b>911</b>
Fire Department	Life/Fire Emergency Service	<b>911</b>
Local Hospital	US Healthworks	<b>(323) 585-7162</b>
Haz. Waste Natl. Response Center	HAZMAT	800-424-8802
MTERP Incident Command	CHP	<b>911</b>
California Office of Emergency Response	CalOES	<b>800-852-7550</b>
<b><i>PROJECT/BUSINESS</i></b>		
ICS Project Manager	John Farmer jfarmer@icsinc.tv	Office: 714-893-6366 Cell: 714-615-5728
ICS Health & Safety Director	Tony S. Mudhar tmudhar@icsinc.tv	Office: 714-893-6366 Cell: 714-943-6238
ICS Field Supervisor Site Safety Officer	Scott Anderson sanderson@icsinc.tv	Office: 714-893-6366 Cell: 714-915-3886
Advanced Geoservices	Kevin O'Rourke korourke@advancedgeoservices.com	Cell: 302-250-3616
Patriot Environmental Services (ER Contractor)	Luis Fukutake <a href="mailto:lfukutake@patriotenvironmental.com">lfukutake@patriotenvironmental.com</a> <a href="#">m</a>	Office: 800-624-9136 Cell: 562-244-2222
ICS Human Resources Manager	Human Resources Manager	Office: 714-893-6366

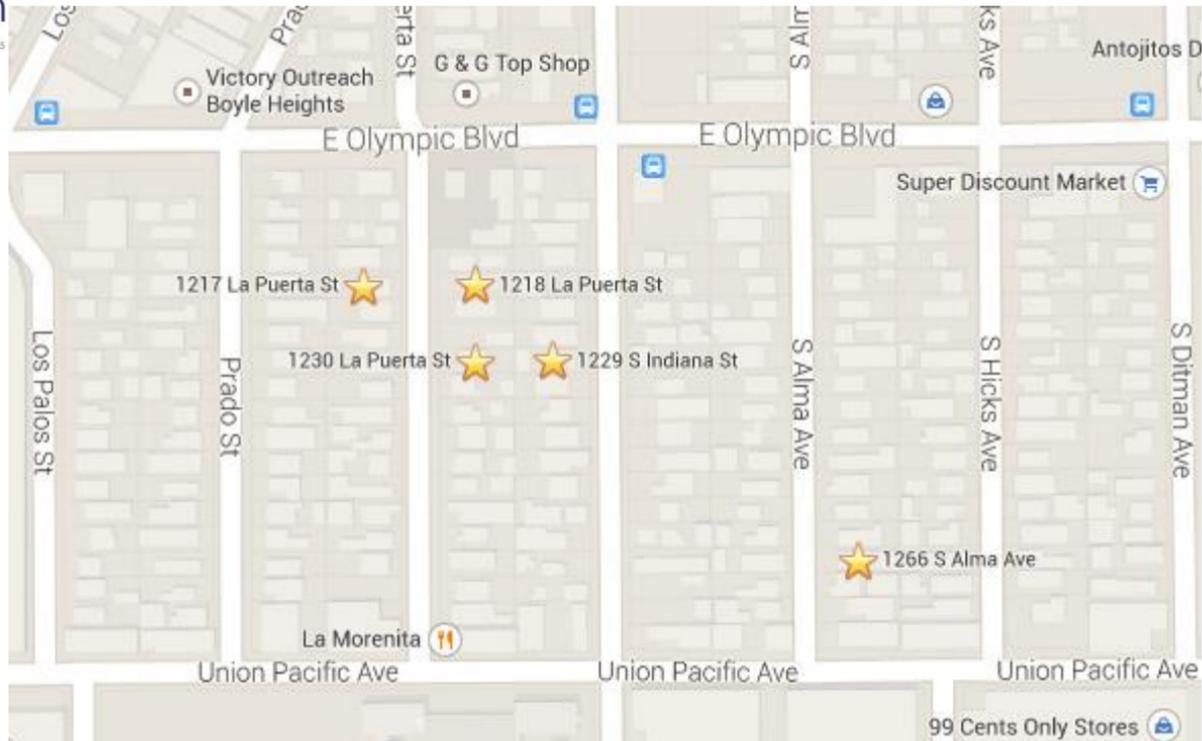
**Site Location:** See Hospital Maps (Attachment 5)  
Los Angeles, CA

**Hospital:** US Healthworks  
3851 S Soto St.  
Vernon, CA 90058

## **Attachment 1**

### ***Site Map(s)***





## **Attachment 2**

# ***Health and Safety Forms***

Add other forms as appropriate for the task(s) performed. This is not an inclusive list.

- ▶ **Utility Clearance, Underground Service Alert**
- ▶ **Utility Clearance, ICS Utility Clearance Checklists**
- ▶ **Direct Reading Report Form**
- ▶ **Instrument Calibration Log**
- ▶ **Tailgate Safety Meeting Form**
- ▶ **PM/Field Supervisor Audit Form**
- ▶ **Other: Code of Safe Practices**

**CALL TOLL FREE 8-1-1**  
2 workings days before you dig



**DigAlert No.** \_\_\_\_\_

**LOCATION REQUEST FORM**

*For faster service, prior to calling fill out all non-italicized fields*

Date: \_\_\_\_\_ Time: \_\_\_\_\_ *Operator:* \_\_\_\_\_

Company Phone #: \_\_\_\_\_ Caller: \_\_\_\_\_

Company \_\_\_\_\_ Name: \_\_\_\_\_

\_\_\_\_\_ Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Fax: \_\_\_\_\_ E-mail: \_\_\_\_\_

Best hours to reach your company: \_\_\_\_\_

Foreman: \_\_\_\_\_ Foreman's pager/cellular #: \_\_\_\_\_

Delineated:  Yes  No

County: \_\_\_\_\_ City: \_\_\_\_\_

If more than 1 address or descriptive location: \_\_\_\_\_

Address: \_\_\_\_\_ Street: \_\_\_\_\_

Closest X/ST: \_\_\_\_\_

Thomas Guide page & grid: \_\_\_\_\_

Boring:  Yes  No Explosives:  Yes  No Vacuum:  Yes  No

Type of work: \_\_\_\_\_

Work to begin: Date: \_\_\_\_\_ Time: \_\_\_\_\_

Instructions:  Mark By  Meet & Mark  Validate Permit Only  Now

Work Being done for: \_\_\_\_\_

Permit # : \_\_\_\_\_  Not required  Not Available  Blanket

**Members being notified by USA:** \_\_\_\_\_

**Update on/or before date:** \_\_\_\_\_

Underground Service Alert of Southern California

## AIR MONITORING LOG

Date: \_\_\_\_\_

Project

Name: \_\_\_\_\_ Project

No.: \_\_\_\_\_

Name: \_\_\_\_\_

<b>CALIBRATION RECORD</b>			
Time	Location	PID/FID (ppm)	Comments

<b>DAILY LOG</b>			
Time	Location	PID/FID (ppm)	Comments


Permit Number _____ Date _____
--------------------------------

**Location & Description of Confined Space:**

**Purpose of Entry:**

--	--

Scheduled Start _____ a.m. / _____ p.m. <small>Day / Date / Time</small>	Scheduled Finish _____ a.m. / _____ p.m. <small>Day / Date / Time</small>
---	--

→ **Employee(s) in charge of entry:** \_\_\_\_\_ **SIGNATURE:** \_\_\_\_\_

**Entrants:**

**Attendants:**


→ **Pre-Entry Authorization:** \_\_\_\_\_ **SIGNATURE:** \_\_\_\_\_

*{Check those items below which are applicable to your confined space permit.}*

**TYPES OF HAZARDS**

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Oxygen-Deficient Atmosphere | <input type="checkbox"/> Engulfment           | <input type="checkbox"/> Energized Electrical Equipment |
| <input type="checkbox"/> Oxygen-Enriched Atmosphere  | <input type="checkbox"/> Toxic Atmosphere     | <input type="checkbox"/> Entrapment                     |
| <input type="checkbox"/> Welding/Cutting             | <input type="checkbox"/> Flammable Atmosphere | <input type="checkbox"/> Hazardous Chemical             |

Note: If welding/cutting operations are to be performed, attach Hot Work Permit to entry form.

**SAFETY PRECAUTIONS**

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Self-Contained Breathing Apparatus | <input type="checkbox"/> Protective Gloves  | <input type="checkbox"/> Barricade Job Area       |
| <input type="checkbox"/> Lines, pipes, etc...               | <input type="checkbox"/> Lifelines          | <input type="checkbox"/> Signs Posted             |
| <input type="checkbox"/> Air-Line Respirator                | <input type="checkbox"/> Respirators        | <input type="checkbox"/> Clearances Secured       |
| <input type="checkbox"/> Fire-Retardant Clothing            | <input type="checkbox"/> Lockout/Tagout     | <input type="checkbox"/> Lighting                 |
| <input type="checkbox"/> Ventilation                        | <input type="checkbox"/> Fire Extinguishers | <input type="checkbox"/> Ground Fault Interrupter |
| <input type="checkbox"/> Remarks _____                      |   |   |

**ENVIRONMENTAL CONDITIONS**

<b>TESTS TO BE TAKEN</b>	<b>RE-TESTING</b>
<b>DATE / TIME</b>	<b>DATE / TIME</b>
Oxygen: _____% _____ a/p	Oxygen: _____% _____ a/p
Lower Explosive Limit: _____% _____ a/p	Lower Explosive Limit: _____% _____ a/p
Toxic Atmosphere: _____	Toxic Atmosphere: _____
Instruments Used: _____	Instruments Used: _____

→ **Employee Conducting Safety Checks** \_\_\_\_\_ **SIGNATURE:** \_\_\_\_\_

**Remark on the overall condition of the confined space.**

**RESCUE PLAN:**

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<b>ENTRY AUTHORIZATION</b>  59	All actions and/or conditions for safe entry have been performed.  ICS
--------------------------------------	--

Person in Charge  
of Entry \_\_\_\_\_  
PLEASE PRINT

**ENTRY CANCELLATION**

Entry has been completed and all entrants have exited permit space.

Person in Charge  
of Entry \_\_\_\_\_  
PLEASE PRINT



## TAILGATE SAFETY MEETING

DATE: \_\_\_\_\_

TIME (*Clock In Your Crew*): \_\_\_\_\_

SITE LOCATION: \_\_\_\_\_

PROJECT NUMBER: \_\_\_\_\_

TRAINING PRESENTED BY: \_\_\_\_\_

TOPICS COVERED:

1.	6.
2.	7.
3.	8.
4.	9.
5.	10.

### ATTENDEES

Name (Print)	Signature	Company	Fit for Duty
1.			Start End
2.			Start End
3.			Start End
4.			Start End
5.			Start End
6.			Start End
7.			Start End
8.			Start End
9.			Start End
10.			Start End
11.			Start End
12.			Start End
13.			Start End
14.			Start End
15.			Start End

**SITE SUPERVISOR SIGNATURE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_



**TAILGATE SAFETY MEETING**

DATE: \_\_\_\_\_

TIME (*Clock In Your Crew*): \_\_\_\_\_

SITE LOCATION: \_\_\_\_\_

PROJECT NUMBER: \_\_\_\_\_

TRAINING PRESENTED BY: \_\_\_\_\_

TOPICS COVERED:

1.	6.
2.	7.
3.	8.
4.	9.
5.	10.

**ATTENDEES**

Name (Print)	Signature	Company	Fit for Duty
1.			Start End
2.			Start End
3.			Start End
4.			Start End
5.			Start End
6.			Start End
7.			Start End
8.			Start End
9.			Start End
10.			Start End
11.			Start End
12.			Start End
13.			Start End
14.			Start End
15.			Start End

**SITE SUPERVISOR SIGNATURE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_



# CUTTING - WELDING HOT WORK

**IMPORTANT: Precautions on reverse side must be followed without fail.**

Date \_\_\_\_\_ Time Started \_\_\_\_\_ Completed \_\_\_\_\_

Building \_\_\_\_\_ Floor/Dept./Area \_\_\_\_\_

Work to be done: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Work will be \_\_\_\_\_  
performed by: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Items 1, 2, 3, and 4 of the required precautions listed on the reverse side have been completed. Arrangements have been made for Item 5.  
Permission is therefore granted for this work.**

**This permit expires \_\_\_\_\_ or end of shift, whichever is first.**

**If fire occurs, phone \_\_\_\_\_ or use alarm box located at:**

\_\_\_\_\_

**Signed:** \_\_\_\_\_ **Title:** \_\_\_\_\_

File in Project Safety and Health File.

**See Page 2**

# CUTTING - WELDING HOT WORK

## **DANGER**

Do not cut, weld, or use other open flame or spark producing equipment until the following precautions have been taken.

### **Check each item:**

- D 1. The location where work is to be done has been personally inspected.
  - D A. Sprinklers, where provided, are in commission.
  - D B. There is no flammable dust, vapors, or liquids, or unpurged tanks or equipment previously containing such materials in the area.
  - D C. This work will be confined to the area or equipment specified in the permit.
  
- D 2. The following safeguards have been provided:
  - D A. Floors and surroundings have been swept clean and wet down.
  - D B. Ample portable extinguishing equipment has been provided.
  
- D 3. If the work involves cutting, welding, or other spark producing equipment, the following additional safeguards have been provided:
  - D A. All combustibles have been located 30 feet from the operation and the remainder protected with fire blanket, metal guards, or flameproofed covers (not ordinary tarps).
  - D B. All floor and wall openings within 40 feet of the operations have been tightly covered.
  - D C. Firewatches have been assigned to watch for dangerous sparks in area, as well as floors above and below.
  
- D 4. Flame or spark producing equipment to be used has been inspected and found in good repair.
  
- D 5. Arrangements have been made for a patrol of the area, including floors above and below, during any lunch or rest period and for at least one half hour after has been completed



# INNOVATIVE CONSTRUCTION SOLUTIONS DAILY PERMIT TO WORK

Project #: \_\_\_\_\_

Date: \_\_\_\_\_

- Site Address \_\_\_\_\_
- Traffic control has been deployed **YES \_\_\_ NO \_\_\_ NA \_\_\_**
- The work area has been delineated /barricaded **YES \_\_\_ NO \_\_\_ NA \_\_\_**
- Are there any utility/well vaults to be accessed **YES \_\_\_ NO \_\_\_ NA \_\_\_**
- Have the utility/well vaults been delineated /barricaded **YES \_\_\_ NO \_\_\_ NA \_\_\_**
- Are there any confined spaces (no permit or permit required) **YES \_\_\_ NO \_\_\_ NA \_\_\_**
- The soils have been identified and a suitable excavation plan was designed by a competent person and communicated **YES \_\_\_ NO \_\_\_ NA \_\_\_**
- The stability of adjoining structures that may potentially be endangered by excavating have been evaluated by a competent person and the plan communicated **YES \_\_\_ NO \_\_\_ NA \_\_\_**
- Is the operator and equipment certified for the work to be performed **YES \_\_\_ NO \_\_\_ NA \_\_\_**
- The on-site means to contact emergency services are operable **YES \_\_\_ NO \_\_\_ NA \_\_\_**
- The location of utilities or any other underground installations have been located and marked prior to opening the excavation **YES \_\_\_ NO \_\_\_ NA \_\_\_**
- The primary means of access/egress are located per OSHA standards **YES \_\_\_ NO \_\_\_ NA \_\_\_**
- List the other hazards of the work being performed \_\_\_\_\_

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- List the measures used to eliminate, or control other hazards before work \_\_\_\_\_

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- Stockpiles / Equipment / Materials are staged at least 2 feet from the edge of trenches / excavations **YES \_\_\_ NO \_\_\_ NA \_\_\_**
- The trench / excavation has been inspected daily, and as needed by a competent person for evidence of standing water, possible cave-ins, failure of protective systems, hazardous atmospheres, or other hazardous conditions **YES \_\_\_ NO \_\_\_ NA \_\_\_**
- A hot work permit is required and issued **YES \_\_\_ NO \_\_\_ NA \_\_\_**
- Identify the system in place to protect employees from cave-ins for excavations greater than 5 feet or where the soil has potential for cave-in \_\_\_\_\_
- List the safety equipment to be used: \_\_\_\_\_
- All components of the excavation equipment and tools have been inspected and tested by a competent person and are adequate for use **YES \_\_\_ NO \_\_\_ NA \_\_\_**
- Any other information necessary, in order to ensure employee safety \_\_\_\_\_

## PERMIT VALIDATION

This Permit is valid from \_\_\_\_\_ am/pm TO \_\_\_\_\_ am/pm on / / . (Note: Permit must not exceed 1 day)

I ensure this permit has been filled out completely and in accordance with all applicable ICS requirements to provide a safe workplace.  
I will take action to control hazardous conditions associated with this work.

Permit Acceptance (print name):

Permit Authorization (Print Name):

Permit Holder Signature:

Permit Issuer Signature:

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_

# PERMIT CLOSE OUT

All work has been completed and the site has been left in a safe and satisfactory condition.

YES \_\_\_ NO \_\_\_

All vaults / trenches / excavations have been closed / secured / plated.

YES \_\_\_ NO \_\_\_

Permit Holder Signature:

Permit Issuer Signature:

Date:

Time:

Date:

Time:

**Safe Work Observation Form**

Project:		Observer :	Date:
Position/Title of worker observed:		Background Information/ comments:	
Task/Observation Observed: _____			
<ul style="list-style-type: none"> <li>❖ Identify and reinforce safe work practices/behaviors</li> <li>❖ Identify and improve on at-risk practices/acts</li> <li>❖ Identify and improve on practices, conditions, controls, and compliance that eliminate or reduce hazards</li> <li>❖ Proactive PM support facilitates eliminating/reducing hazards (do you have what you need?)</li> <li>❖ Positive, corrective, cooperative, collaborative feedback/recommendations</li> </ul>			
Actions & Behaviors	Safe	At-Risk	Observations/Comments
Current & accurate Pre-Task Planning/Briefing (Project safety plan, STAC, AHA, PTSP, tailgate briefing, etc., as needed)			<b>Positive Observations/Safe Work Practices:</b>
Properly trained/qualified/experienced			
Tools/equipment available and adequate			
Proper use of tools			<b>Questionable Activity/Unsafe Condition Observed</b>
Barricades/work zone control			
Housekeeping			
Communication			
Work Approach/Habits			
Attitude			
Focus/attentiveness			<b>Safer option/ corrected action:</b>
Pace			
Uncomfortable/unsafe position			
Inconvenient/unsafe location			
Position/Line of fire			
Apparel (hair, loose clothing, jewelry)			<b>Observed Worker's Corrective Actions/Comments:</b>
Repetitive motion			
Other (PPE, etc...)			



# RIGGING COMPONENT PRE-USE INSPECTION CHECKLIST

Wire Rope Slings  
Identification #s of slings \_\_\_\_\_

	No	Yes	Other:
• Broken wires	<input type="checkbox"/>	<input type="checkbox"/>	Amount _____
• Worn and abraded wires	<input type="checkbox"/>	<input type="checkbox"/>	Amount _____
• Fatigue fracture	<input type="checkbox"/>	<input type="checkbox"/>	Amount _____
• Reduction in rope diameter	<input type="checkbox"/>	<input type="checkbox"/>	Amount _____
• Stretch	<input type="checkbox"/>	<input type="checkbox"/>	
• Corrosion	<input type="checkbox"/>	<input type="checkbox"/>	
• Insufficient lubrication	<input type="checkbox"/>	<input type="checkbox"/>	
• Damaged or inadequate splices	<input type="checkbox"/>	<input type="checkbox"/>	
• Corroded, cracked, bent, worn and improperly applied connections	<input type="checkbox"/>	<input type="checkbox"/>	Specify _____ _____ _____
• Kinks	<input type="checkbox"/>	<input type="checkbox"/>	
• Heat damage	<input type="checkbox"/>	<input type="checkbox"/>	
• Electric arc	<input type="checkbox"/>	<input type="checkbox"/>	
• Replace?	<input type="checkbox"/>	<input type="checkbox"/>	

## Synthetic Web Slings, Round slings, Twinpath slings

Identification #s of slings \_\_\_\_\_

	No	Yes	Other:
• Worn or distorted fittings	<input type="checkbox"/>	<input type="checkbox"/>	
• Cuts	<input type="checkbox"/>	<input type="checkbox"/>	
• Holes	<input type="checkbox"/>	<input type="checkbox"/>	
• Punches	<input type="checkbox"/>	<input type="checkbox"/>	
• Tears	<input type="checkbox"/>	<input type="checkbox"/>	
• Frayed material	<input type="checkbox"/>	<input type="checkbox"/>	
• Broken stitching	<input type="checkbox"/>	<input type="checkbox"/>	
• Acid, caustic or heat burns	<input type="checkbox"/>	<input type="checkbox"/>	
• Replace?	<input type="checkbox"/>	<input type="checkbox"/>	If Yes, identify replacements _____ _____ _____

Date: \_\_\_\_\_

Operator/User: \_\_\_\_\_

Insufficiencies Reported to: \_\_\_\_\_

## **EXCAVATION PERMIT**

This permit will remain at the work site until the work is completed or a new permit is issued. If conditions change within the excavation, all persons must be evacuated until the conditions are evaluated and a new permit is issued. Expired permits must be returned to the Health & Safety Director for filing.

Date Issued:  Date Expires:

Specific Location of Work: Purpose of Excavation:

Size of Trench, Pit or Wall Opening:			
Feet Long	<input style="width: 90%;" type="text"/>	Feet Wide	<input style="width: 90%;" type="text"/>
		Feet Deep	<input style="width: 90%;" type="text"/>

**NOTE:** A professional engineer must design excavations greater than 20 feet deep. Excavation plans and all registered drawings must be maintained at the excavation site.

MEANS OF EGRESS (If 4 feet or more in depth access must be provided within 25 feet of workers):			
<input type="checkbox"/>	Stairway(s)	<input type="checkbox"/>	Ladder(s)
<input type="checkbox"/>	Ramp(s)	<input type="checkbox"/>	Other (specify)

SOIL TYPE (See Definitions Below):	
<input type="checkbox"/>	Stable Rock
<input type="checkbox"/>	Type A
<input type="checkbox"/>	Type B
<input type="checkbox"/>	Type C

IDENTIFICATION OF UNDERGROUND INSTALLATIONS: (Method used to identify buried hazards)			
<input type="checkbox"/>	Electrical	<input type="checkbox"/>	Drainage
<input type="checkbox"/>	Communications	<input type="checkbox"/>	Acid
<input type="checkbox"/>	Fuel / Oil	<input type="checkbox"/>	Natural Gas
<input type="checkbox"/>	Water	<input type="checkbox"/>	Sewer
<input type="checkbox"/>	Process	<input type="checkbox"/>	Other (specify)
<input type="checkbox"/>	Steam	<input type="checkbox"/>	

OTHER KNOWN OBSTRUCTIONS:			
<input type="checkbox"/>	Footings	<input type="checkbox"/>	Encasements
<input type="checkbox"/>	Pilings	<input type="checkbox"/>	Other (specify)
<input type="checkbox"/>	Tanks	<input type="checkbox"/>	

CONTROL REQUIREMENTS:			
<input type="checkbox"/>	Shoring	<input type="checkbox"/>	Sloping at angle
<input type="checkbox"/>	Trench Box	<input type="checkbox"/>	Material and equipment 2 feet from edge

PRECAUTIONS:			
<input type="checkbox"/>	Properly Isolated Lines	<input type="checkbox"/>	Ground Tools
<input type="checkbox"/>	Hand Excavation	<input type="checkbox"/>	Hot Work Permit
<input type="checkbox"/>	Confined Space Permit	<input type="checkbox"/>	Other (specify)

WARNING SYSTEMS:			
<input type="checkbox"/>	Barricades	<input type="checkbox"/>	Lighting
<input type="checkbox"/>	Signaling Devices	<input type="checkbox"/>	Flagman (with appropriate vests)

SECURITY SYSTEMS: (if left open overnight)			
<input type="checkbox"/>	Trench Plates	<input type="checkbox"/>	Temporary Fencing
<input type="checkbox"/>		<input type="checkbox"/>	Other:

The above data has been checked with drawings on file. Stakes and or markings indicating the location and depth must mark existing lines and interferences in the vicinity of work. When tight interferences are identified, hand excavation must be used to determine the exact location.

**Approved By:**

Competent Person

Print Name

Signature

Date





# ICS DAILY INSPECTION OF TRENCHES & EXCAVATIONS

Site Location:

Project Number:

Date:

Weather:

Soil Type:

Trench Depth:

Length:

Width:

Type of Protective System:

Project Supervisor:

Assigned **Competent Person**:

Crew Members:

Excavation equipment type(s):

Equipment Operator(s):

Yes No N/A

### Excavation

- |                          |                          |                          |   |
|--------------------------|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Excavations and Protective Systems inspected by <b>Competent Person</b> daily, before start of work.        |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <b>Competent Person</b> has authority to remove workers from excavation immediately.                        |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Surface encumbrances supported or removed.  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Employees protected from loose rock or soil.  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Hard hats worn by all employees.  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Spoils, materials, and equipment set back a minimum of 2' from edge of excavation.                          |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Barriers provided at all remote excavations, wells, pits, shafts, etc.                                      |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Ingress/egress within excavation provided at 25' intervals.   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Walkways and bridges over excavations 6' or more in depth equipped with guardrails.                         |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Warning vests, or other highly visible PPE provided and worn by all employees exposed to vehicular traffic. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Employees prohibited from working or walking under suspended loads.   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Employees prohibited from working on faces of sloped or benched excavations above other employees.          |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Warning system established and used when mobile equipment is operating near edge of excavation.             |

Yes No N/A

### Utilities

- |                          |                          |                          |   |
|--------------------------|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Utility companies contacted and/or utilities located.                               |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Exact location of utilities marked when near excavation.                            |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Underground installations protected, supported, or removed when excavation is open. |

Yes No N/A

### Wet Conditions

- |                          |                          |                          |  |
|--------------------------|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Precautions taken to protect employees from accumulation of water. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Water removal equipment monitored by <b>Competent Person</b> .     |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Surface water controlled or diverted.                              |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Inspection made after each rainstorm.                              |

Yes No N/A

### Hazardous Atmosphere

- |                          |                          |                          |  |
|--------------------------|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Atmosphere tested when there is a possibility of oxygen deficiency or build-up of hazardous gases. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Oxygen content is between 19.5% and 21%.   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Ventilation provided to prevent flammable gas build-up to 20% of lower explosive limit of the gas. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Testing conducted to ensure that atmosphere remains safe.  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Emergency Response Equipment readily available where a hazardous atmosphere could or does exist.   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Employees trained in the use of Personal Protective and Emergency Response Equipment.              |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Safety harness and life line individually attended when employees enter deep confined excavation.  |

Comments:

Signature of **Competent Person**:

Date:



## Ladder / Step Ladder Inspection Daily Checklist

Ladder ID: \_\_\_\_\_

Check	Condition
Is the ladder tag in place and up to date?	
Is the equipment free of cracks and impact damage?	
Are all rivets in place?	
Are the feet in place and firmly attached?	
Are feet excessively worn?	
Is the ladder clean and free of mud and oil etc?	
Are all locking devices working properly?	
Can it be opened properly, does everything lock into position?	
Is it stable and free from wobble?	
Is the ladder free of corrosion?	
Are the ropes on extension ladders intact without fraying or excessive wear?	
Are the instructions readable?	

### Remarks

\_\_\_\_\_

Inspected by

\_\_\_\_\_

Date of inspection

\_\_\_\_\_

# Full Body Harness

Inspection Checklist / Log

ICS Project Number \_\_\_\_\_

Name: \_\_\_\_\_

Tag Number: \_\_\_\_\_

Model: \_\_\_\_\_

Manufacture Date: \_\_\_\_\_

Serial Number: \_\_\_\_\_

Lot Number: \_\_\_\_\_

Comments:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

General Factors	Accepted / Rejected	Supportive Details or Comments
<b>Hardware:</b> (includes D-rings, buckles, keepers, and back pads) Inspect for damage, distortion, sharp edges, burrs, cracks and corrosion	<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"></div> <div style="width: 40%; text-align: center;">Accepted</div> <div style="width: 30%;"></div> </div> <hr style="border-top: 1px dashed black;"/> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"></div> <div style="width: 40%; text-align: center;">Rejected</div> <div style="width: 30%;"></div> </div>	Accepted
<b>Webbing:</b> Inspect for cuts, burns, tears, abrasion, frays, excessive soiling, and discoloration.	<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"></div> <div style="width: 40%; text-align: center;">Accepted</div> <div style="width: 30%;"></div> </div> <hr style="border-top: 1px dashed black;"/> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"></div> <div style="width: 40%; text-align: center;">Rejected</div> <div style="width: 30%;"></div> </div>	
<b>Stitching:</b> Inspect for pulling or cut stitches.	<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"></div> <div style="width: 40%; text-align: center;">Accepted</div> <div style="width: 30%;"></div> </div> <hr style="border-top: 1px dashed black;"/> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"></div> <div style="width: 40%; text-align: center;">Rejected</div> <div style="width: 30%;"></div> </div>	
<b>Labels:</b> Inspect, make certain all labels are securely held in place and legible	<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"></div> <div style="width: 40%; text-align: center;">Accepted</div> <div style="width: 30%;"></div> </div> <hr style="border-top: 1px dashed black;"/> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"></div> <div style="width: 40%; text-align: center;">Rejected</div> <div style="width: 30%;"></div> </div>	
	<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"></div> <div style="width: 40%; text-align: center;">Accepted</div> <div style="width: 30%;"></div> </div> <hr style="border-top: 1px dashed black;"/> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"></div> <div style="width: 40%; text-align: center;">Rejected</div> <div style="width: 30%;"></div> </div>	
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	<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"></div> <div style="width: 40%; text-align: center;">Accepted</div> <div style="width: 30%;"></div> </div> <hr style="border-top: 1px dashed black;"/> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"></div> <div style="width: 40%; text-align: center;">Rejected</div> <div style="width: 30%;"></div> </div>	

**Overall Disposition**

Accepted 
Inspected By: \_\_\_\_\_

Rejected 
Date Inspected: \_\_\_\_\_

# Lanyards

Inspection Checklist / Log

ICS Project Number \_\_\_\_\_

Name: \_\_\_\_\_

Tag Number: \_\_\_\_\_

Model: \_\_\_\_\_

Manufacture Date: \_\_\_\_\_

Serial Number: \_\_\_\_\_

Lot Number: \_\_\_\_\_

Comments:

General Factors

Accepted / Rejected

Supportive Details or Comments

**Hardware:** (Includes snap hooks, D-ring, keepers, carabiners, adjusters, & thimbles). Inspect for damage, distortion, sharp edges, burns, cracks, corrosion and proper operation.

**Accepted**



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**Rejected**



**Accepted**

**Webbing:** Inspect for cuts, burns, tears, abrasion, frays, excessive soiling, and discoloration.



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**Rejected**



**Accepted**

**Stitching:** Inspect for pulling or cut stitches.



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**Rejected**



**Accepted**

**Synthetic Rope:** Inspect for pulled or cut yarns, burns, abrasion, knots, excessive soiling and discoloration.



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**Rejected**



**Accepted**

**Wire Rope:** Inspect for broken wires, corrosion, kinks, and separation of strands.



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**Rejected**



**Accepted**

**Energy Absorbing Component:** Inspect for elongation, tears, and excessive soiling.



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**Rejected**



**Accepted**

**Labels:** Inspect, make certain all labels are securely held in place and legible



---

**Rejected**



<b>Overall Disposition</b>	<u>Accepted</u> 	Inspected By: _____
	<u>Rejected</u> 	Date Inspected: _____



**DAILY INSPECTION CHECKLIST  
HEAVY EQUIPMENT**

Equipment Name: \_\_\_\_\_ Week Ending \_\_\_\_\_

Equipment ID No: \_\_\_\_\_ Inspector's Name: \_\_\_\_\_

Beginning Hours: \_\_\_\_\_ End Hours: \_\_\_\_\_

INSPECTED ITEMS	<input checked="" type="checkbox"/> IF SATISFACTORY					COMMENTS
	Mon.	Tue.	Wed.	Thurs.	Fri.	
Falling Object Protective Structure (FOP)						
Roll-Over Protection Structure (ROP)						
Seat Belts						
Operator Seat Bar (s)						
Side Shields, Screens or Cab						
Lift Arm Device						
Grab Handles						
Back-up Alarm-Working						
Lights						
Guards						
Horn						
Anti-Skid Tread Clear or Mud						
Safety Signs (i.e. counterbalance swing area)						
Fire Extinguisher						
Fuel Connection						
Oil (full and no leaks)						
Clear of Extra Materials						
Controls Function Properly						
Damage Parts						
Hydraulic System (full and no leaks)						
Parking Brake						
Lift Arm and Bucket						
Tires/Tracks						
Steering						
General Condition						
Fill Hose and Hydrant Wrench						
<b>Operator Signature:</b>						
Gallons of Fuel Added:	Quarts of Oil Added:		Other Maintenance:			

**INSTRUCTIONS:** Each shift must inspect all applicable items indicated. If an unsatisfactory condition is observed, suspend operation of the equipment and report the unsatisfactory condition to the site supervisor immediately.

## INCIDENT REPORTING FORM

DEPARTMENT	PHONE #	Corporate Health & Safety 714-893-6366
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1. EMPLOYEE (last name, first name, mi)	2. EMPLOYEE ID No.	3. SEX <input type="checkbox"/> M <input type="checkbox"/> F	4. AGE	5. DATE/TIME OF INCIDENT
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6. TIME IN JOB <input type="checkbox"/> Less than 1 mo. <input type="checkbox"/> 6 mos. to 1 year <input type="checkbox"/> 1 to 5 mos. <input type="checkbox"/> More than 1 year	7. JOB TITLE AT TIME OF ACCIDENT	8. EMPLOYMENT CATEGORY <input type="checkbox"/> Full-time <input type="checkbox"/> Temporary <input type="checkbox"/> Part-time <input type="checkbox"/> Student
--	----------------------------------	--

9. SPECIFIC LOCATION OF NEAR LOSS (bldg., floor, room #, outside)	10. WITNESS (list name(s) & phone #)
_____	_____
_____	_____
_____	_____

11. DESCRIPTION OF NEAR LOSS (Describe sequence of events, including time, date, and location of incident. Attach photos, drawings, or separate page if necessary)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

12. FACTORS (Why it Happened) Describe conditions or practices, if any, that may have led to the occurrence of this incident. Attach separate page if necessary

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

13. CORRECTIVE ACTIONS (Prevention). Developed jointly with H&S

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

14. REPORTED BY  Signature _____ Date _____	16. H&S REVIEW  _____  _____  _____  Signature _____ Date _____
15. DEPARTMENT HEAD/SAFETY MANAGER COMMENTS.  _____  _____  Department Head/Safety Manager Signature _____ Date _____	

## Near LOSS Investigation

**Near Losses need to be investigated.** The supervisor of the employee involved in the near loss is responsible for conducting the investigation in consultation with Corporate Health and Safety (H&S) and, when appropriate, ensuring that corrective actions are taken with the input of H&S. The depth and complexity of the investigation will vary with the circumstances and seriousness of the incident. A thorough investigation may identify previously overlooked physical, environmental, or process hazards, the need for new or more extensive safety training, or unsafe work practices.

The supervisor should complete sections 1 to 13, sign and date the form, and then forward the form to the Project Manager or Safety Coordinator for review and approval. Once complete, a copy of the form must be sent to H&S (fax: 714-352-3218; email: mcatton@icsinc.tv). For additional guidance, please call Michael Catton 310-486-8924.

**1-8 Background Information on Injured Person (if any):** This form must be used only for near losses involving ICS employees. Accidents involving outside contractors or site visitors must be reported to H&S immediately.

**9. Specific Location:** : Self-explanatory

**10. Witnesses:** Self-explanatory

**11. Description of Near Loss:** Most accidents result from an accumulation of events. An accurate, factual description of the accident and the events leading up to it can be very helpful. This chronological sequence can be studied to determine how each event may have contributed to the accident. Include photos or drawings of the accident site, if these will be useful to the investigation.

**12. Factors:** Factors, if any, are the conditions in the workplace or actions that contributed to the occurrence of this accident. Examples might include unguarded machinery, broken tools, slippery floors, not following established procedures, or insufficient training or maintenance.

**13. Corrective Actions:** List actions or steps that could be taken to control or eliminate the likelihood of a recurrence. Include not only those that can be accomplished right away (e.g., providing personal protective equipment, installing a machine guard), but also actions such as changes in policy or providing additional training. H&S should be an integral part of any corrective actions. Please consult the H&S Department prior to implementing corrective actions.



## Incident Report

Date: \_\_\_\_\_

Jobsite: \_\_\_\_\_

Date/Time of Reported Injury or Illness Injury: \_\_\_\_\_

Description of Incident: \_\_\_\_\_

\_\_\_\_\_

Name of Employee(s) Involved: \_\_\_\_\_

Cause(s) of Incident, If Known: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Means of Preventing Reoccurrence, If Known: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Modification(s) of Code of Safe Practices Required: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Other: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Investigation Completed by: \_\_\_\_\_

Date of Review by Responsible Person: \_\_\_\_\_

Date of Implementation of Corrective Action: \_\_\_\_\_



## **Attachment 3**

# ***Job Hazard Analysis***

# Activity Hazard Analysis (AHA)

<b>Activity/Work Task:</b> Excavation	<b>Overall Risk Assessment Code (RAC) <i>Use Highest from Below</i></b>					<b>M</b>
<b>Project Location:</b>	<b>RISK ASSESSMENT CODE (RAC) MATRIX</b>					
<b>Contract Number:</b>	<b>Severity</b>	<b>Probability</b>				
<b>Date Prepared:</b>		Frequent	Likely	Occasional	Seldom	Unlikely
<b>Prepared By (Name/Title):</b>  Robert Castaneda Health and Safety Coordinator	Catastrophic	<b>E</b>	<b>E</b>	<b>H</b>	<b>H</b>	<b>M</b>
	Critical	<b>E</b>	<b>H</b>	<b>H</b>	<b>M</b>	<b>L</b>
<b>Reviewed By (Name/Title):</b>	Marginal	<b>H</b>	<b>M</b>	<b>M</b>	<b>L</b>	<b>L</b>
	Negligible	<b>M</b>	<b>L</b> <b>L</b> <b>L</b> <b>L</b>			
<b>Notes (Field Notes, Review Comments, etc):</b>  In addition to the information listed in this AHA, all field personnel must review and be familiar with all provisions of the approved ICS HASP	<b>Step 1:</b> Review each " <b>Hazard</b> " with Identified Safety " <b>Controls</b> " and Determine RAC (See Matrix Above)					
	" <b>Probability</b> " is the likelihood to cause an incident, near miss or accident and is identified as: Frequent, Likely, Occasional, Seldom or Unlikely	<b>RAC Chart</b>				
	" <b>Severity</b> " is the outcome/degree if an incident, near miss or accident did occur and identified as: Catastrophic, Critical, Marginal or Negligible	<b>E = Extremely High</b>				
	<b>Step 2:</b> Identify the RAC (Probability/Severity) as E, H, M or L for each "Hazard" on the AHA. Annotate the highest overall RAC at the top of this page (enter in shaded gray - top right).	<b>H = High Risk</b>				
	<b>M = Moderate Risk</b>					
	<b>L = Low Risk</b>					

## Activity Hazard Analysis (AHA)

DEVELOPMENT TEAM	POSITION/TITLE
	PROJECT MANAGER
ROBERT CASTANEDA	HEALTH AND SAFETY CORRINATOR

PERSONAL PROTECTIVE EQUIPMENT	REQUIRED (Y/N)	COMMENTS
Safety Shoes		
Hard Hat		
Safety Glasses		
Fire Resistant Clothing		
Hearing Protection		
Goggles		
High Visibility Gloves		
Safety Cones/Barricades		
Personal Gas Monitor		
High visibility vest		
Other:		

**Additional Items:**

Stop work Authority Reviewed  
  Hazard ID Wheel Reviewed  
  Serious Injury/Fatality Hazards Reviewed  
  Observations/BBS  
  SSE Identified/Monitored



**Permitting/SWP:**

General Permit to Work       High Risk Permits: \_\_\_\_\_       Safe Work Practices: \_\_\_\_\_

**Emergency:**

Nearest Hospital/Clinic: \_\_\_\_\_ Muster Point: \_\_\_\_\_

Company Emer. # \_\_\_\_\_ Site Emer.# \_\_\_\_\_ Local Emer.# \_\_\_\_\_

Job Steps	Potential Hazards	Controls	Level of Protection	RAC	Person(s) Responsible
<b>Trenching / Excavation</b>					
1. Inspect area for utilities and clearance for heavy equipment.	Contact with underground utilities could cause injury to worker and damage to property or equipment.  Verify that there are no overhead power or communication lines.	Physically verify the location and depth of existing utilities prior to starting excavation through geophysical and utility survey. Call National One call – dial 811. Review as-built drawings. Protect all existing utilities during excavation. Perform excavation within 4 feet of existing utilities by hand and/or nonaggressive methods. Protect all underground utilities as soil is removed	D	L	Name(s):
2. Obtain equipment maintenance records prior to commencing work.	Improper equipment maintenance which can cause equipment failure and possible personal injury.	Verify records in possession are for equipment on site. Verify maintenance is current.	D	L	Name(s):
3. Set up exclusion zone (s). Stockpile area and established work areas / heavy equipment pathways.	Injury or exposure to public or other onsite personnel.	Set up exclusion zones. It is the responsibility of the SHSO to annotate the site plan with the location of the exclusion zone(s). Use safety tape, snow fence and delineators.	D	M	Name(s):
	Slips, Trips, Falls	Clear walkways work areas of equipment, tools, vegetation, excavated material and debris Mark, identify, or barricade other obstructions Maintain 3 point contact when ascending/descending ladders/ mounting/dismounting from heavy equipment Halt exterior work in high winds, lightning, severe			Name(s):
3. Set up exclusion zone (s). Stockpile area and					

established work areas / heavy equipment pathways. (continued)		weather Employ proper lifting technique when handling plastic sheeting to cover stockpiles				
	Struck By/ Against Heavy Equipment	Wear reflective hi-vis vests worn when exposed to vehicular traffic Isolate equipment swing areas Make eye contact with operators before approaching equipment Understand and review hand signals				Name(s):
	Handling Heavy Objects	Observe proper lifting techniques Obey sensible lifting limits (60 lb. maximum per person manual lifting) Use mechanical lifting equipment (hand carts, trucks) to move large, awkward loads				Name(s):
	Eye Injuries	Wear face shield, goggles when operating powered clearing /grubbing equipment				Name(s):
	Sharp Objects	Wear cut resistant work gloves when the possibility of lacerations or other injury may be caused by sharp edges or objects Maintain all hand and power tools in a safe condition Keep guards in place during use Close doors, windows on heavy equipment to prevent injuries from tree branches and other vegetation				Name(s):
4. Hand digging/post-holing where necessary to expose and protect underground installations as needed.	Damage to lines (and associated Physical Hazards or property damage). Injury or vehicle damage from falling into holes.	Use hand tools whenever possible	D	L	Name(s):	
	Slips, Trips, Falls	Clear walkways work areas of equipment, tools, vegetation, excavated material and debris Mark, identify, or barricade other obstructions Maintain 3 point contact when ascending/descending ladders/ mounting/dismounting from heavy equipment Halt exterior work in high winds, lightning, severe weather			Name(s):	
	Injury or vehicle damage from falling into holes.	Barricade/cover trenches until job is complete. Avoid twisting back during post holing.			Name(s):	

5. Trench / Excavate	Underground/ Overhead Utilities	Identify all utilities around the site before work commences Cease work immediately if unknown utility markers are uncovered Use manual excavation within 3 feet of known utilities	D	M	Name(s):
	Contact with underground utilities could cause injury to worker and damage to property or equipment.	Physically verify the location and depth of existing utilities prior to starting excavation through geophysical and utility survey. Call National One Call, 811, prior to any disturbance of ground. Scan the excavation area with electromagnetic and sonic equipment and mark ground where existing underground utilities are discovered. Protect all existing utilities during excavation. Perform excavation within 4 feet of existing utilities by hand and/or nonaggressive methods. Protect all underground utilities as soil is removed around or under the utility line. Complete and submit activity notification form for Cal-OSHA if any personnel are planning to enter excavation that is 5 feet or greater in depth.			Name(s):
	Excavation Wall Collapse	Construct diversion ditches or dikes to prevent surface water from entering excavation Provide good drainage of area adjacent to excavation Collect ground water/rain water from excavation and dispose of properly Store excavated material at least 2 feet from the edge of the excavation; prevent excessive loading of the excavation face Provide sufficient stairs, ladders, or ramps when workers enter excavations over 4 feet in depth Place ladders no more than 25 feet apart laterally Treat excavations over 4 feet deep as confined spaces Complete confined space permit entry procedure			Name(s):
5. Excavation of Soil (continued)					

5. Excavation of Soil (continued)		<p>Monitor atmosphere for flammable/toxic vapors, and oxygen deficiency</p> <p>Slope, bench, shore, or sheet excavations over 5 feet deep if worker entry is required</p> <p>Assign a competent person to inspect, decide soil classification, proper sloping, the correct shoring, or sheeting</p> <p>Inspect excavations (when personnel entry is required) daily, any time conditions change</p> <p>Provide at least two means of exit for personnel working in excavations</p> <p>Where the ICS competent person finds evidence of a situation that could result in a possible cave-in, indications of failure of protective systems, hazardous atmospheres, or other hazardous conditions, exposed employees shall be removed from the hazardous area until the necessary precautions have been taken to ensure their safety.</p>		
	Struck By/ Against Heavy Equipment	<p>Wear reflective Hi-Vis vests when exposed to vehicular traffic</p> <p>Isolate equipment swing areas</p> <p>Make eye contact with operators before approaching equipment</p> <p>Understand and review hand signals</p>		Name(s):
	Inhalation and Contact with Hazardous Substances	<p>Provide workers proper skin, eye and respiratory protection based on the exposure hazards present</p> <p>Review hazardous properties of site contaminants with workers before operations begin</p> <p>Dampen soil using light water spray to prevent fugitive dust emissions</p>		Name(s):
	High/Low Ambient Temperature	<p>Monitor for Heat/Cold stress</p> <p>Provide fluids to prevent worker dehydration</p> <p>Establish work/rest schedule</p>		Name(s):
	Strains from use of tools,	Maintain steady pace when using tools and take		Name(s):

	such as shovels, could occur.	adequate rest periods. If possible, rotate tasks among the workers. Use appropriate tools for the task and maintain tools in good condition.			
	Heavy equipment hazards could be present.	Equip all heavy equipment on this project with rollover protection systems and backup alarms. Stay clear of moving equipment, unless necessary. If working near equipment, workers must be in visual contact with the operator. Inspect all equipment daily, before use, to ensure that proper maintenance is being performed. Make eye contact with operator; heavy equipment has right-of-way. Workers will not work under any equipment or loads.			Name(s):
	Workers could fall into excavation.	As required by EM 385-1-1 and EHS 3-8, Fall Protection, if the excavation is 6 feet or greater in depth, workers must be at least 6 feet from the edge of the excavation. If workers must be closer, they must use personal fall protection (full body harness, lanyard or retractable life line, anchorage point). If excavation is less than 6 feet deep, workers should stand at least 2 feet from the edge of the excavation.			Name(s):
	Workers could be injured if they enter excavations that are not protected as required by Cal-OSHA and EM 385-1-1, Section 25.	Workers can only enter excavations that are directly supervised by a competent person identified above. The ICS competent person must verify that the excavation is sloped or that an approved shoring system is installed per specifications. Each worker who enters can enter only after getting verbal approval from the competent person who is physically present at the excavation.			Name(s):
6. Additional Notes:	•	•			Name(s):

7. Additional Notes:	•	•			Name(s):
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<b>Equipment to be Used</b>	<b>Training Requirements/Competent or Qualified Personnel Name(s)</b>	<b>Inspection Requirements</b>
<p>Competent Person</p> <p>Tony S. Mudhar – H&amp;S Director</p>	<p>ICS Competent Person for Trenching/Excavating</p>	<p>Daily inspections of excavations, the adjacent areas, and protective systems shall be made by the ICS competent person for evidence of a situation that could result in possible cave-ins, indications of failure of protective systems, hazardous atmospheres, or other hazardous conditions.</p> <p>An inspection shall be conducted by the ICS competent person prior to the start of work and as needed throughout the shift.</p> <p>Inspections shall also be made after every rainstorm or other hazard increasing occurrence. These inspections are only required when employee exposure can be reasonably anticipated.</p>
<p>Vehicles, pickup trucks</p>	<p>Only licensed personnel will operate vehicles.</p>	<p>Daily and before use. Use equipment safety checklist.</p>
<p>Heavy equipment, elevating work platform, hand tools, power tools</p>	<p>Only qualified persons may operate equipment. Operators' manual must be reviewed and be available on-site.</p> <p>Excavation competent person must be on-site during excavation activities (Dan Ford, Todd St. Peter, Michael Catton or other ICS designated competent person).</p>	<p>Daily and before use. Use inspection checklists as required.</p>
<p>PPE – Level "D" minimum: hard hat, safety vest, safety boots, safety glasses (unless indicated above)</p> <p>For other levels see ICS HASP</p>	<p>Specific training for PPE will be provided.</p>	<p>Daily and or before use</p>
<p>Power tools, hand tools</p>	<p>Specific training for power tools and hand tools will be provided.</p> <p>Review operator's manual for each tool and ensure that directions are followed.</p>	<p>Inspect hand tools before each use following manufacturers' requirements. Discard or tag out-of-service, any tools that are damaged. Do not use power tools that have frayed cords or exposed wiring. All power tools must have a</p>

		grounding plug or be double insulated. The SSHO will inspect electrical cords and connections daily.
Fire extinguisher	Fire extinguisher training including use/limitations	At least monthly by SSHO or designee.
First-aid kits and other emergency equipment	Personnel require training to use emergency equipment and first-aid kits. These personnel must be familiar with this plan, the inspection criteria for the equipment, and how the equipment is used. The SSHO provides direction on the use of the equipment	Initially and at least weekly thereafter or after the kit is used and restocked

**Abbreviations and Acronyms:**

AHA – Activity Hazard Analysis  
 RAC – Risk Assessment Code  
 SSHO – Site Safety and Health Officer  
 HASP – Site Specific Health and Safety Plan  
 ICS – Innovative Construction Solutions

PPE – personal protective equipment  
 APP – Accident Prevention Plan  
 CTO – Contract Task Order  
 EHS – Environmental Health and Safety

### 7.5.1 Activity Hazard Analysis (AHA)

<b>Activity/Work Task:</b> Loading/Hauling Off loads	<b>Overall Risk Assessment Code (RAC ) <i>Use Highest from Below</i></b>					<b>M</b>
<b>Project Location:</b>	<b>RISK ASSESSMENT CODE (RAC) MATRIX</b>					
<b>Contract Number:</b>	<b>Severity</b>	<b>Probability</b>				
<b>Date Prepared:</b>		Frequent	Likely	Occasional	Seldom	Unlikely
<b>Prepared By (Name/Title):</b>  Robert V. Castaneda Health and Safety Coordinator	Catastrophic	<b>E</b>	<b>E</b>	<b>H</b>	<b>H</b>	<b>M</b>
	Critical	<b>E</b>	<b>H</b>	<b>H</b>	<b>M</b>	<b>L</b>
<b>Reviewed By (Name/Title):</b>	Marginal	<b>H</b>	<b>M</b>	<b>M</b>	<b>L</b>	<b>L</b>
	Negligible	<b>M</b>	<b>L</b>	<b>L</b>	<b>L</b>	<b>L</b>
<b>Notes (Field Notes, Review Comments, etc):</b>  In addition to the information listed in this AHA, all field personnel must review and be familiar with all provisions of the approved ICS HASP	<b>Step 1:</b> Review each "Hazard" with Identified Safety "Controls" and Determine RAC (See Matrix Above)					
	<b>"Probability"</b> is the likelihood to cause an incident, near miss or accident and is identified as: Frequent, Likely, Occasional, Seldom or Unlikely	<b>RAC Chart</b>				
	<b>"Severity"</b> is the outcome/degree if an incident, near miss or accident did occur and identified as: Catastrophic, Critical, Marginal or Negligible	<b>E = Extremely High</b>				
	<b>Step 2:</b> Identify the RAC (Probability/Severity) as E, H, M or L for each "Hazard" on the AHA. Annotate the highest overall RAC at the top of this page (enter in shaded gray - top right).	<b>H = High Risk</b>				
		<b>M = Moderate Risk</b>				
	<b>L = Low Risk</b>					

## Activity Hazard Analysis (AHA)

Job Steps	Potential Hazards	Controls	Level of Protection	RAC
1. Assess work site prior to entering work area	<ul style="list-style-type: none"> <li>• Damage to existing site conditions</li> <li>• Unintended damage to surrounding structure</li> </ul>	<ul style="list-style-type: none"> <li>• Have any debris removed prior to entering work area.</li> <li>• Equipment operator must have a spotter when working in close proximity to structures, other vehicles or equipment or encumbered work zones</li> </ul>	D	L
2. Loading trucks for off haul	<ul style="list-style-type: none"> <li>• Injuring surrounding workers, truck driver. Damage to truck trench stability</li> <li>• Proper containment during transport.</li> </ul>	<ul style="list-style-type: none"> <li>• Review safety policies with site workers prior to start of the work               <ul style="list-style-type: none"> <li>○ Truck drivers are not allowed to exit truck cab while truck is inside exclusion zone.</li> <li>○ Truck loads will be checked by ground personnel and conditions of load will be verbally communicated to the truck drivers</li> </ul> </li> <li>• Use spotter to inform truck drivers where to stop for load out</li> <li>• Ensure truck is located on a level surface during loading activities</li> <li>• Ensure truck is a safe distance from the equipment to eliminate any risk of damage from equipment swing or operation</li> <li>• Soil should contain adequate moisture to inhibit dust generation. All loads of soil offered for transportation shall be tarped/covered during transport</li> <li>• Tarping will be performed prior to vehicle leaving the decontamination area.</li> <li>• Refer to Soil Excavation, Backfilling, and Hauling AHA</li> </ul>	D	H
3. Hauling loads to disposal site.	<ul style="list-style-type: none"> <li>• Incorrect route</li> </ul>	<ul style="list-style-type: none"> <li>• ICS technician (Truck Boss) will inform truck drivers of approved routes for access and egress to job site.</li> </ul>	D	L

Job Steps	Potential Hazards	Controls	Level of Protection	RAC
<b>Decontamination of Trucks</b>				
1. Dry decontamination with hand tools/brushes/ brooms	<ul style="list-style-type: none"> <li>Injury by vehicle rolling</li> <li>Falling objects</li> <li>Slips trips falls</li> </ul>	<ul style="list-style-type: none"> <li>Ensure that truck driver has clear communication with ground crew spotter.</li> <li>Ensure that all individuals are wearing proper PPE: level D, unless material is found to require an upgraded PPE of Level D modified with Tyvecks and half face respirators with P100 cartridges.</li> <li>Ensure that prior to working around dump truck, chocks have been placed in front and behind both front tires</li> <li>Ensure that truck driver has shut off truck and that emergency brakes are engaged.</li> <li>Maintain proper house keeping</li> <li>Make sure that truck driver is fully aware of protocols described in the Rules and Regulations hand out.</li> </ul>	D	M
2. Tarping trucks	<ul style="list-style-type: none"> <li>Pinch points</li> </ul>	<ul style="list-style-type: none"> <li>Truck drivers must stay in their vehicle during all loading, decontamination, and tarping activities. Drivers must not lower their windows or exit their truck for any reason during these activities</li> <li>Provide dust control during decontamination activities if required</li> <li>Ensure employee is instructed in the use of the various roller tarp systems utilized by the truck drivers</li> </ul>	D	M
3. Starting truck to exit exclusion zone	<ul style="list-style-type: none"> <li>Personal injury by being struck by vehicle</li> <li>Moving parts</li> </ul>	<ul style="list-style-type: none"> <li>Vehicle is only to be started after the spotter has notified all other ground personal to clear the area.</li> <li>Vehicle is only to be started when given approval by spotter</li> </ul>	D	L
4. Truck exit	<ul style="list-style-type: none"> <li>Personal injury</li> <li>Noise</li> <li>Property damage</li> </ul>	<ul style="list-style-type: none"> <li>Do a visual inspection of surrounding area</li> <li>Wear Level D PPE including earplugs</li> </ul>	D	L

Equipment to be Used	Training Requirements/Competent or Qualified Personnel Name(s)	Inspection Requirements
Front End Loader	ICS Operator Certification	Heavy Equipment Inspection Checklist
End dumps and other dump trucks	Visual inspection and checklist	Commercial driver license
Hand tools (brushes, shovels)	Visual inspection	Technician Field Training



**Abbreviations and Acronyms:**

AHA – Activity Hazard Analysis

RAC – Risk Assessment Code

SSHO – Site Safety and Health Officer

HASP – Site Specific Health and Safety Plan

ICS – Innovative Construction Solutions

PPE – personal protective equipment

APP – Accident Prevention Plan

CTO – Contract Task Order

EHS – Environmental Health and Safety



### 7.5.2 Activity Hazard Analysis (AHA)

<b>Activity/Work Task:</b>	<b>Overall Risk Assessment Code (RAC) <i>Use Highest from Below</i></b>					<b>M</b>
<b>Project Location:</b>	<b>RISK ASSESSMENT CODE (RAC) MATRIX</b>					
<b>Contract Number:</b>	<b>Severity</b>	<b>Probability</b>				
<b>Date Prepared:</b>		Frequent	Likely	Occasional	Seldom	Unlikely
<b>Prepared By (Name/Title):</b>	Catastrophic	<b>E</b>	<b>E</b>	<b>H</b>	<b>H</b>	<b>M</b>
	Critical	<b>E</b>	<b>H</b>	<b>H</b>	<b>M</b>	<b>L</b>
<b>Reviewed By (Name/Title):</b>	Marginal	<b>H</b>	<b>M</b>	<b>M</b>	<b>L</b>	<b>L</b>
	Negligible	<b>M</b>	<b>L</b>	<b>L</b>	<b>L</b>	<b>L</b>
<b>Notes (Field Notes, Review Comments, etc):</b>  In addition to the information listed in this AHA, all field personnel must review and be familiar with all provisions of the approved ICS HASP	<b>Step 1:</b> Review each "Hazard" with Identified Safety "Controls" and Determine RAC (See Matrix Above)					
	<b>"Probability"</b> is the likelihood to cause an incident, near miss or accident and is identified as: Frequent, Likely, Occasional, Seldom or Unlikely			<b>RAC Chart</b>		
	<b>"Severity"</b> is the outcome/degree if an incident, near miss or accident did occur and identified as: Catastrophic, Critical, Marginal or Negligible			<b>E = Extremely High</b>		
	<b>Step 2:</b> Identify the RAC (Probability/Severity) as E, H, M or L for each "Hazard" on the AHA. Annotate the highest overall RAC at the top of this page (enter in shaded gray - top right).			<b>H = High Risk</b>		
			<b>M = Moderate Risk</b>			
			<b>L = Low Risk</b>			

## Activity Hazard Analysis (AHA)

Job Steps	Potential Hazards	Controls	Level of Protection	RAC
1.	•	•		
2.	•	•		
3.	•	•		
4.	•	•		
5.	•	•		
6.	•	•		

Equipment to be Used	Training Requirements/Competent or Qualified Personnel Name(s)	Inspection Requirements

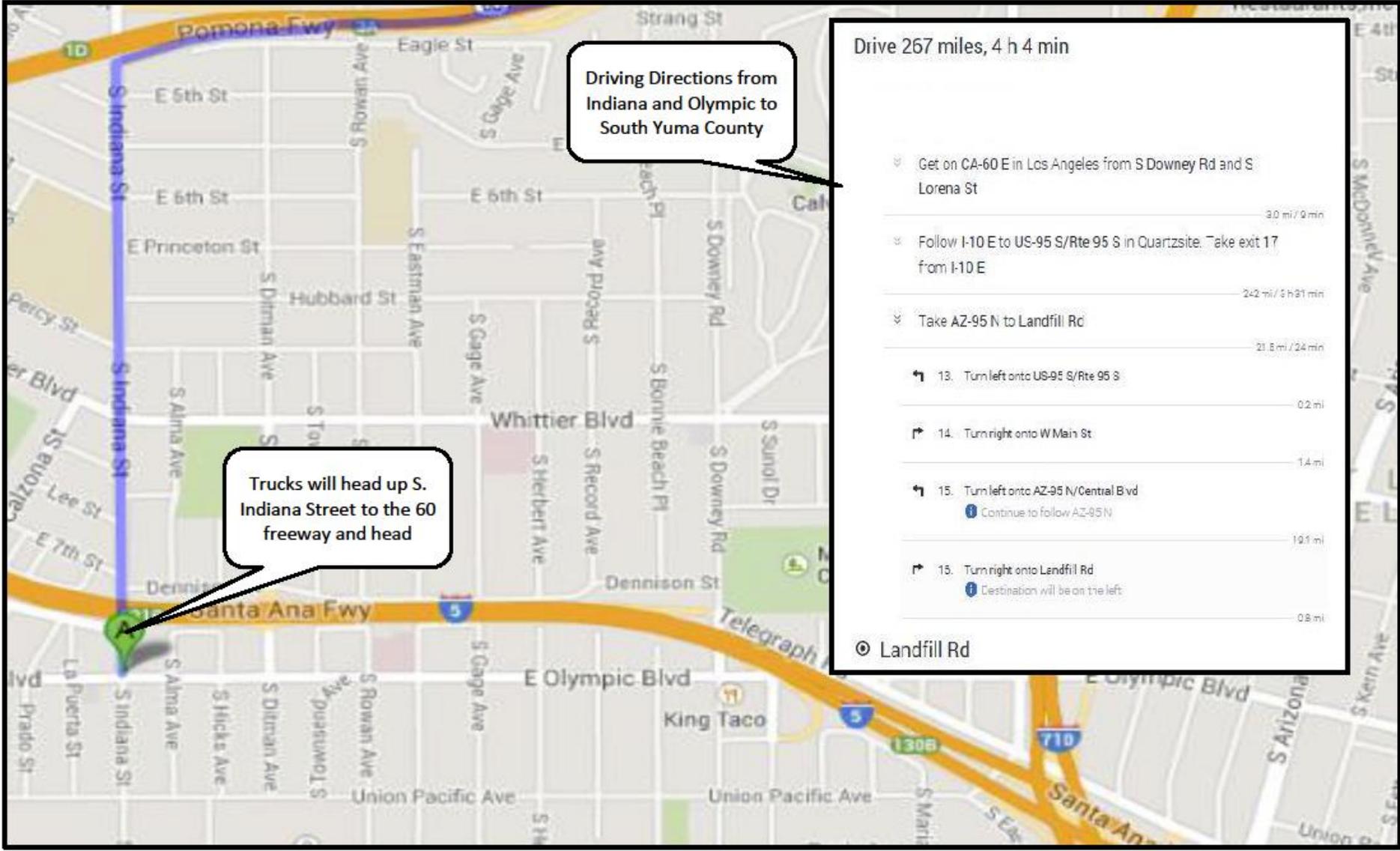
**Abbreviations and Acronyms:**

- |   |                                       |
|---|---------------------------------------|
| AHA – Activity Hazard Analysis              | PPE – personal protective equipment   |
| RAC – Risk Assessment Code                  | APP – Accident Prevention Plan        |
| SSHO – Site Safety and Health Officer       | CTO – Contract Task Order             |
| HASP – Site Specific Health and Safety Plan | EHS – Environmental Health and Safety |
| ICS – Innovative Construction Solutions     |                                       |



## **Attachment 4**

# ***Transportation Routes***



Driving Directions from  
Indiana and Olympic to  
South Yuma County

Trucks will head up S.  
Indiana Street to the 60  
freeway and head

Drive 267 miles, 4 h 4 min

- Get on CA-60 E in Los Angeles from S Downey Rd and S Lorena St 30 mi / 9 min
- Follow I-10 E to US-95 S/Rte 95 S in Quartzsite. Take exit 17 from I-10 E 242 mi / 5 h 31 min
- Take AZ-95 N to Landfill Rd 21.8 mi / 24 min
- 13. Turn left onto US-95 S/Rte 95 S 0.2 mi
- 14. Turn right onto W Main St 1.4 mi
- 15. Turn left onto AZ-95 N/Central Blvd 10.1 mi  
Continue to follow AZ-95 N
- 15. Turn right onto Landfill Rd 0.8 mi  
Destination will be on the left

Landfill Rd

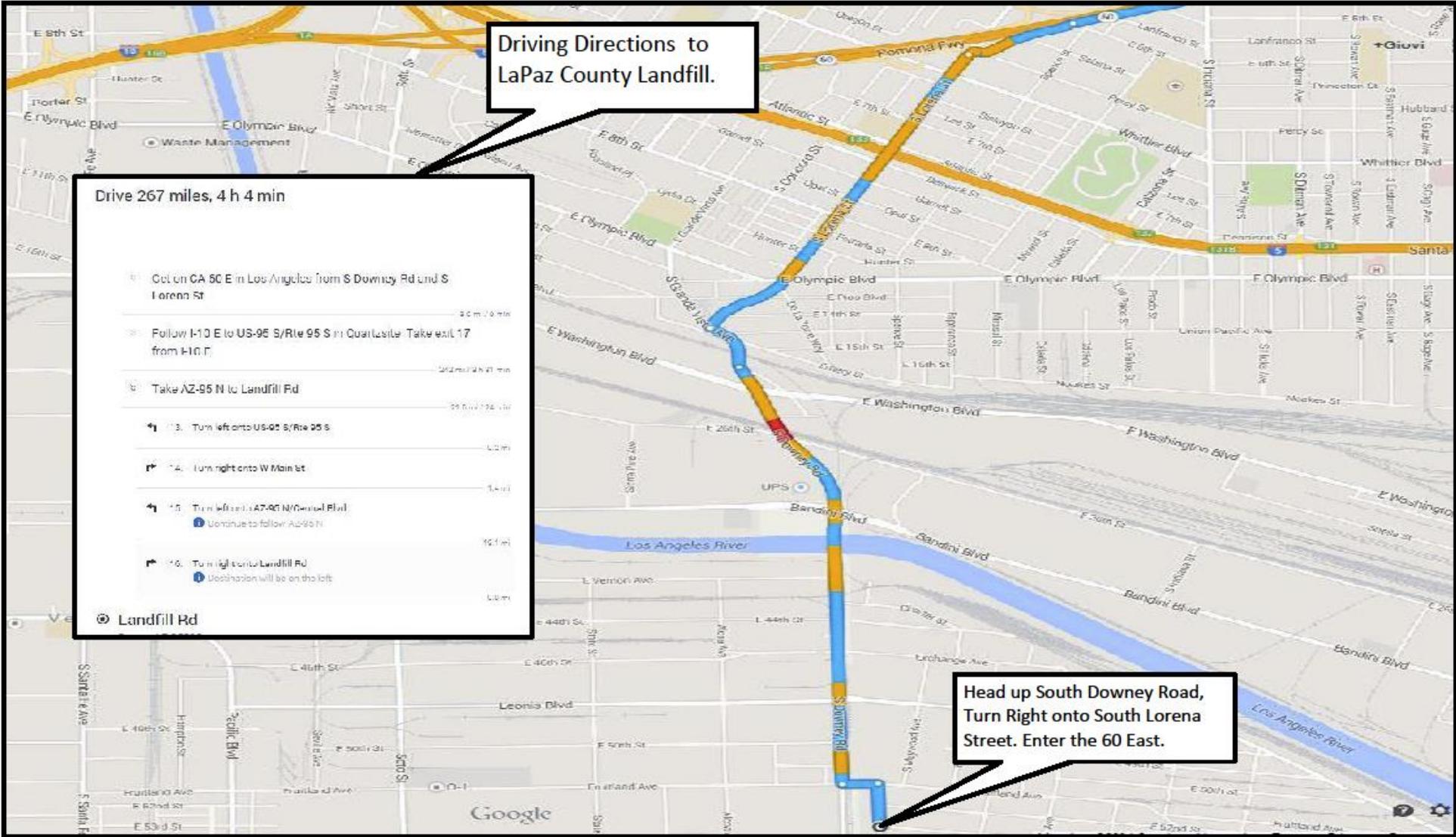
### Driving Directions to LaPaz County Landfill.

Drive 267 miles, 4 h 4 min

- 1. Get on CA 50 E in Los Angeles from S Downey Rd and S Lorenz St 30.0 mi / 10 min
- 2. Follow I-10 E to US-95 S/Rte 95 S in Quartzsite. Take exit 17 from I-10 E. 202.0 mi / 2 h 1 min
- 3. Take AZ-95 N to Landfill Rd 29.0 mi / 19 min
- 4. Turn left onto US-95 S/Rte 95 S 1.0 mi
- 5. Turn right onto W Main St 1.4 mi
- 6. Turn left onto AZ-95 N/General Blvd. Continue to follow AZ-95 N 19.1 mi
- 7. Turn right onto Landfill Rd. Destination will be on the left 1.0 mi

Landfill Rd

Head up South Downey Road, Turn Right onto South Lorenz Street. Enter the 60 East.





## **Attachment 5**

# Hospital Route Map

(map route based on central location at the respective sites – review specific site addresses to confirm proper route)

- 3532 E 53rd St. Maywood, CA 90270
- 3541 E 53rd St. Maywood, CA 90270
- 3560 E 53rd St. Maywood, CA 90270
- 3569 E 53rd St. Maywood, CA 90270
- 3589 E 53rd St. Maywood, CA 90270
- 3566 E 52nd St. Maywood, CA 90270
- 3558 E 53rd St. Maywood, CA 90270

## ○ 3558 E 53rd St

Maywood, CA 90270

↑ 1. Head west on E 53rd St toward S Maywood Ave

0.1 mi

↘ 2. Turn right onto S Maywood Ave

0.1 mi

↙ 3. Turn left onto Fruitland Ave

367 ft

↘ 4. Take the 1st right onto S Downey Rd

0.8 mi

↙ 5. Turn left onto Bandini Blvd

0.9 mi

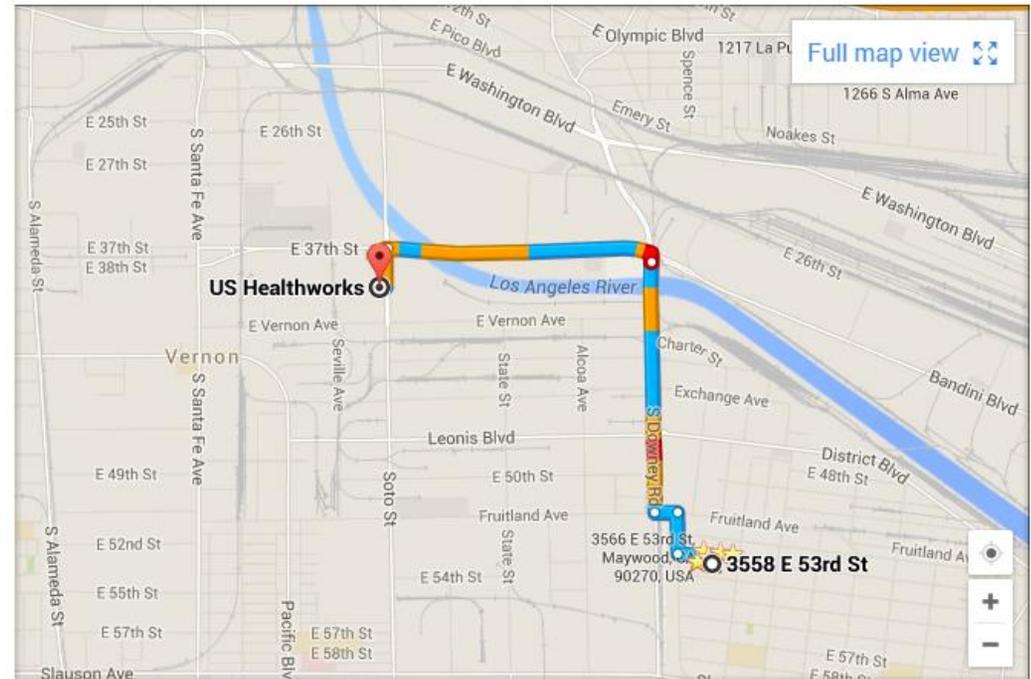
↙ 6. Turn left onto Soto St

**i** Destination will be on the right

0.1 mi

## ○ US Healthworks

3851 S Soto St, Vernon, CA 90058



# Hospital Route Map

(map route based on central location at the respective sites – review specific site addresses to confirm proper route)

1229 S. Indiana St. Los Angeles, CA 90023

1266 S. Alma Ave. Los Angeles, CA 90023

1230 La Puerta St. Los Angeles, CA 90023

1218 La Puerta St. Los Angeles, CA 90023

1217 La Puerta St. Los Angeles, CA 90023

## ○ 1230 La Puerta St

Los Angeles, CA 90023

↑ 1. Head south on La Puerta St toward Union Pacific Ave

492 ft

↘ 2. Turn right onto Union Pacific Ave

0.9 mi

↙ 3. Turn left onto S Grande Vista Ave

0.3 mi

↑ 4. Continue onto S Downey Rd

0.3 mi

↘ 5. Turn right onto Bandini Blvd

0.8 mi

↙ 6. Turn left onto Soto St

**i** Destination will be on the right

0.1 mi

## ○ US Healthworks

3851 S Soto St, Vernon, CA 90058

