Appendix B – Health and Safety Plan

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DTSC Exide Residential Project

Project Safety, Health, and Environmental Plan

PARSONS

OWN ZERO

December 2018

Parsons
Draft Project Safety, Health, and Environmental Plan (PSHEP)
Revision Date: 12/7/2018

Contract Identification: 18-T4506
Client: DTSC – 8800 Cal Center Drive, Sacramento CA 95826

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Approver Signature: _____ Date Approved: 12/7/2018

This PSHEP covers Parsons and Parsons-contracted work performed at the following locations.

1,610 residential properties located in the Preliminary Investigation Area (PIA), which includes portions of the County of Los Angeles and the Cities of Los Angeles, Commerce, Maywood, Bell, and Huntington Park, California.

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ORGANIZATIONAL STRUCTURE

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SECTION 1 – INTRODUCTION

1.1 PARSONS SAFETY, HEALTH & ENVIRONMENT POLICY

Exhibit P-1 – Parsons Corporate SH&E Policy

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1.2 STOP WORK AUTHORITY

Each Parsons employee and Parsons-contracted person is a critical leader for preventing injuries, illnesses, and adverse environmental impacts. Achieving SH&E excellence requires a personal commitment. Therefore, each employee is authorized to stop work immediately if a safety, health, or environmental concern exists or if the work is not going according to plan. Once work is stopped, each employee is expected to communicate the work stoppage to the other affected stakeholders and further evaluate the condition and adjust the approach to implementing the work to resolve the safety, health, or environmental concern before restarting the work.

Each employee shall understand that he or she has the authority and the responsibility to stop work at any time when he or she notices an unplanned or unexpected issue that he or she believes will adversely affect the project's safety, health, or environmental risk. This concept is consistent Parsons SH&E core value.

Sometimes, the idea of "stop work" suggests that the project is shut down and all employees end their work day until the catastrophe is averted. Though this is a dramatic example of a legitimate stop work event, most stop work events are much simpler.

S.T.O.P.

1. Stop the task you are doing, or intervene with a co-worker, if appropriate.
2. Take immediate measures to notify any others affected. If there is no imminent danger, notify the appropriate line supervisors and site leaders. This is also a good time to make any other notifications, such as to the client.
3. Offer correction or get help if needed. Keep it positive. Affected parties shall discuss and gain agreement on the resolution of the stop work issue. The initiator of the stop work event shall be thanked for his or her concern.
4. Prepare to resume once the concern has been resolved. If nessessary, suspend that task until the adjusted work plan can be reviewed and revised, when needed. When opinions differ regarding the validity of the stop work issue or adequacy of the resolution, the appropriate site leader shall make the final determination, giving full weight to all opinions and views. Positive feedback shall be provided to affected personnel regarding the resolution of the stop work issue.

There is no circumstance where retribution or retaliation may be directed toward an employee who conscientiously exercised his or her stop work authority.

1.3 THE PROJECT SAFETY, HEALTH, AND ENVIRONMENTAL PLAN (PSHEP)

This PSHEP outlines requirements and guidelines developed by Parsons for project work. When implemented, these requirements help protect project personnel, visitors, the public, and the environment from the effects of SH&E risks. Parsons employees should never perform a task that may endanger their own safety and health, the safety and health of coworkers or the public, or the environment. This PSHEP shall be updated as conditions or work phases change. All Parsons employees and contractors shall receive a copy of this PSHEP, understand it, and implement the provisions contained in it.

Parsons contractors shall establish their own SH&E programs for their work and employees. Contract specifications require each Parsons-contractor to accept provisions of the Parsons PSHEP and prepare its own contractor site-specific safety, health, and environmental plan (SSHEP) for work activities for which the contractor is responsible for performing. The PSHEP requirements identified for project personnel (e.g.,

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incident reporting, training, certifications of competence and qualification, substance abuse identification and testing) shall apply to contractor workers, and such provisions shall be included in each contractor's SSHEP.

This PSHEP and its associated legal compliance register, risk register, hazard and risk analyses, work plans, procedures, contractor SSHEPs, compliance programs, best practices, training matrix, and certifications of competence and qualification, apply to all locations, facilities, operations, tasks, and project work.

1.4 SUBCONTRACTOR SAFETY, HEALTH, AND ENVIRONMENTAL PLANS (SSHEPS)

Subcontractors must establish their own safety program for their work and employees. Contract specifications require all subcontractors to accept the Parsons' PSHEP and prepare their own subcontractor safety, health, and environment plan (SSHEP) for work activities the subcontractor has responsibility for performing. The subcontractor will present the SSHEP to the Parsons' Project Manager at least 10 days before site mobilization. At a minimum, subcontractor plans must meet the requirements of this PSHEP and provide SH&E equipment and safeguards suitable for the hazards involved. This PSHEP may not cover all potential hazards on every project, and subcontractors must ensure that appropriate SH&E information is available for all of the subcontractor's project tasks.

All PSHEP requirements for Parsons' personnel (e.g., training, substance abuse screening, incident reporting, etc.) also apply to subcontractor personnel, and do not need to be repeated in the SSHEP. Since the SSHEP is part of the PSHEP, subcontractor personnel will be required to receive an orientation that covers information from both documents and sign off accepting the PSHEP.

For this project, there will be subcontractors directly hired by Parsons.

1.5 MANAGEMENT OF CHANGE (MOC)

Modifications may be made to this PSHEP document after discussion and approval by the Parsons BU/Division SH&E Manager. Insert a description of the changes in the table below (insert additional rows as necessary).

PSHEP Section	SH&E Initials	Date	Description/Comments

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SECTION 2 – SCOPE OF WORK

2.1 SCOPE OF WORK

Parsons, in their contracted role with California Department of Toxic Substances Control is providing site (the terms "site" and "property" are used interchangeably in this document) remediation and restoration services for the work as specified in the Contract No. 18-T4506. As part of this contract, Parsons will provide the personnel, services, materials, and equipment necessary to remove lead impacted soil from 1610 properties within a 1.7-mile radius surrounding the former Exide Facility located at 2700 S. Indiana Street in the City of Vernon, County of Los Angeles, California. This work affects multiple communities within the 1.7-mile radius including portions of Los Angeles County (East Los Angeles), and the cities of Los Angeles, Maywood, Commerce, Bell, Vernon and Huntington Park.

Parsons responsibilities will provide project oversight and coordination, including general project management responsibilities, preparation of documents, attending pre-construction meetings, oversight of cleanup contractors during site cleanups and restorations, collection of soil samples and air monitoring during site cleanup activities.

Parsons will hire subcontractors for this project. The following list includes the type of contractor needed for this project and their responsibilities:

- TestAmerica– Samples will be submitted to the laboratory after field events and the laboratory will provide sample analysis and reports.
- Psomas – will provide survey of excavation areas and sampling locations during the remediation phase.
- Panacea – will provide air monitoring to comply with South Coast Air Quality Management District Rule 1466, as necessary.
- ICS – will provide remediation and restoration services. This will include utility clearance, potholing for utility identification, excavation, transport and disposal of impacted materials, backfill and restoration.

During the project, all field personnel will wear personal protective equipment (PPE) to assist in mitigating health and safety concerns potentially associated with cleanup activities.

2.2 MINIMUM PROJECT PPE REQUIREMENTS FOR THIS SCOPE OF WORK

Only level D PPE is anticipated to be used in this project and consist of the following:

- Hard Hat
- Safety Glasses
- High Visibility Safety Vest
- Long sleeve shirts
- Steel-toed boots (or equivalent)
- Gloves
- Ear plugs/Muff (when necessary)

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When site workers are performing tasks that contact high level of lead-contaminated soil, the Site Health and Safety officer will decide if disposal Tyvek coveralls shall be used.

Modifications to this PPE will be made as required by task specific Activity Hazard Analysis (AHAs) or other site conditions.

SECTION 3 – START-UP/ADMINISTRATIVE

3.1 PROJECT SAFETY, HEALTH & ENVIRONMENT (SH&E) COMMITTEE

This section of the PSHEP describes the constituency and protocols of the project's employee SH&E committees. A properly commissioned employee SH&E committee has a charter, a description of its authority and responsibilities, operating procedures, and committee member roles and responsibilities.

Written records of the minutes, actions, and recommendations of each employee SH&E committee shall be maintained, and this section of the PSHEP also shall describe where the SH&E committee records are maintained.

Charter

SH&E Committee Charter will be established by the project team once construction activities begin and the project has enough employees to warrant a safety committee team.

Description of the SH&E Committee's Authority

SH&E Committee Authority and Responsibilities statement will be established by the project team once construction activities begin and the project has enough employees to warrant a safety committee team.

Operating Procedures

Initial and on-going procedures for selecting committee members, selecting officer, conducting meetings, taking minutes, preserving committee records, submitting committee recommendations, performing walk-downs and inspections, tracking requests and findings to resolution, reviewing risk assessments and investigations, etc. will be established by the project team once construction activities begin and the project has enough employees to warrant a safety committee team.

Member Roles and Responsibilities

Committee member roles, descriptions, and responsibilities, such as Chair, Vice Chair, Secretary, regular member, will be established by the project team once construction activities begin and the project has enough employees to warrant a safety committee team.

3.2 NEW EMPLOYEE AND VISITOR ORIENTATION

Employee Orientation

Each person assigned to a project team (including new Parsons employees, existing Parsons employees reassigned to the project, contractors, lower-tier contractors, teaming and JV partner employees, suppliers, vendors, client representatives, members of the leadership team, and other stakeholder employees) will receive an initial project- and site-specific orientation beginning on their first day of work.

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No worker will start work on tasks for which he or she does not have the verified knowledge, skills, training, certifications, qualifications, and competencies to complete successfully, consistent with the risk control strategies defined in the risk register and its associated risk assessments.
The Parsons project manager, construction manager, site construction representatives, Project SH&E Representative, or subcontractor supervisor, management or safety staff will use the completed PSHEP Orientation to conduct an orientation for all new Parsons staff and subcontractor management personnel, who will be working on site.

Visitor Orientation

Visitors to a project shall receive an orientation briefing appropriate for their visits.

No visitor shall be permitted access to the project site unless he or she has completed visitor orientation to be given by Parsons staff (consisting of health and safety officer, construction manager, site construction representatives) or subcontractor (consisting of field supervisor or health and safety officer) and is escorted continually by a knowledgeable member project team.

- Each visitor shall sign the daily field log which will be maintained by the subcontractor field supervisor or his/her designee at the property at which the visitor wishes to view. Visitors will only be allowed on property if they are related to the project (i.e. workers from DTSC, Parsons Management, Contractors personnel and/or third tier contractor personnel). Prior to entering the site, the lead superintendent must ensure that the visitor is wearing all appropriate personal protective equipment (Hard hat, safety vest, steel toed boots, safety glasses and gloves and hearing protection as necessary. Those who do not have the appropriate PPE shall not be allowed onsite while operations are occurring. In some cases, extra PPE may be maintained at each site to allow the visitor to enter. After assessing the visitor's PPE status, the superintendent shall provide a brief health and safety briefing to the visitor that includes going through each of the AHAs in Appendix C to ensure that the visitor understands that these sites are potentially dangerous, but with the appropriate training and awareness these risks can be mitigated. Thereafter, the superintendent shall escort the visitor to the areas of the site that they wish to see, and personnel/visitors shall not be allowed be allowed to linger onsite as continuing work is critical to the success of the program. After the visitor has viewed the site, they will be required to sign out on the daily log form so that, if an emergency occurs, the list on the log can be utilized to account for project personnel. At no time shall anyone on property be allowed to discuss the project with the media, public or anyone not related to the project.

  Note: Parsons will not allow any visitors on the property during excavation activities, unless they can demonstrate that they have completed all relevant training (i.e. 40-hour HAZWOPER). However, visitors without this training may be allowed onsite on a limited basis, but only under escort and only if their presence is required on the site, if equipment is not operating, and if they are wearing appropriate PPE.

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3.3 AWARENESS CAMPAIGN

SH&E bulletin boards maintained by the Project SH&E Manager are primary information points for the project awareness campaign. The bulletin boards are located in the break room of the project office and will also be located in the field office for the project.

3.4 STAKEHOLDER PSHEP ALIGNMENT MEETING

A stakeholder safety coordination/alignment meeting was held on November 13th, 2018. The following representatives were in attendance for the meeting:

1. Client – Cesar Campos (PPU), Erglae Gomez (PPS), Alfredo Zanoria (Field Operations Manager), Angela Garcia (Senior Geologist), Poonam Acharya (Senior Engineer)
2. Parsons – Jeff Muller (Project Manager), Paul Boyajian (Deputy Project Manager), John Barker (VP SH&E), Darrell Pruitt (SH&E Manager), Tom Blaney (Construction Manager), Carrie Crozier (Post Construction Lead), Carolyn Hillman (Pre-Construction Team)
3. Subcontractor – Steven Modtland (Project Manager) (Panacea), Justin Gough (ICS) (Project Manager), Tino Magdaleno (ICS) (Operations Manager), Danny Avila (ICS) (Superintendent),Terry Dussault (ICS) (Health and Safety Manager), Rob Olson (Psomas) (Project Manager), Sean Logal (Psomas) (Survey Manager), Scott Thomas (Psomas) (Surveyor), Jeff Messinger (Psomas) (Safety Director)
4. Client contractor – NA

Parsons presented the PSHEP and obtained stakeholders concurrence with the approach outlined in the document. The meeting included a review of stakeholder roles and responsibilities and elements of control appropriate to project risks.

3.5 TRAINING

Activity Hazards Analysis Training

When the Activity Hazards Analysis (AHA) is complete, the Parsons supervisor or subcontractor conducts a training session with all individuals involved with the task. Individuals should be given an opportunity to provide input regarding task steps, hazards identified, and appropriate control measures.

Site Specific Training and Reference Procedures

The project has a comprehensive health & safety training program tailored to the client requirements and scope of work. All office-based employees or field employees who spend a significant portion of their time in an office or trailer must receive specialized office training consisting of proper lifting techniques, ergonomics, housekeeping, common office hazards, waste management and office emergencies. All projects should be associated with a PARSONS office, and the Office Health & Safety Plan should be reviewed for additional information. All personnel and on-site workers shall have completed the OSHA 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training and have a current 8-hour refresher training. All lead staff shall have completed the HAZWOPER Supervisor training. At least one staff member present shall have CPR/First Aid, excavation, and trenching safety certification.

Specific training requirements for each classification of Parsons' employees and for Parsons' key subcontractors are listed in the training matrix in Appendix D.

All subcontractors will develop and maintain their own training matrix. Records will be reviewed and verified on an ongoing basis.

Safety training for project personnel will be based primarily on their work activities and corresponding exposure to hazardous substances and health hazards. The PARSONS Corporate Safety and Health Program (CSHP) and applicable sections will be used as a reference for determining the minimum training requirements based on the project scope of work.

Applicable	Corporate Safety and Health Program Section/Topic
Yes No	CSHP-1 Medical Qualification and Surveillance (baseline blood lead and zinc protoporphyrin levels exam required prior to starting work on the project).
Yes No	CSHP-2 First Aid - list all site personnel in the Training Matrix that will be a first responder due to the insufficient response time of EMS personnel.
Yes No	CSHP-3 Ergonomics
Yes No	CSHP-4 Concrete and Masonry Construction
Yes No	CSHP-5 Field and Office Facilities
Yes No	CSHP-6 Personal Protective Equipment
Yes No	CSHP-7 Hearing Conservation
Yes No	CSHP-8 Respiratory Protection – list all site personnel in the Training Matrix that will have a theoretical potential exposure to contaminants above a permissible exposure limit (PEL) based on known soil or water analysis results, or when there is known contamination with no exposure data. Personnel are required to have annual training, medical clearance and a fit test to wear a respirator.
Yes No	CSHP-9 Air Monitoring
Yes No	CSHP-10 Hazard Communication
Yes No	CSHP-11 Emergency Procedures
Yes No	CSHP-12 Fire Protection
Yes No	CSHP-13 Hazardous Waste Operations – list all site personnel in the Training Matrix that will be engaged in hazardous substance removal or other activities that expose or potentially expose them to hazardous substances or health hazards (such as entering an exclusion zone), which are required to receive appropriate training as required by 29 CFR 1910.120, including, but not limited to, initial 40-hour, 8-hour Supervisor and annual 8-hour refresher training.
Yes No	CSHP-14 Process Safety Management
Yes No	CSHP-15 Confined Space - list all site personnel in the Training-Medical spreadsheet that will be involved with confined spaces, which will require proof of training.
Yes No	CSHP-16 Signs, Barricades and Traffic Control

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3.6 Risk Analysis and Safety Specification Development

Legal Compliance Register

Parsons shall comply with regulatory, legal, and other similar requirements in the jurisdictions where the project performs work. The legal compliance register identifies the SH&E-related laws, regulations, ordinances, and legal obligations that may impact the project. As legal requirements change during the lifecycle of the project, the changes shall be updated in the legal compliance register and their effects considered.

A legal compliance register has been included in Appendix A.

Risk Register

Parsons shall continually identify project SH&E risks and seek effective and reliable means to control these risks to an acceptable level. From these identified SH&E risks, additional policies, procedures, equipment, compliance programs, or special training required to control the risk of project activities shall be developed, communicated, monitored, and adjusted.

Hazard analysis and risk assessment planning, the basis of the risk register, is an ongoing process occurring throughout the life of the project. Hazard analysis and risk assessment planning should address items such as: routine and non-routine activities; activities of all persons having access to the workplace (including contractors, lower-tier contractors, visitors, and client representatives); any outside hazards that might impact the workplace or the people in the workplace; hazards associated with materials or equipment being used in the workplace; any changes or modifications in design, processes, legal obligations, safety system changes; and any human factor or capability issues.

A risk register for the project has been included as Appendix B.

Activity Hazard Analysis (AHAs) for specific tasks have been included in Appendix C.

3.7 Subcontractor Prequalification Review

For this project, there will be any subcontractors directly hired by Parsons.

The subcontractors directly hired by Parsons that will be working on the project are included in Exhibit 3-1.

Exhibit 3-1 – Hired Subcontractors

SUBCONTRACTOR	WORK ACTIVITIES	DATE OF EVALUATION
ICS	Remediation Contractor	11/21/2018
Panacea	Air Monitoring	11/21/2018
Psomas	Surveying	11/21/2018

*CSE not required for surveyors

3.8 Competent Person Submission Review

Copies of signed Competent Person forms for subcontractor personnel should be submitted prior to mobilization. Exhibit 9-1 represents regional, municipal, provincial, local, and/or OSHA regulations, owner, and Parsons corporate requirements applicable to the project.)

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3.9 SUBCONTRACTOR SAFETY PLAN SUBMISSION REVIEW

Contractor Qualification

All contractors to be engaged in providing field services shall pass a contractor qualification process prior to engagement. The project shall provide the following information to each contractor prior to qualifying and selecting the contractor.

- Detailed statement of work
- SH&E hazards and risks
- Parsons minimum SH&E expectations
- To assist with the contractor qualification process, the contractor shall identify the following.
    - Types of field activities to be conducted
    - Location of work places
    - Timing and sequence
    - Facilities, tools, and equipment to be used
    - Materials and consumables to be used
- In addition, the contractor shall provide as much of the following information as possible.
    - Contractor's SH&E policy statement
    - A statement or proof that the contractor has an occupational safety and health or environmental management system compliant with standards such as ANSI Z10, OHSAS 18001, ISO 14001, or OSHA's Voluntary Protection Programs
    - The names and qualifications of those with SH&E responsibilities for this work (onsite and offsite)
    - SH&E training compliance program and copies of training records for contractor employees expected to perform work on this contract
    - A copy of the contractor's compliance programs, competent person designations (United States), and other employee-related SH&E compliance certifications and qualifications (e.g., powered industrial truck driver, personal protective equipment user, qualified electrical worker)
    - SH&E awards earned
    - Occupational injury and illness statistics for the past 3 years
    - Explanations for any SH&E enforcement notices issued against the contractor by any SH&E regulator
    - Lists of anticipated/preferred lower-tier subcontractors and suppliers
    - Its proposed SSHEP and associated site-specific risk assessments or AHAs for the work.

This information shall be evaluated by the project SH&E representative and the PM (or delegate) using the Parsons online Global Contractor Safety Evaluation Program and the Site-specific Safety, Health, and Environmental Plan (SSHEP) Review form.

3.10 MOBILIZATION/KICKOFF SH&E MEETING

Project Managers conduct the Mobilization/Kickoff SH&E Meeting on or before the first day of subcontractor mobilization in the field at each work site. The meeting includes a review of the prebid site/area risk analysis and a walk through of the work area to locate items on the prebid risk analysis checklist.

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SECTION 4 – CONSTRUCTION/FIELD EXECUTION

4.1 SITE RISK ANALYSIS

Below is a list of potential hazards on the project.

- Chemical exposures – for this project chemical exposure to lead in soil is anticipated to be of low risk. During the sampling phase of the project, there is no dust generation. As such exposure due to inhalation is not of concern. Exposure due to ingestion may pose a risk, which can be easily mitigated by proper use of Level D PPE. Hands and shoes may come in direct contact with potentially contaminated soil. Therefore, workers will be required to wear steel toed work boots, latex gloves, high visibility vests, and hard hats as part of their Level D PPE. Handling of soil, soil samples, and sampling equipment is only allowed while wearing latex gloves, or work gloves over latex gloves. After an activity is completed, the latex gloves will be discarded, and hand washing will be required. Additionally, boots will be decontaminated by brushing off any loose soil and washing the boots with water. These PPE requirements will also be implemented during the remediation activities. Based on air monitoring results obtained by Parsons during previous property cleanups, level C respiratory protection is not considered necessary for the project.
- Environmental – cold/heat related illnesses, animals, insects, poisonous plants/vegetation. See Section 8.2 for information related to Environmental hazards.
- Excavations and trenches – Shallow excavations up to 18 inches deep conducted to remediate soil impacted with lead and arsenic
- Lightning - personnel shall follow the 30/30 rule - stop field activities and seek shelter when the time between seeing the lightning and hearing the thunder is less than 30 seconds. When the lightning has subsided for 30 minutes, work activities can resume.
- Noise
- Public Safety – Work location is in neighborhoods which have a history of high crime. All personnel should keep a low profile, call 911 in case of an emergency, avoid confrontations. If public concerns arise over field operations, provide the client public relations contact information.
- Traffic – Traffic is a recognized hazard during the remediation activities when moving equipment between properties. Traffic control plans and no parking zone permits are likely necessary at each property. Traffic is also a hazard during sampling activities, when taking equipment in and out of vehicles, and/or crossing street to access job location from parking location.
- Sources of ionizing radiation such as x-ray fluorescence (XRF) units will not be used on this project, therefore, ionizing radiation is not anticipated to exceed naturally occurring background levels.

4.2 SITE CONTROL

For all site visitors and new employees, the following steps must be taken before working or visiting the jobsite:

- Park in designated parking area
- Check in to job trailer
- Review all applicable paperwork associated with visit/work. i.e. AHA's etc.

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- Make sure you have the proper PPE either issued to you or your own staff.
- Contact supervisor or project manager to get direction on where you go for work or site visit.

Table 4-1 – Chemicals of Concern

Chemical of Concern	*Soil (mg/kg) or ground water (g/ml) concentrations*	*Monitoring Equipment*	*Action Levels*	*PPE/Action Taken*
Lead	>1,000 mg/kg in soil	Soil samples will be sent to laboratory for analysis	80 mg/kg	Latex gloves, long sleeve shirts, level D PPE to prevent dermal exposure during sampling

4.3 CONTROL MEASURES

Site hazards and hazards resulting from investigation and remediation activities are controlled using one or more of the control measures listed below. The order of precedence is as follows:

Engineer/design to eliminate or minimize hazards.

A major component of the remediation and restoration phase is to select appropriate safety features to eliminate a hazard and render it fail-safe or provide redundancy using backup components.

Guard the hazard.

Hazards that cannot be eliminated by design must be reduced to inacceptable risk level by safety guards or isolation devices that render them inactive.

Provide warnings.

Hazards that cannot be eliminated by design or guarding are controlled through using a warning or alarm device. This project will require decontamination procedures for personnel and/or equipment.

To minimize tracking soil off the site into public roadways, trucks removing soil from the exclusion zone will drive over plastic while getting filled with excavated soil. Water will not be used on the tires as this could increase the retention of dirt tracked off-site; heavy-duty brushes will be used to scrape tires clean instead. The exclusion zone will be that which immediately surrounds the work area and open excavation. The contamination reduction zone will be the area where oversight will be conducted to ensure soils are removed safely and according to prescribed workplans and/or standard operating procedures. The support zone will be the area outside of the work zone, limited to those who do not have the training, authorization, or PPE to safely enter the other two zones.

Note: Parsons will clearly identify the support zone with caution tape and proper signage. The support zone will also include a table, chairs and a pop-up canopy. In addition, this will allow for easy distinction between the support zone and the exclusion zone for all unauthorized visitors.

Provide special procedures or training.

When design, guarding, or warnings cannot eliminate hazards, subcontractors must develop procedures, training, and audits to ensure safe completion of work. Training cannot be a substitute for hazard elimination when life-threatening hazards are present. This project will not bring or use chemicals on site, including chemicals used for personnel or equipment decontamination.

Provide personal protective equipment.

To protect workers from injury, the last method in the order of precedence is the use of personal protective equipment, such as hard hats, gloves, eye protection, life jackets, and other protective equipment with the understanding that bulky, cumbersome, and heavy personal protective equipment is often discarded or not used, rendering this method ineffective without proper controls.

4.4 ACTIVITY HAZARD ANALYSIS

Below is a list of Activity Hazards Analyses (AHAs) for the hazards identified in Section 4.1, and all aspects of the work.

Field Activities. Many different types of activities occur in the field from excavations, demolition, restoration, subsurface utility surveys, soil sampling, and monitoring. A variety of hazards could be incurred with each activity such as biological, slip/trips/falls, lightning and lacerations. An activity hazard analysis is required for each different field activity to identify the hazards and controls. Personnel shall stop field activities and seek shelter when lightning is present. When the lightning has subsided for 20 minutes, work activities can resume.

Field Visit. When a field visit occurs, it may be before any field activities are taking place. However, there may still be hazards present such as walking or driving in fields with uneven terrain, poisonous vegetation, etc. Although personal protective equipment such as a hard hat and safety glasses may not be needed, sturdy work boots, long pants, long sleeve shirts and sunscreen may be necessary.

Heavy Equipment Operation. Parsons subcontractors will be operating heavy equipment. Subcontractors' safety plans will address and evaluate the use of heavy equipment in operations such as site clearing, grading, excavation or lifting. Controls should include equipment alarms, use of qualified operators, equipment inspections, and any specific OSHA regulatory requirements.

Decontamination of Equipment. Decontamination procedures are necessary for the removal action conducted at each property. As a result, these procedures are summarized below:

- Prior to loading excavated materials into trucks, plastic sheeting will be placed on the ground or asphalt such that any spilled material will be prevented from contacting the ground surface. Upon completion of loading, any debris will be placed in the appropriate container for proper disposal and the plastic sheeting will be folded and disposed of daily.

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- All equipment wheels/tires will be cleaned over plastic sheeting by means of shovels and stiff-bristled brooms or brushes until they are fully cleaned. Upon completion of cleaning, any debris will be placed in the appropriate container for proper disposal and the plastic sheeting will be folded and disposed.
- HEPA hardscape areas where residual impacts may be present after removal actions have been implemented.
- Personal Protective Equipment, such as gloves, will be removed and discarded in the contamination reduction zone. To decontaminate reusable items such as work boots, a two-stage decontamination process will be used during remediation. This process will include washing in a detergent solution with a stiff-bristled brush and rinsing with clean water. The rinsate water will be distributed over contaminated soil (to be exported) for dust control purposes. Due to the low disturbance nature during soil sampling activities, boots decontamination stations are not anticipated during soil sampling.
- Decontamination of sampling equipment will be conducted using 5-gallon buckets. One wash bucket with a deionized water and alconox solution, and one rinse bucket with deionized water. Sampling equipment will be dried after decontamination and prior to use.
- The decontamination containers will be clearly marked, identifying the wash and rinse containers to be used. Rinse water will be applied to materials that will be off-loaded for disposal only and will not be applied to any of the open excavations to avoid potential cross-contamination.

Material Handling. Consider the size and weight of loads, the equipment to be used, how the equipment is set up and protected, and safety and maintenance inspections of material handling and rigging equipment. Also consider employee training in the use of the equipment or personal body mechanics when engaged in manual material handling activities.

Material Storage. Consider where materials and equipment will be stored on site. Implement measures to protect against chemical spills/releases, fire, vandalism and theft of tools, equipment, or materials. Also consider the hazards that may exist for workers when they are storing or retrieving those materials.

Mobilization/Demobilization. Conduct an initial site inspection for pre-job planning. The inspection should cover potential exposures such as the location of electrical lines, underground utilities, nearby structures, traffic conditions, site security needs, public exposures general liability, and other potential exposures.

Portable Hand and Power Tools. Evaluate the tools to be used and the ways that workers are protected from the hazards associated with the use of tools. Consider tool maintenance requirements; electrical requirements; the use of ground fault circuit interrupters, grounding, extension cords, and tool inspection procedures; and employee training and PPE requirements.

Traffic Controls. 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.

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Vehicle traffic around the excavation and sampling properties is expected to be moderate. Extreme caution will be exercised while staging the vehicles, and/or entering and exiting the work area to ensure safe and uninterrupted traffic flow. During soil hauling periods, traffic into and out of the area will be planned to minimize impact to traffic flow. Entrance into and departure from the work sites by trucks will be facilitated by flagmen (as necessary), with due consideration for the traffic hazards associated with nearby businesses and pedestrian traffic in the remediation area.

Excavated material will be transported via surface streets (following the DTSC-approved Transportation Plan) directly to the off-site disposal facility. Backfill will be transported directly to the residential property, also following the Transportation Plan provided in the Workplan.

Construction vehicular traffic will be controlled to make sure activities are performed safely and efficiently. Site workers will remain cognizant of the nature of this work within residential neighborhoods and perform work in a safe manner. Speed limits will be established and implemented by signs and flagmen, as necessary, to minimize dust generation and maintain a safe environment for workers and local residents, including children. All trucks hauling excavated or backfill soil will be tarped during transportation.

Vehicle Operation. 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.

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4.5 AUDITS AND INSPECTIONS

The scope of the project's inspection, self-assessment, and audit protocols includes all site and facility locations controlled by the project, including sites and facilities not typically occupied, such as material and equipment storage areas, as-needed fabrication areas, and parking areas. In addition, these protocols include the physical site, grounds, and outdoor environmental infrastructure controlled by the project. Contractor-controlled worksites and operations are included.

SH&E Inspections

An SH&E inspection is an in-person, on-site verification (by direct observation) that work is being performed, and equipment and infrastructure is being used and maintained, in accordance with the risk register, and in accordance with associated SH&E policies, procedures, regulations, laws, and best practices.

The findings of SH&E inspections and associated non-conformances arising out of the inspections shall be documented, and non-conformances shall be resolved as soon as practical.

Routine SH&E Inspections

The following daily and start-of-shift SH&E inspections shall be conducted and documented by each supervisor (or knowledgeable person) prior to conducting work.

Focused SH&E Inspections

Focused SH&E inspections shall be conducted by the Project Manager and other designated knowledgeable people in accordance with the following schedule. This schedule includes contractor worksites and operations over which Parsons has contractual authority.

- Weekly PM-led focused SH&E inspection, along with other focused programmatic inspections such as excavations, ladder use, powered industrial trucks, ergonomics, etc.

SH&E compliance inspections shall be conducted in accordance with the following schedule. This schedule includes contractor worksites and operations over which Parsons has contractual authority.

- One semiannual SH&E compliance inspection led by a project SH&E representative (for projects with a staffed duration lasting 6 months or more with five or more full-time employees, or with 25 or more contractor workers at any field site), along with other SH&E compliance inspections as required by the project's legal obligations described in the risk register and the legal compliance register.

ESHARP Self-assessments

An ESHARP self-assessment is a snapshot of how well the project is conforming to the principles in the ESHARP Guidebook. The Project Manager shall complete an ESHARP self-assessment in Industry Safe once each quarter for projects with a staffed duration lasting 6 months or more, with five or more full-time employees (or 25 or more contractor workers) at a field site.

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SH&E Audits

An SH&E audit is an internal review of the project's SH&E management systems, including the SH&E management systems of contractors and lower-tier contractors performing project field activities.

SH&E audits shall be conducted in accordance with the following schedule. This schedule includes contractor SH&E management systems associated with work over which Parsons has contractual authority.

One semiannual SH&E audit led by a qualified SH&E auditor appointed by the BU SH&E Director (or delegate) for projects with a staffed duration lasting 6 months or more with five or more full-time employees, or with 25 or more contractor workers at any field site.

4.6 SH&E Enforcement And Discipline

The Project Manager has established a fair and consistent project policy for the disciplinary process related to employees and project stakeholders who are unable to abide by the project's SH&E expectations. In general, Parsons employees and contractor workers who intentionally create or contribute to situations that are immediately dangerous to life, health, the environment, or the security of the project are subject to immediate termination. The Project Manager, and the project's assigned Talent Management professionals, shall ensure that enforcement and discipline matters are handled fairly and fully consistently with applicable contracts, collective bargaining agreements, local, regional, and national laws and regulations, and the Parsons SH&E core value.

Continual improvement is an essential aspect of Parsons SH&E core value. The Project Manager, supervisors, and project stakeholders shall identify and immediately address unacceptable actions and behaviors. All members of the project team shall be on the lookout continually for any conditions, actions, or behaviors that increases the risk of injury, illness, property damage, or environmental insult. The first step to addressing at-risk conditions, actions, and behaviors is through personal communication, coaching, or mentoring.

Parsons and its subcontractors enforce all applicable SH&E requirements of regional, federal, municipal, state, local, and all other regulations; and OSHA 1910 and 1926 and Engineering Manual (EM) 385.1, where applicable. Subcontractors must also comply with and enforce Parsons Site requirements.

Contractors must have written progressive disciplinary systems available for review in their Human Resources departments.

Notice of Violation of Safety and Health Regulations

A Notice of Subcontractor Violation of SH&E Regulations form (see Appendix) will be used to document immediately dangerous to life and health (IDLH) situation, respiratory airborne hazards (RDLH), and/or when the subcontractor repeatedly fails to comply with SH&E requirements.

The Notice of Subcontractors Noncompliance to SH&E Regulations form documents poor performance and requires a response from subcontractor senior management. The notice contains five distinct levels of discipline, from submission of a recovery plan to contract termination.

Substance Abuse Identification and Testing

Parsons is committed to providing a drug-free and healthful work environment. In collaboration with the Talent Management professionals assigned to the project, the Project Manager has established a fair and reliable substance abuse and identification and testing program.

Without exception, employees, contractor workers, and other project stakeholders shall be fit for duty while conducting work on behalf of Parsons, while on Parsons worksites, and while driving.

The Talent Management Department administers required substance abuse tests in accordance with the Parsons Substance Abuse Policy, the CVX Controlled Substance and Alcohol Procedure and the CVX Drug, Alcohol, and Search Policy – Notice to Supplier Employees (Appendix G). The CVX Controlled Substance and Alcohol Procedure requires the following types of controlled substances and/or alcohol testing:

- Pre-Work
- For-Cause
- Post-Incident - Personnel involved in an accident (e.g. serious injury incident, significant release, and/or serious near-miss) may also be required to submit to testing for controlled substances and/or alcohol.

Parsons project personnel involved in a motor vehicle accident while operating a company vehicle are required to submit to testing for controlled substances and/or alcohol within two hours of the accident.

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4.7 SH&E MEETINGS

Risk communication and planning meetings routinely shall take place on the project. All project meetings that include five or more people must begin with a SH&E moment. The meeting chairperson may present the SH&E topic or ask for a volunteer to open the discussion. In general, these "SH&E moments" are brief, perhaps a minute or two, and should be directly relevant to the work of the day or applicable to most employees (e.g., nonwork-related injuries, waste management procedures, effects of stormwater discharges, home exposure to hazardous materials).

This section of the PSHEP describes these meetings, their structure, their participants, their expected frequency, and whether or not they are to be documented. If these meetings are to be documented, then this section of the PSHEP also describes what is documented and where these documented meeting records are maintained.

Other meetings beyond these listed may be needed to help ensure that project risks are communicated, and risk controls are planned adequately.

- Stakeholder SH&E Alignment Meetings
    - Involves relevant members of the project staff and stakeholders to introduce Parsons SH&E expectations to new contractors or other stakeholders performing work on the project
    - These meetings shall be formally documented, with names of attendees, the agenda, meeting minutes, and actions items coming from the meeting. Action items shall be tracked to resolution.
    - All meeting documents for this program will be maintained at Parsons office in Pasadena, CA.
- Project Kickoff and Premobilization Meetings (PM, staff, line supervisors, stakeholders)
    - Establishes initial site conditions, verifies field office and site infrastructure availability, verifies initial supplies, tools, and equipment are available, reinforces work initiation and SH&E expectations among stakeholders
    - Confirms that necessary work instructions, activity hazard analyses, SH&E programs, and SH&E training and qualifications have been completed and have been communicated to the affected personnel
    - Unresolved PSHEP implementation tasks shall be identified and a path to their resolution shall be agreed to
    - These meetings shall be formally documented, with names of attendees, the agenda, meeting minutes, and actions items coming from the meeting. Action items shall be tracked to resolution.
    - All meeting documents for this program will be maintained at Parsons office located in Pasadena, CA.
- 2-week Look-ahead Meetings (PM, staff, line supervisors)
    - Involves relevant members of the project staff and stakeholders to plan the work over the next 2 or more weeks to ensure adequate SH&E planning is built into the schedule and that the planned risk controls are still valid and consistent with the risk register

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- These meetings shall be formally documented, with names of attendees, the agenda, meeting minutes, and actions items coming from the meeting. Action items shall be tracked to resolution.
- The meeting notes will be maintained in the field office for the project and transferred to Parsons office in Pasadena, CA after the project is complete

- Daily / Pre-task Briefings (line employees and line supervisors)
  - Conducted by line employees and line supervisors prior to beginning any task
  - Involves the use of an activity hazard analysis or other job-specific risk assessment
  - These meeting should involve stretching and exercise.
  - These meetings will be documented on a daily tailgate meeting form to be maintained at each project site in either hard copy or on the iPad to be utilized to track the project
- Work Pause / "Take 5" Briefings (line employees and line supervisors)
  - Conducted by line employees and line supervisors when something occurs that was not planned and requires a brief reassessment of the work to continue
  - Involves the use of an activity hazard analysis or other job-specific risk assessment process, with modifications applied as necessary to account for the unplanned event
  - These meetings will be documented on a field form and in a log book as necessary to be maintained at each project site in either hard copy or on the iPad to be utilized to track the project
- Stop Work Meetings (line employees, line supervisors, PM/staff)
  - Conducted by any employee who notices an unsafe condition, act, or behavior that precludes continuing the work as planned.
  - Involves the use of an activity hazard analysis or other job-specific risk assessment process, with modifications applied as necessary to account for the unplanned event
  - May involve a lengthy work stoppage and invoke other reporting requirements to ensure the work is ready to resume
  - These meetings shall be formally documented, with names of attendees, the agenda, meeting minutes, and actions items coming from the meeting. Action items shall be tracked to resolution.
  - These meetings will be documented on a field form and in a log book as necessary to be maintained at each project site in either hard copy or on the iPad to be utilized to track the project.
- Toolbox Talks (PM, staff, line supervisors, stakeholders, line employees)
  - Conducted by stakeholders and employees regularly
  - Involves the preparation of a briefing on a SH&E topic relevant to the work group
  - These meetings will be documented on a daily tailgate meeting form to be maintained at each project site in either hard copy or on the iPad to be utilized to track the project
- All Hands Meetings (all employees and stakeholders)

- Involves everyone on the project. The PM typically leads these meetings to encourage the project team, to recognize and reward outstanding employees and stakeholders, and to ensure the Parsons SH&E core value is expressed.
- These meetings shall be formally documented, with names of attendees, the agenda, meeting minutes, and actions items coming from the meeting. Action items shall be tracked to resolution.
- All Hands Meeting documents for this program will be maintained at Parsons office in Pasadena, CA.

- Other Meetings
  - Meetings with building trades councils, unions, guilds, and collective bargaining units
  - Meetings with SH&E regulators
  - These meetings shall be formally documented, with names of attendees, the agenda, meeting minutes, and actions items coming from the meeting. Action items shall be tracked to resolution.
  - All Other Meeting documents for this program will be maintained at Parsons office in Pasadena, CA.

4.8 REWARDS AND RECOGNITION

Each project with a duration of at least 6 months must follow the Rewards and Recognition Procedure for developing a "Rewards and Recognition" program to foster continuous improvement in SH&E performance. If a project is less than 6 months in duration, then the project can choose to fall under the "Rewards and Recognition" Program for the Parsons' office responsible for the project.

Parsons Corporate Safety Rewards and Recognition Policy recognizes Parsons' employees and project teams who make a performance contribution to Parsons SH&E. This policy recognizes achievements or accomplishments that contribute to the overall SH&E objectives of the company.

This policy outlines acceptable methods of rewards and recognition and provides sample plans that focus on leading indicators rather than lagging indicators. Projects and programs are encouraged to reward their teams and individual employees with items from the Parsons Online Safety Products Store and are encouraged to base incentives on leading SH&E indicators.

Examples of leading indicators or actions to reward and recognize are as follows:

- Participating in or leading a safety meeting.
- Providing suggestions for improving workplace SH&E.
- Serving on a SH&E committee.
- Creating or revising an activity hazard analysis (AHA) worksheet.
- Actively reporting near misses, positive interventions or taking other proactive actions for safety

Celebrations of achievements at a project or office level are still important. Project luncheons at milestone achievements are encouraged and are the appropriate place to recognize the collective achievements of working without incident.

4.9 EMERGENCIES AND EMERGENCY MANAGEMENT

To report any emergency by phone, dial 911, and be prepared to describe the emergency and its location. In the State of California, when dialing 911 from a mobile phone, the call goes directly to the California Highway Patrol. The caller needs to ensure that they know the City in which the work is located so that the CHP can transfer the call to the appropriate local authorities (Police, Fire, Paramedics, etc.). The project shall display posters and stickers with the proper emergency number near phones and in common areas.

For non-emergencies, the following Urgent Care Centers/Hospitals have been identified in case of non-life-threatening emergencies:

Urgent Care Centers

US HealthWorks Medical Group PC
Occupational/Industrial Medicine
Urgent Care Center/Walk-In
3851 S Soto St
Vernon, CA 90058
323-585-7162

Hospital

White Memorial Medical Center
Hospital - General
1720 E Cesar E Chavez Ave
Los Angeles, CA 90033
323-268-5000

Each project stakeholder shall be familiar with the kinds of alarms on their project site and know how to effectively respond when an alarm sounds or when an emergency order is given. In addition, project workers shall be familiar with, and participate in, worker accountability protocols. Project-specific emergency response roles and responsibilities, and worker accountability protocols are described in the site-specific emergency action plan.

The project has a business continuity plan that will be followed when an emergency occurs. Project workers shall understand their roles in helping to ensure the continuity of critical operations and services during and after an emergency.

SECTION 5 – INCIDENT REPORTING, INVESTIGATION, AND MANAGEMENT

5.1 INCIDENT REPORTING

An incident that triggers Parsons' incident reporting, investigation, and management process is any of the following.

- An injury of any significance is sustained by anyone on a Parsons-controlled or Parsons-managed worksite.
- An injury of any significance is sustained by any Parsons employee while the employee is in a travel status in support of Parsons business.

- An illness of any significance is sustained by anyone and manifests its signs or symptoms on a Parsons-controlled or Parsons-managed worksite.
- An illness of any significance is sustained by any Parsons employee and manifests its signs or symptoms while the employee is in a travel status in support of Parsons business.
- An injury or illness of any significance is sustained by anyone and is related to Parsons-controlled or Parsons-managed work activities.
- An unplanned, unauthorized, or non-permitted release of a hazardous substance or spill of soil, when loading end dumps, or a release of an environmentally significant substance occurs on a Parsons-controlled or Parsons-managed worksite, irrespective of whether the release meets any threshold for regulatory reporting.
- A hazardous substance release on a Parsons-controlled or Parsons-managed worksite exceeds an environmental permit requirement or a regulatory threshold.
- An unplanned release of a hazardous substance or other environmentally significant substance occurs anywhere and affects Parsons-controlled or Parsons-managed work activities.
- An unplanned security or law enforcement event of any significance occurs on a Parsons-controlled or Parsons-managed worksite.
- An unplanned security or law enforcement event occurs that directly affects a Parsons employee while the employee is in a travel status in support of Parsons business.
- An unplanned event involving property damage occurs on a Parsons-controlled or Parsons-managed worksite.
- A motor vehicle-related event of any significance occurs involving vehicle or facility damage on a Parsons-controlled or Parsons-managed worksite, or in support of Parsons work.
- A motor vehicle-related event of any significance occurs involving vehicle or facility damage and involving a Parsons employee, while the Parsons employee is in a travel status in support of Parsons business.
- An unplanned event occurs on a Parsons-controlled or Parsons-managed worksite that could have caused an injury, an illness, environmental damage, or property damage, but did not because of the intervention of random or fortunate circumstances and conditions. These types of incidents also are called near misses, near hits, and close calls.

When a person detects an incident, the person shall immediately implement the following incident reporting process.

Step 1: Does the person perceive that the incident is an emergency?

- Yes: Stop work, summon the appropriate emergency services, activate an alarm, or direct, by name, a nearby person to summon emergency assistance. Render first aid or other emergency assistance, as appropriate. Follow the site-specific Hazard Communication.
- Plan to respond to the emergency. Follow the instructions of qualified emergency responders. Proceed to Step 2.
- No: Proceed to Step 2.

Step 2: Report the incident to Project Manager: Jeff Muller, (626)460-9375

Step 3: Report the incident to Project SH&E Representative: Darrell Pruitt, (812) 605-2108

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Step 4: Does the incident involve a work-related injury or illness?

- Yes: Did a Parsons employee working in the United States or Canada sustain the injury or illness?
- Yes: The affected employee, supervisor, or project SH&E representative shall call WorkCare at 888-449-7787 when first aid beyond simple or obvious self-care may be needed. For example, WorkCare shall be called for work-related muscle strains, sprains, possible fractures, lacerations or punctures, head injuries, eye injuries, joint injuries, or concerns related to ill health. Proceed to Step 5.
- No: Proceed to Step 5.
- No: Proceed to Step 5.

Step 5: Cooperate with any related investigations or reviews.

The Project Manager (or delegate) shall make an initial report of the incident to the BU SH&E Director (or delegate) and to other members of the Parsons leadership team, as required by the project's organization. Further investigation may be necessary.

For significant work-related injuries, illnesses, environmental incidents, security incidents, or property damage incidents, the PM (or delegate) shall make the above initial incident report telephonically and immediately. This immediate initial incident report is essential as Parsons may have to report the significant incident to one or more regulatory authorities within a few hours of the occurrence of the incident. Examples of significant incidents are those that involve:

- One or more fatalities;
- One or more injuries or illnesses requiring a worker to be treated in an emergency room or requiring in-patient hospitalization;
- An injury to a visitor or member of the public;
- An event that may present adverse media press to Parsons or the project;
- A release of a substance requiring a report to a governmental regulator;
- A criminal injury;
- A law enforcement arrest; or,
- Property loss or damage exceeding an initial estimate of USD $50,000.

After the immediate telephonic notification (for significant incidents), or after determining that an immediate telephonic report is unnecessary (for all other incidents), the PM (or delegate) shall create and submit the initial report of the incident in IndustrySafe within 4 hours of the occurrence of the incident, or as soon as practical.

All project team members, including those directly affected by the incident, shall cooperate fully with any related incident investigations and management system process reviews.

All accidents/incidents/near misses will be reported immediately to the project management team. A draft report will be submitted within 24 hours of accident/incident/near miss happening. The final report will be submitted within 48 hours of the accident/incident/near miss happening. This will also apply to all subcontractors working on this project.

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5.2 INCIDENT INVESTIGATION

The Project Manager shall ensure that significant incidents (including significant near misses) are formally investigated. Incident investigations seek facts, not fault. The result of a properly conducted incident investigation is thoughtful identification of root causes of the incident and effective corrective actions and recommendations to prevent similar incidents from recurring. Incident summaries and any documents associated with incident investigations shall be submitted and retained within the IndustrySafe record associated with the incident.

The investigation process starts as soon as the initial report of the investigation is submitted. The Project Manager (or delegate) shall lead the investigation and shall seek assistance from the project SH&E representative or BU SH&E Director (or delegate) for subject matter expertise and investigation support. Depending on the incident's complexity and consequences (or potential consequences), the BU SH&E Director may commission a corporate investigation team to work collaboratively with the Project Manager's investigation process. A formal incident investigation report with corrective actions and accountability assignments shall be distributed to the appropriate members of the project team and Parsons leadership team and submitted in IndustrySafe as a part of the IndustrySafe record of the incident.

After the investigation report is submitted, the Project Manager shall ensure that the project team is aware of any findings, lessons learned, and the status of the corrective actions identified in the incident investigation report. In addition, the Project Manager shall prepare for an Executive Incident Review to formally involve the Parsons executive leadership team.

5.3 INCIDENT MANAGEMENT

For an incident involving a Parsons employee who sustained a work-related injury or illness, the Project Manager shall designate a project team member or a Parsons workers' compensation specialist to communicate with the affected worker to collaborate with his or her care and treatment and to help ensure that the medical providers understand the employee's job roles and opportunities for the employee to engage in alternative work. Parsons' objective is to ensure our employees receive the right care as soon as possible and are able to return to work with maximum medical improvement. The Project Manager shall make an effort to communicate with the affected employee as soon as practical to ensure the employee knows Parsons and the project team are concerned with the employee's health and welfare.

If care at a clinic or hospital for an injured Parsons employee is required, the forms in the Workers' Compensation section should be provided directly to the care provider, as related to treatment and workers' compensation billing.

If an injured or ill employee is out of work, is restricted from his or her usual work-related activities, or is transferred to an alternative work role, the Project Manager (or delegate) shall routinely communicate with the affected employee, the designated Parsons workers' compensation specialist, and the project SH&E representative to see how the employee is progressing, to ensure the employee knows Parsons and the project team remain concerned with the employee's continuing health and welfare, and to receive an update on the employee's return-to-work status. The Project Manager (or delegate) shall then update the employee's return-to-work status (and any other details) within the IndustrySafe record associated with the incident.

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The Project Manager shall require direct contractors on the project team to submit routine status reports related to their workers who have sustained work-related injuries or illnesses while performing Parsons work on Parsons-controlled or Parsons-managed worksites. These status reports, at a minimum, shall describe the current condition of the injured or ill worker (until the worker has reached maximum medical improvement) and the worker's return-to-work status. The Project Manager (or delegate) shall then update the worker's return-to-work status (and any other details) within the IndustrySafe record associated with the incident.

SECTION 6 – MEDICAL MONITORING AND WORKER'S COMPENSATION

6.1 WORKERS' COMPENSATION

Donna Miller (donna.miller@Parsons.com; 661-904-0978) is the Parsons point of contact for this project for all workers' compensation matters. When an employee is injured or made ill as a result of work-related activities, it is essential that we abide by local workers' compensation laws and regulations.

In the event of a work-related injury/illness in the State of California, Parsons may not direct an injured worker's medical care. The injured worker may undeniably select a medical provider. However, in the event an employee is not familiar with a provider or prefers otherwise, Parsons may suggest she/he see a medical provider from our network.

The scope of the project's inspection, self-assessment, and audit protocols includes all site and facility locations controlled by the project, including sites and facilities not typically occupied, such as material and equipment storage areas, as-needed fabrication areas, and parking areas. In addition, these protocols include the physical site, grounds, and outdoor environmental infrastructure controlled by the project. Contractor-controlled worksites and operations are included.

6.2 MEDICAL MONITORING

All personnel engaged in activities that have the potential for exposure to chemicals at or above the OSHA Permissible Exposure Limit (PEL) or wear a respirator for more than 30 days in a year, must comply with 29 CFR 1910.120(f) – Medical Surveillance. All personnel who wear a respirator must be medically qualified by a physician, trained, and fit-tested on an annual basis.

The potential for lead exposure exceeding the PEL is low for Parsons personnel performing field work on this project. The Construction Manager and each of the Site Managers will travel among each of the properties observing and documenting cleanup activities. During this task, they will follow the PSHEP, wear Level D PPE (without respirators), enter each of the properties for only brief periods, and implement decontamination procedures before leaving each property. Note: Regardless of the medical monitoring requirements of Cal-OSHA and the results of personnel monitoring, all PARSONS employees assigned to conduct field operations will receive a baseline Blood lead and Zinc Protoporphyrin levels exam prior to starting work on the project. At the time of termination from their activities on the project employees may receive a similar exam.

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Parsons will utilize the services of WorkCare to manage all aspects of the corporation's medical surveillance program as required. Biennial physicals (every two years) are completed at a local Occupational Health Clinic and WorkCare reviews, distributes (as appropriate), and archives the employees' medical information.

Employees working on asbestos abatement, that requires respirator use, will participate in a *yearly* physical program.

Site visitors (i.e. persons not performing actual work beyond site reconnaissance) are not required to participate in the medical surveillance program. If applicable, proof of participation in the medical surveillance program will be provided for each field team member to the Project SH&E Manager prior to that individual's performing fieldwork. Documentation will be provided by the medical surveillance facility including at a minimum, a statement that the employee is approved for unrestricted work and is able to use all forms of PPE.

The Division or Program SH&E Manager administers the medical surveillance program.

6.3 INDUSTRIAL HYGIENE MONITORING

The following assignments, roles, tasks, operations, or worksites may require baseline, initial, routine, or continual industrial hygiene monitoring. At each property, one site person directly involved in the removal of lead-impacted soils (a member of the subcontractor field crew) will be wearing a personal air sampling device to assess the potential exposure to lead in dust. However, with appropriate PPE and decontamination procedures, the potential for exposure is limited. The person closest to the potential exposure, i.e. the spotter for the excavator or those hand digging impacted materials will be tested. The sampling records are those of the contractor and results must be shared with those employees that are potentially affected. Industrial Hygiene Monitoring will be the responsibility of the contractor for its employees. As such, Parsons will not perform IH monitoring for any of its subcontractors and vice versa. Written results will be provided to the employee as required by law. It will be the responsibility of the contractors certified industrial hygienist (CIH) to convey the information to the employee and provide affected workers with appropriate measures to protect themselves.

Industrial hygiene monitoring results are maintained at the offices of the contractor, and for Parsons employees at Parsons office located at 100 W. Walnut Street, Pasadena, CA. Copies of industrial hygiene monitoring results may be obtained by contacting the appropriate SH&E Representative for the respective company.

SECTION 7 – RECORD KEEPING AND POSTING

Parsons and its subcontractors must comply with the recordkeeping requirements of the regional, municipal, local, and/or OSHA regulations, Owner, Parsons Corporation, and this PSHEP, including, but not limited, to:

- OSHA logs
- Training
- Air Monitoring Data
- Inspection/Audits

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SH&E Performance Measurement

No more than three business days after the close of the monthly reporting period, the Project Manager (or delegate) shall report the following information through the project's organizational chain of command and to the BU SH&E Director (or delegate).

Leading Indicators of SH&E Performance

- Number of focused SH&E inspections performed and documented
- Number of SH&E compliance inspections performed and documented
- Number of near misses reported and investigated
- Number of SH&E-related rewards and recognitions dispensed among project stakeholders
- Number of direct contractors not used due to SH&E disqualification

Trailing (Lagging) Indicators of SH&E Performance (Parsons Employees)

- Number of hours worked on the project by Parsons employees
- Number of Parsons employee injuries or illnesses leading to lost time
- Number of Parsons employee injuries or illnesses leading to restricted duty or transfer
- Total number of all Parsons employee recordable injuries or illnesses

Trailing (Lagging) Indicators of SH&E Performance (Direct Contractors)

- Number of hours worked on the project by all direct contractor employees
- Number of direct contractor worker injuries or illnesses leading to lost time
- Number of direct contractor worker injuries or illnesses leading to restricted duty or transfer
- Total number of direct contractor worker recordable injuries or illnesses

SECTION 8 – SAFETY AND HEALTH REQUIREMENTS

8.1 COMPETENT PERSON AND ACTIVITY HAZARDS ANALYSIS

Parsons and its subcontractors are individually responsible for training their respective employees and for complying with all project requirements. Failure to comply could lead to disciplinary actions against Parsons employees and subcontractors or their employees. Further guidance is available on the Parsons Corporate policy center under our safety procedures;

Competent Person forms will be submitted for subcontractor personnel for applicable Safety and Health Requirements in Exhibit 8-1.

- Exhibit 8-1 – Competent Person and Activity Hazards Analysis Requirements

Safety and Health Requirement	Parsons Safety, Health, and Environmental Manual	OSHA Regulation	EM 385-1-1 Regulation	Competent/ Qualified Person	Training Required	Written Plan and AHA Required
General Safety and Health		1926.20	01.A	*Yes*	*Yes*	*Yes*
Safety Training		1926.21	01.B.01	*Yes*	*Yes*	*Yes*
Housekeeping		1926.25	14.C	*N/A*	*N/A*	*N/A*
Personal Protective Equipment		1926.28, 95-98, 100-107	05.A	*Yes*	*Yes*	*Yes*
Acceptable Certifications		1926.29		*Yes*	*Yes*	*Yes*
Incorporation by Reference		1926.31	Preamble	*N/A*	*N/A*	*N/A*
Emergency Employee Action Plans		1926.35	01.E	*Recommended*	*Yes*	*Yes*
Noise Exposure		1926.52	05.C	*Yes*	*Yes*	*Yes*
Gases, Vapors, Dusts and Mists		1926.1926.55		*Yes*	*Yes*	*Yes*

- Exhibit 8-1 – Competent Person and Activity Hazards Analysis Requirements (Cont'd)

Safety and Health Requirement	Parsons Safety, Health, and Environmental Manual	OSHA Regulation	EM 385-1-1 Regulation	Competent/ Qualified Person	Training Required	Written Plan and AHA Required
Hazardous Waste Operations and Emergency Response		1926.65 1910.120	28.A	*Yes*	*Yes*	*Yes*
Accident Prevention Signs and Tags		1926.200	08.A	*N/A*	*N/A*	*N/A*
Material Storage		1926.250	14.B	*N/A*	*Yes*	*Yes*
Waste Disposal		1926.252	14.D	*Yes*	*Yes*	*Yes*
Tools		1926.300-307	13.A	*N/A*	*N/A*	*Yes*
Motor Vehicles, Mechanized Equipment		1926.600-603	18.A	*Yes*	*Yes*	*Yes*
Site Clearing		1926.604	31.A	*N/A*	*Yes*	*Yes*
Excavations		1926.650-652	25.A	*Yes*	*Yes*	*Yes*

- Exhibit 8-1 – Competent Person and Activity Hazards Analysis Requirements (Cont'd)

Safety and Health Requirement	Parsons Safety, Health, and Environmental Manual	OSHA Regulation	EM 385-1-1 Regulation	Competent/ Qualified Person	Training Required	Written Plan and AHA Required
Excavation Permit		N/A	N/A	*Yes*	*Yes*	*Yes*
Demolition		1926.850-860 inclusive	23.A	*Yes*	*Yes*	*Yes*

8.2 ENVIRONMENTAL HAZARDS

8.2.1 Heat Related Illness

Overview and Objectives

This Heat Illness Prevention Plan (HIPP) applies to employees of Parsons Corporation, who work in outdoor areas of employment or on job tasks where the environmental risk factors for heat illness are present and are at risk for developing heat illnesses if they do not protect themselves appropriately. Based on the California Code of Regulations, Title 8 Section 3395, this standard applies to all outdoor places of employment, with the following industries being subject to all provisions of the standard:

- Construction

Scope

The Parsons Corporation HIPP includes steps for ensuring drinking water is provided in sufficient amounts, temperatures and humidity conditions are monitored, shade is available as required by the law, high heat procedures are followed, employee training is in place, emergency response procedures are documented, acclimatization of employees is accounted for, and auditing processes are incorporated to strengthen the plan's success.

Policy

It is the policy of Parsons Corporation that any employee participating in job tasks where environmental risk factors for heat illness are present will comply with the procedures in this document and in the Injury and Illness Prevention Program. A copy of this Heat Illness Prevention Plan will be made available at each job site in both English and the language understood by the majority of employees.

Water

Parsons Corporation will provide fresh, pure and suitable cool water, free of charge, as close as practicable to areas where employees are located. Supervisors will visually examine the water to ensure purity and check that it is adequately cool by pouring some on their skin.

When employees are working in large areas water will be placed in several locations. Parsons Corporation will also place water in designated shade areas and near restrooms.

Parsons Corporation will ensure that 1 quart of water per person per hour is available at the start of the shift and will have a water replenishment system (including designated responsibility) in place.

Parsons Corporation encourages employees to drink water frequently and to report low water levels, as well as warm or dirty water containers, to supervisors.

Procedures For Monitoring The Weather

Supervisors will be trained and instructed to check in advance the extended weather forecast. Weather forecasts can be checked with the aid of the internet (http://www.nws.noaa.gov/), by calling the National Weather Service phone numbers (see CA numbers below), or by checking the Weather Channel TV Network. The work schedule will be planned in advance, taking into consideration whether high temperatures or a heat wave is expected. Routine advance weather monitoring will take place between the months of May and September; with additional advance monitoring conducted as needed during the remainder of the year.

In addition to advance weather monitoring, supervisors shall utilize one of the aforementioned weather services to review the day's forecasted temperature and humidity level prior to the start of work. Temperature and humidity levels will also be monitored on the work site throughout the day and compared to the National Weather Service Heat Index to evaluate the risk level for heat illness and determine when precautionary heat illness prevention measures should be taken. Temperature will be monitored by means of dry bulb thermometer in degrees Fahrenheit. Temperature measurements will be taken in work areas where shade is not present.

Shade

Parsons Corporation will provide shade when the temperature exceeds 80 degrees Fahrenheit. Shade areas will be open to the air or provided with ventilation or cooling. Enough shade will be provided to accommodate the number of employees on break or recovery period at any given time.

Parsons Corporation will ensure that employees in shaded areas can sit in a normal posture fully in the shade without having contact with one another. The shade shall be located as close as practicable to the work area. During meal periods, the amount of shade available shall be enough to accommodate the number of employees on meal break and those seeking cool-down rest periods.

Parsons Corporation will encourage employees to take a preventive cool-down rest in the shade when they feel the need to protect themselves from overheating.

Employees taking cool-down breaks will be monitored and asked if they are experiencing symptoms of heat illness and will be encouraged to remain in the shade until any signs or symptoms have abated. Employees will be given no less than 5 minutes to rest in the shade, in addition to time needed to access the shade.

Parsons Corporation policy will be that any employee who exhibits signs or reports symptoms of heat illness while taking a preventive cool-down rest shall be provided with appropriate first aide or emergency response.

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Note: A pop-up canopy will be placed at each property in the support zone. This will provide all day shade and/or a resting area if a laborer needs shade or a place to rest. In addition, this will allow for easy distinction between the support zone and the exclusion zone for all unauthorized visitors.

High Heat Procedures

Parsons Corporation will implement the following high heat procedures when the temperature equals or exceeds 95 degrees Fahrenheit.

- A supervisor, or a qualified designee, shall directly observe employees, for signs and symptoms of heat illness. Each supervisor, or qualified designee, shall be responsible for observing no more than 20 employees.
- If impractical to directly observe employees, a mandatory buddy system shall be implemented or;
- Regular communication with employees working solo shall be implemented by either radio or cellular phone or;
- Other effective observation such as periodic checks.
- Employees shall be observed for symptoms of heat illness and will be reminded throughout the work shift to drink plenty of water.
- Parsons Corporation will designate 1 or more employees to call for emergency medical procedures and will allow any employees to call for emergency services when a designated person is not available.
- Parsons Corporation will closely supervise new employees for the first 14 days of employment, unless the new employee indicates at the time of hire that they have been doing similar work for at least 10 of the past 30 days, and for more than 4 hours per day.

Training

Parsons Corporation will provide training to all supervisors, and affected employees, prior to their engaging in work that could result in exposure to risk factors for heat illness. Training will include:

- An explanation of the employer's responsibility to provide shade, water, cool-down rest periods, and access to first aide, as well as the employee's right to exercise their rights without fear of retaliation.
- Environmental and personal risk factors for heat illness.
- The signs and symptoms of heat illness.
- The importance of immediately reporting signs and symptoms of heat illness – and appropriate first aide to be taken.
- Importance of frequent consumption of water.
- Importance of acclimatization.
- Parsons Corporation response plan to a case of possible heat illness.
- Supervisor and employee responsibilities.
- Supervisors will be taught procedures to follow in case of an employee reporting or displaying symptoms of heat illness.

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- Supervisors will be trained how to monitor weather reports and how to respond to hot weather advisories.

Emergency Response Procedures

All supervisors and management personnel of Parsons Corporation are required to take immediate action if an employee exhibits signs or symptoms off heat illness. Emergency response procedures will include but not be limited to the following actions:

- Ensuring that effective communication by voice, observation, or electronic means are maintained so that employees at the high temperature work site can contact a supervisor or emergency medical service when necessary.
- Cellphones, company radio, email and other electronic devices will be used for communication. If electronic devices are not reliable forms of communication, Parsons Corporation will develop alternative means of summoning emergency medical services.
- Employers and supervisors will be trained to recognize symptoms of heat stress, such as decreased level of consciousness, disorientation, irrational behavior, staggering, vomiting and convulsions; and are required to take immediate action if any employee exhibits signs of the mentioned symptoms of heat illness.
- Supervisors and employees will be taught first aide measures and how emergency services are to be provided to affected employees.
- Employees exhibiting signs or symptoms will be monitored and shall not be left alone or sent home without being first offered onsite first aide and /or being provided with emergency medical service.
- If deemed necessary, emergency medical services will be contacted, and employees will be transported to a place where they can be reached by emergency medical providers.
- In emergency events – clear and precise directions to work site will be provided to emergency responders.
- In the event that a work site is in a difficult to find location, an employee will be sent to meet emergency medical services at the nearest landmark; and lead them to the work site.

Acclimation

- New employees and employees who have not previously worked in environments where the possibility that heat illness may occur will be given an opportunity for their bodies to gradually be exposed to heat. Employees will be given an opportunity to adapt to the heat by working in the heat for at least 2 hours a day, between 4 to 14 days.
- Parsons Corporation will also monitor employees during a heat wave. “Heat wave” being defined as any day the predicted temperature is at least 80 degrees Fahrenheit and at least 10 degrees Fahrenheit higher that the average high daily temperature in the preceding 5 days. Monitoring can be done by either the supervisor or by use of the buddy system.
- Parsons Corporation will stress to new employees the importance of immediately reporting to their supervisor symptoms and signs of heat stress in themselves or in co-workers.

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Heat Illness Prevention Plan Audit

Parsons Corporation, as part of the implementation of our Injury & Illness Prevention Program, and to ensure the success of our HIPP, will conduct an audit of our written plan and documentation by Supervisors and Managers. Audits of the HIPP will be conducted annually. The audit shall review the plan to ensure that the heat illness prevention procedures continue to be effectively implemented. This will include, but is not limited to:

- Ensuring that suitably fresh and cool water is routinely provided in the required amounts.
- Ensuring sufficient shade is routinely made available.
- Verifying that the required supervisor and employee training has been completed.
- A review of the effectiveness of emergency response procedures.
- Ensuring that employees are acclimatized as required.
- Ensuring that high heat procedures are implemented when the temperature reaches 95 degrees Fahrenheit.

Additional Guidance

Cal/OSHA - http://www.dir.ca.gov/DOSH/HeatIllnessInfo.html

NIOSH - http://www.cdc.gov/niosh/topics/heatstress

8.2.2 Perimeter Dust Monitoring and Dust Control

To ensure proper compliance with South Coast Air Quality Management District, air monitoring will be performed during soil removal and placement activities to ensure that there is no fugitive dust from the impacted soils or fill materials. Real-time particulate monitors and personal air monitors (PAMs) will be used during the operations as detailed in the subsequent sections.

Particulate dust monitors measure the total dust in the air. Three particulate dust monitors will be set up daily at each property:

- One monitor will be placed downwind of the excavation area to monitor the effects of the work;
- One monitor will be placed upwind of the excavation to monitor dust coming from sources unrelated to the work; and
- A third monitor will be placed at the property's closest entryway to excavation to identify particulates near the work area.

Dust Trak model 8530 or model 8532 dust meter or equivalent aerosol monitors will be used to measure total suspended particles (TSP) in the air. These monitors measure aerosol particulates corresponding to particulate matter up to 10 microns in diameter (PM10).

Note: Equipment will be calibrated according to manufacturer's specifications.

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Monitors will be placed each day prior to soil disturbance or placement activities, and the levels relative to the area-specific action level will be reviewed hourly during the work. The action level will be the SCAQMD's standard for PM10, which is 50 µg/m3 of PM10 when determined by simultaneous sampling, as the difference between upwind and downwind samples collected. This concentration will be greater than the upwind monitor reading that measures the ambient (i.e., non- work-related) conditions. If the downwind or entryway monitor shows a level exceeding the action level, the upwind monitor will be checked to see if there is an upwind source for the increased dust level. The monitor will be checked again in 10 minutes to determine whether the level has dropped below the action level. If it has not, work will be decreased, and the dust suppression techniques will be correspondingly increased as needed to lower the dust levels below the action level. Although dust monitoring will not be conducted during a significant rain event, dust meters will be protected in place in the event of a sudden shower.

In addition to the three dust monitors described above, during disturbance of lead-impacted soils, a Gilian GilAir-5 model (or comparable) personal air monitoring (PAM) will be co-located with a dust monitor at each location during the excavation work. The PAM cassettes will be analyzed for lead content at an offsite laboratory after completion of the excavation work. The findings will be reviewed and documented. The date, start time, end time, and air flow will be recorded on the cassette for analysis.

Work proposed for this project requires disturbance of soil up to an 18-inch depth. Strict dust control measures shall be used to eliminate air transport of lead contaminated soil. To ensure proper dust control and compliance with SCAQMD Rule 1466 the following dust suppression techniques will be implemented

Dust Suppression Techniques

A rule of "no visible dust" will be applied to all aspects of the work that involve impacted soils and fill placement. This will be accomplished by implementing the following procedures to control the possible generation and migration of dust during the excavation and handling of materials:

- Apply water directly to the active excavation prior to soil disturbance. Additionally, water will be applied during the truck loading operations, as appropriate;
- Promptly apply water to excavation, loading or unloading operations upon any observance of dust;
- Control dust during operation of trucks by not allowing material to be dropped from heights above the top rail of the truck body;
- Regularly inspect all rear gate seals and locking mechanisms on material transport vehicles to prevent spillage and dust production;
- HEPA vacuum and/or wash the trucks prior to leaving the loading areas to prevent the deposition of material;
- Clean up all spilled soil material within the loading area and work areas. Following each day's construction activities, the Contractor will HEPA vacuum all areas to remove any residual soils from non-excavation areas; and
- All transport vehicles used for off-site transport of materials will be lined with polyethylene sheeting to prevent leaking. Sufficient sheeting material will be placed in the transport vehicle to allow the Contractor to cover and wrap the waste within the vehicle. The Contractor will install secured, strapped-down covers to prevent any fugitive lead dust during transport to the disposal facility.

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Parsons will also implement measures agreed upon by DTSC and SCAQMD, concerning Rule 1466. These measures are listed below:

- Place 10-mil plastic sheeting over supersacks, extend it a minimum of 24 inches over the side, and anchor it at the end of each work day, if necessary [(Rule 1466. (e)(4)(E)];
- Visually inspect all covered supersacks on a daily basis and record the inspections [(Rule 1466 (e)(4)(F)];
- On days where wind speeds exceed 25 mph or average over 15 mph for 15 minutes, cease work and immediately secure or cover excavation areas and soils in a manner that does not generate fugitive lead dust [(Rule 1466. (e)].
- Ensure that soil inside the supersack is no less than one foot below the top of the supersack [(Rule 1466. (d)(1)];
- Soil stockpiles will not be generated on Site. Soil will be directly loaded into bins, supersacks, or trucks. [Rule 1466 (K)(4)]
- When they're being placed into trucks, the supersacks must be slowly lowered until the bottom of each sack is no more than approximately one (1) foot above the bottom of the truck bed. At that point, the sack can be fully lowered on to the truck bed [Rule 1466 (K)(4)]
- Unauthorized personnel must be kept away from supersacks at all times. At the end of each work day and when they are not being used, the supersacks must be properly secured and surrounded by a construction fence [Rule 1466 (K)(4)]

During construction activities, a sign will be placed at the front of the property. DTSC had agreed to take additional steps associated with signage as part of Rule 1466 compliance. The sign will display the following information and will be visible from the street nearest the excavation activities:

TO REPORT ANY DUST LEAVING THE SITE PLEASE CALL DTSC'S HOTLINE AT 1-844-225-3887 OR THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AT 1-800-CUT-SMOG

Air monitoring to ensure compliance with the project performance standards will be conducted as described below.

8.2.3 Air Monitoring Plan

Air monitoring will be performed during soil removal and placement activities to ensure that there is no fugitive dust from the impacted soils or fill materials. Real-time particulate monitors and personal air monitors (PAMs) will be utilized during the operations as detailed below.

Real-Time Particulate Monitors

Three (3) particulate dust monitors will be setup at each property on a daily basis. Particulate dust monitors measure the total dust in the air. A monitor will be placed downwind of the excavation area to monitor the effects of the work activity. A monitor will be placed upwind of the excavation to monitor any dust coming from sources unrelated to the work. The third monitor will be placed at the closest entryway to the home to understand any particulates in proximity to the work. The Contractor will utilize Dust Trak model 8530 or model 8532 which measure total suspended particles (TSP) in the air. These monitors measure aerosol particulates corresponding to particulate matter that is 10 microns (PM10) size fractions.

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Monitors will be placed each day prior to soil disturbance or placement activities and review the levels relative to the area-specific action level on hour intervals during the work. The action level shall be the SCAQMD's standard for PM_{10} which is 50 ug/m^3 above background. This concentration will be above the upwind monitor reading which measures the ambient (i.e. non-work related) conditions. If the downwind or entryway monitor shows a level above the action level, the upwind monitor will be checked to see if there is an upwind source for the increased dust level, DTSC will be informed, and the monitor will be checked again in 10 minutes to determine whether the level has dropped below the action level. If it has not, work will be decreased and a corresponding increase in the dust suppression techniques as needed to lower the dust levels below the action level.

Personal Air Monitors

In addition to the three (3) dust monitors described above, during disturbance of lead-impacted soils, a Gilian GilAir-5 model (or comparable) personal air monitor (PAM) will be co-located with a dust monitor at each location during the excavation work. The PAM cassettes will be analyzed for lead content at an off-site laboratory after completion of the excavation work. The findings will be reviewed and documented. The date, start time, end time and air flow will be recorded on the cassette for analysis purposes.

Note: Equipment will be calibrated according to manufacturer's specifications.

8.2.4 Breathing Zone Monitoring

In addition to the perimeter monitoring specified, PARSONS will implement worker exposure monitoring initially and periodically during soil excavation activities to assess worker exposure to lead. The breathing zone monitoring should be conducted within one foot of the workers mouth to accurately assess the exposure of the worker. During disturbance of lead-impacted soils, a Gilian GilAir-5 model (or comparable) personal air monitoring (PAM) will be used to assess worker exposure to lead. The PAM cassettes will be analyzed for lead content at an offsite laboratory after completion of the excavation work. The findings will be reviewed and documented. The date, start time, end time, and air flow will be recorded on the cassette for analysis.

All air samples will be submitted to an AIHA certified laboratory under proper chain-of-custody procedures. Results shall be analyzed and be available for review within 5 to 10 business days.

If sampling results indicate that employee exposure is greater than the Cal-OSHA level for lead (30 micrograms per cubic meter) the Site Health and Safety officer will stop work and modify work procedures and/or PPE levels to reduce lead exposure.

If Cal-OSHA action levels of lead are detected then biological monitoring requirements and other provisions of California Code of Regulations, Title 8, Section 1532 shall be implemented before further work proceeds. Until re-sampling confirms that exposure levels have been appropriately reduced.

Note: Equipment will be calibrated according to manufacturer's specifications.

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8.2.5 Medical Monitoring

It is believed that significant worker lead exposure is highly unlikely. Should air monitoring become necessary and it is determined that exposure is at or above the Cal- OSHA action level for lead then the medical monitoring requirements established by California Code of Regulations, Title 8, Section 1532.1 will be enacted.

Regardless of the medical monitoring requirements of Cal-OSHA and the results of personnel monitoring, all PARSONS employees assigned to conduct field operations will receive a baseline Blood lead and Zinc Protoporphyrin levels exam prior to starting work on the project. At the time of termination from their activities on the project employees may receive a similar exam.

8.2.6 Noise Hazards

Noise hazards are not expected to occur except possibly during the operation of heavy equipment in the project. During the operation of heavy equipment hearing protection in the form of ear plugs, or equivalent, will be made available nearby. If it is considered necessary, a properly calibrated sound level meter or personal noise dosimetry may be used to determine noise levels. Measurements will be collected and/or evaluated by a Certified Industrial Hygienist. If measurements indicate 8-hour time-weighted average (TWA) exposure levels over the 85-dBA action level, hearing protection in the form of ear plugs, or equivalent, will be made available nearby any noisy areas. All PARSONS employees and subcontractors must wear hearing protection (approved by a Certified Industrial Hygienist) if noise levels exceed the Cal-OSHA PEL of 85 dBA during an 8-hour work day or if a sound impulse exceeds 140 dBA. In addition, a Hearing Conservation Program will be provided and followed as required by 8 CCR Article 105. The hearing protection must reduce employee exposures to an 8-hour permissible exposure limit (PEL) of 85 dBA as required by Title 8 CCR Article 105. Hearing protection types will be approved by a CIH. If the noise meter is not available on the subject site and normal conversation is impeded by noise levels, personnel of PARSONS and its subcontractors will wear hearing protection until such time that the noise levels are properly evaluated and determined to be safe.

8.2.7 Illumination

It is anticipated that all work performed on this project will be done during normal daylight hours therefore no additional illumination equipment is expected to be used.

8.2.8 Decontamination Procedures

A decontamination station for footwear shall be established within the work area. Boots shall be decontaminated before leaving the work area by first HEPA vacuuming if necessary then washing in a detergent solution with a stiff-bristled brush and rinsing with clean water. The decontamination containers shall be clearly labeled to identify the wash and rinse.

8.2.9 Spill Containment

Spill Evaluation and Response

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Project Manager, or designated alternate, is ultimately responsible for evaluating spills and determining the appropriate response. When this evaluation is being made, the source of the spill will be determined and, if safe to do so, the spill stopped. The spill area will be isolated and secured to the extent possible. If it is determined that this is an emergency, the site Emergency Response Plan, contained in this PSHEP, will be immediately implemented.

If it is determined that this is an incidental release, clean-up personnel shall receive instructions in a pre-clean-up meeting as to spill conditions, appropriate PPE, response activities, decontamination, and waste handling.

The following are Standard Operating Procedures that response and/or clean-up personnel take when responding to a spill:

- All containers used to handle spilled material shall meet the requirements of 49 CFR
- Only those persons involved in overseeing or performing spill containment operations will be allowed within the designated hazard areas
- Appropriate PPE shall be used when handling spilled materials
- Appropriate spill control measures shall be specified in the pre-clean-up meeting and applied during spill response
- Whenever possible, without endangerment of personnel, the spill will be stopped at the source or as close to the source as possible
- Ignition sources shall be controlled if fire or explosion hazards exist
- Care shall be taken to ensure spilled materials do not enter drains
- Provisions shall be made to contain and recover a neutralizing solution, if used
- Proper spill containment and clean-up material will be used when spills occur
- All hazardous waste that is generated from spills shall be disposed of properly
- Spill kits available

Post-Spill Evaluation

A written spill response report shall be prepared at the conclusion of clean-up operations. The report shall include, at a minimum, the following information:

- Date of spill incident
- Cause of incident
- Type of material spilled
- Estimated quantity of material spilled
- Spill response actions
- Any outside parties involved, including their documents or reports

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- Lessons learned and/or suggested improvements

All spill areas shall be inspected to ensure they have been satisfactorily cleaned up. The use of soil, water, and air sampling shall be utilized in this determination as Parsons deems necessary. The cause of the spill shall be examined and corrective steps taken to minimize the potential for similar spills.

8.2.10 Sanitation

- Food will only be eaten in designated areas
- Store food waste in separate waste receptacle
- Wash skin that contacts suspected contaminated soils
- Wash hands before eating, drinking or smoking
- Throw all trash away in appreciate waste receptacles
- Porta-Johns will be placed in the work areas for restroom breaks
- Smoking is permitted in designated areas only
- First aid kits and eye wash stations will be located in the subcontractor's field office and at each cleanup property, in accordance with California Code of Regulations (CCR), Title 8, Section 5162

8.2.11 Underground/Subservice Hazards

Structures

If any abandoned wells, piping of any kind, or electrical lines are found during excavation that are not properly located or known by the crew, a stop work authority will be issued. All operations will stop until the supervisor and project manager have a chance to evaluate the affected area and will make a decision for any further work in that area.

Utilities

At least 72 hours prior to the start of any digging activities, Underground Service Alert/Dig Alert shall be contacted to identify and mark all proximal underground utilities. Along with the DigAlert inspection of the property a visual site survey will be conducted to include inspection of any overhead hazards and access constraints and any underground utilities or hazards that are identifiable by means of pavement cuts, drains, etc. The DigAlert survey, the visual inspection, and utility maps from previous work will be used to identify potential underground hazards. Areas within approximately six (6) inches of underground utilities will not be disturbed. As necessary, hand excavation will be conducted close to existing structures, utilities, mature trees, or other areas that would be difficult to excavate around or that could be damaged by equipment. Soil will not be removed beneath or inside structures, roads, sidewalks, brick patios, driveways, or other inaccessible or permanent features. On private properties an underground geophysical survey maybe required. Hand digging and potholing maybe used to uncover underground utilities on private properties if authorized by the project manager. An actual geophysical survey shall be conducted if excavation is more than 18 inches. Field employees will 1) observe all overhead utilities; 2) ensure truck or heavy equipment operators know the locations of these lines; and 3) ensure they take precautionary measures to avoid these lines when working on

the property. See table, below, recommending minimum clearances (pursuant to CCR, Title 8, Section 2946), when storing materials near these lines or working around them with boom-type or hoisting equipment.

Nominal voltage		*Minimum Required*
(Phase to Phase)		*Clearance (Feet)*
600	50,000	10
over 50,000	75,000	11
over 75,000	125,000	13
over 125,000	175,000	15
over 175,000	250,000	17
over 250,000	370,000	21
over 370,000	550,000	27
over 550,000	1,000,000	42

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SECTION 9 – APPENDICES

APPENDIX A – LEGAL COMPLIANCE REGISTER

PARSONS

Appendix A - Legal Compliance Register

Item #	Description / identity of relevant SH&E risk	Identity / citation of related legal compliance obligation	How does one gain access to the text of this legal compliance obligation?	Remarks
1	General Safety & Health	• US OSHA 29 CFR 1926.20 • US ACE EM 385-1-1 01.A	• www.osha.gov • www.usace.army.mil/SafetyandOccupationalHealth.aspx	
2	Safety Training	• US OSHA 29 CFR 1926.21 • US ACE EM 385-1-1 01.B.01	• www.osha.gov • www.usace.army.mil/SafetyandOccupationalHealth.aspx	
3	First Aid and Medical	• US OSHA 29 CFR 1926.23 • US OSHA 29 CFR 1926.50 • US ACE EM 385-1-1 03.A	• www.osha.gov • www.usace.army.mil/SafetyandOccupationalHealth.aspx	
4	Fire Protection and Prevention	• US OSHA 29 CFR 1926.24 • US OSHA 29 CFR 1926.150-155 • US OSHA 29 CFR 1926.352 • US ACE EM 385-1-1 09.A	• www.osha.gov • www.usace.army.mil/SafetyandOccupationalHealth.aspx	
5	Housekeeping	• US OSHA 29 CFR 1926.25 • US ACE EM 385-1-1 14.C	• www.osha.gov • www.usace.army.mil/SafetyandOccupationalHealth.aspx	
6	Sanitation	• US OSHA 29 CFR 1926.27 • US OSHA 29 CFR 1926.51 • US ACE EM 385-1-1 02.A	• www.osha.gov • www.usace.army.mil/SafetyandOccupationalHealth.aspx	
7	Personal Protective Equipment	• US OSHA 29 CFR 1926.28 • US OSHA 29 CFR 1926.95-98 • US OSHA 29 CFR 1926.100-107 • US ACE EM 385-1-1 05.A	• www.osha.gov • www.usace.army.mil/SafetyandOccupationalHealth.aspx	
8	Emergency Employee Action Plans	• US OSHA 29 CFR 1926.35 • US ACE EM 385-1-1 01.E	• www.osha.gov • www.usace.army.mil/SafetyandOccupationalHealth.aspx	
9	Noise Exposure	• US OSHA 29 CFR 1910.95 • US OSHA 29 CFR 1926.52 • US ACE EM 385-1-1 05.C	• www.osha.gov • www.usace.army.mil/SafetyandOccupationalHealth.aspx	
10	Gases, Vapors, Dusts and Mists	• US OSHA 29 CFR 1926.55 • SCAQMD Rules 401, 402, 403, 1403 and 1466	• www.osha.gov • www.aqmd.gov	

11	Hazard Communication	• US OSHA 29 CFR 1926.59 • US ACE EM 385-1-1 1.B.06	• www.osha.gov • www.usace.army.mil/SafetyandOccupationalHealth.aspx	
12	Hazardous Waste Operations and Emergency Response	• US OSHA 29 CFR 1910.120 • US OSHA 29 CFR 1926.65 • US ACE EM 385-1-1 28.A	• www.osha.gov • www.usace.army.mil/SafetyandOccupationalHealth.aspx	
13	Accident prevention signs and tags	• US OSHA 29 CFR 1926.200 • US ACE EM 385-1-1 08.A	• www.osha.gov • www.usace.army.mil/SafetyandOccupationalHealth.aspx	
14	Signaling	• US OSHA 29 CFR 1926.201 • US ACE EM 385-1-1 08.B	• www.osha.gov • www.usace.army.mil/SafetyandOccupationalHealth.aspx	
15	Barricades	• US OSHA 29 CFR 1926.202	• www.osha.gov	
16	Material Storage	• US OSHA 29 CFR 1926.250 • US ACE EM 385-1-1 14.B	• www.osha.gov • www.usace.army.mil/SafetyandOccupationalHealth.aspx	
17	Waste Disposal	• US OSHA 29 CFR 1926.252 • US ACE EM 385-1-1 14.D	• www.osha.gov • www.usace.army.mil/SafetyandOccupationalHealth.aspx	
18	Tools	• US OSHA 29 CFR 1926.300-307 • US ACE EM 385-1-1 13.A	• www.osha.gov • www.usace.army.mil/SafetyandOccupationalHealth.aspx	
19	Motor Vehicles, Mechanized Equipment	• US OSHA 29 CFR 1926.600-603 • US ACE EM 385-1-1 18.A	• www.osha.gov • www.usace.army.mil/SafetyandOccupationalHealth.aspx	
20	Site Clearing	• US OSHA 29 CFR 1926.604 • US ACE EM 385-1-1 31.A	• www.osha.gov • www.usace.army.mil/SafetyandOccupationalHealth.aspx	
21	Excavations	• US OSHA 29 CFR 1926.650-652 • US ACE EM 385-1-1 25.A	• www.osha.gov • www.usace.army.mil/SafetyandOccupationalHealth.aspx	
22	Internal Traffic Control	• US ACE EM 385-1-1 8.D	• www.usace.army.mil/SafetyandOccupatio	

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			nalHealth.aspx	
23	Traffic Movement Restriction Times	• US ACE EM 385-1-1 8.C	• www.usace.army.mil/SafetyandOccupationalHealth.aspx	
24	Abatement of Lead Hazards Evaluation Notification Form 8551 and Lead Hazard Evaluation Report Form 8552	• CA Dept of Public Health Forms 8551 and 8552	• www.cdph.ca.gov	
25	Waste Transportation and Handling	• US 40 CFR part 262, subpart E • US 40 CFR section 263.20	• www.dot.gov	

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APPENDIX B – RISK REGISTER

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Activity	HOC Confirmation	Hazard Identification	At Risk	Pre-Risk Mgt Evaluation Matrix			Pre-Risk Mgt Treatment	Risk Management & Control -- Safety & Health	
				Probability	Severity	RAC (Pre-Risk)		Engineering/ Administrative Controls	PPE
General Field Work	Yes	Heat Stress Injuries, Cold Stress Injuries, Biological Hazards, Slips Trips Falls, Struck By, Caught between, Electrocution--Lightning, Scratches Cuts Punctures,	Site personnel	Likely	Critical	HIGH	Reduce	Activity Hazard Analysis, Procedures	Level D - Modified
Site Visit	Yes	Rain, sunshine, cold weather, electrical, traffic	Site personnel	Occasional	Critical	MODERATE	Reduce	Review AHAs. Wear sun screen or protective clothing, Lock Out/Tag Out	Level D - Modified
Soil and LBP Sampling	Yes	Electrocution due to Lightning Strike	Site personnel	Seldom	Catastrophic	HIGH	Eliminate	Review AHAs, Do not perform activities during rain events; do not raise hand auger into the air, wear insulating/Fire Retardant PPE; Check weather report prior to start of field work; Stop work if thunders or lightning are present. Resume work no sooner than 30 minutes after lightning and thunders have ceased	Level D - Modified; insulated gloves

Risk Management & Control -- Environmental			Responsible Person	Cost Contingency	Post-Risk Mgt Evaluation Matrix			Residual Risk Action
Waste Management	Engineering/ Administrative Controls	Site Condition Controls			Probability	Severity	RAC (Post-Risk)	
Avoidance	Permits, Procedures, Regulatory Requirements, Training/education, Checklists/audits, Instructions	Spill Kit on Site	Field Team Leader	Covered in Budget	Seldom	Critical	MODERATE	NA
NA	NA	NA	Field Team Leader	Covered in Budget	Seldom	Critical	LOW	NA
NA	NA	NA	Field Team Leader	Covered in Budget	Seldom	Catastrophic	MODERATE	NA

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APPENDIX C – ACTIVITY HAZARD ANALYSIS (AHA)

Activity Hazard Analysis (AHA)

Activity/Work Task: Driving To/From Site	Overall Risk Assessment Code (RAC) (Use highest code)					M
Project Location: DTSC Exide Technologies Off-Site	Risk Assessment Code (RAC) Matrix					
Contract Number: 451405	Severity	Probability				
Date Prepared: 7/19/2018		Frequent (F)	Likely (L)	Occasional (O)	Seldom (S)	Unlikely (U)
Prepared by: Darrell Pruitt, SH&E Manager	Catastrophic (C)	E	E	H	H	M
	Critical (Cr)	E	H	H	M	L
Reviewed by: Tom Blaney/Jeff Muller	Marginal (M)	H	M	M	L	L
	Negligible (N)	M	L	L	L	L
Employer/GBU: Parsons Infrastructure	Step 1: Review each "Hazard" with identified safety "Controls" and determine RAC (See above). The RAC is developed after correctly identifying all the hazards and fully implementing all controls.					
Notes: (Field Notes, Review Comments, etc.) References:	P "Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent (F), Likely (L), Occasional (O), Seldom (S) or Unlikely (U).	RAC Chart				
	S "Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic (C), Critical (Cr), Marginal (M), or Negligible (N)	E = Extremely High Risk				
	Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.	H = High Risk				
		M = Moderate Risk				
		L = Low Risk				

Job Steps	Hazards	Controls	P	S	RAC
1. Inspection of the vehicle.	1.1 Unsafe walking surfaces during inspection.	1.1.1 Wear proper footwear. 1.1.2 Watch footing for obstructions and slippery surfaces Conduct in safe area away from traffic or moving vehicles,	U	M	L
	1.2 Unsafe hood lift support.	1.2.1 Ensure that hood lift support is not defective and properly secured. 1.2.2 Be aware of moving vehicles during inspection and light check.	U	M	L
2. Driving to site.	2.1 Defective Vehicle.	2.1.1 Ensure that vehicle is periodically maintained. 2.1.2 Inspection of the vehicle to be carried out prior to use.	U	M	L

Job Steps	Hazards	Controls	P	S	RAC
2. Driving to site. (Cont…)	2.2 Traffic Collision.	2.2.1 Competency to drive the vehicle and valid driving license should be ensured. 2.2.2 Drive defensively, courteously, and safely. Obey all traffic regulations including speed limits and travel restrictions. 2.2.3 Avoid taking unnecessary risks on the journey, taking care for own safety and health and that of other road users and others who might be affected by the actions. 2.2.4 Always use your seat belt, ensure passengers use their seat belts.	S	Cr	M
	2.2 Traffic Collision. (Cont…)				
	2.3 Lost on route / unfamiliar with road layout.	2.3.1 Ensure that site road layout has been oriented or familiarize prior to commencing journey. 2.3.2 Route map should be carried for reference. 2.3.3 Emergency card with mobile contact details should be carried to ensure further assistance regarding road direction.	U	N	L
	2.4 Hazardous road condition.	2.4.1 Avoid driving on poor road condition. Use alternate road, if possible. 2.4.2 Adjust driving according to road condition.	S	Cr	M
	2.5 Adverse weather condition.	2.5.1 Avoid driving during adverse weather conditions. 2.5.2 Adjust driving according to adverse weather condition. Never drive beyond the limits of visibility. 2.5.3 Slow down and be more alert. 2.5.4 Avoid off-road driving.	S	M	L
	2.6 Distraction while driving.	2.6.1 Do not use mobile phone and other devices while driving. 2.6.2 Concentrate on driving and avoid frequent adjustment of vehicle accessories. 2.6.3 Avoid eating/drinking while driving.	S	Cr	M
	2.7 Fatigue.	2.7.1 Avoid driving if feeling drowsy/sleepy/too tired. Take a break and rest.	S	M	L

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Job Steps	Hazards	Controls	P	S	RAC
		2.7.2 Avoid heavy meals before driving.			
	2.8 Pedestrians and School Children	2.8.1 Identify school bus/public transit times of operation and adjust schedule or driving operations as needed. 2.8.2 Be vigilant for children.	S	Cr	M
3. Arrival on site.	3.1 Parking in unauthorized area.	3.1.1 Park in designated parking areas only. 3.1.2 Avoid parking the vehicle which can obstruct others parking access/egress. 3.1.3 Use reverse parking where possible. 3.1.4 Safe distance from other vehicles to be maintained.	S	M	L
Equipment to be Used	Training Requirements/Competent or Qualified Personnel	Inspection Requirements			
1. Vehicle • Training	1. Valid driving license. • ParsonsU Driver Training	1. Daily Inspection of the vehicle.			

Activity Hazard Analysis (AHA)

Activity/Work Task: Construction Oversight/Site Visits	Overall Risk Assessment Code (RAC) (Use highest code)	H
Project Location: DTSC Exide Technologies Off-Site	Risk Assessment Code (RAC) Matrix	
Contract Number: 451405	Severity / Probability	
Date Prepared: 7/19/2018		
Prepared by: Darrell Pruitt, SH&E Manager		
Reviewed by: Tom Blaney/Jeff Muller		
Employer/GBU: Parsons Infrastructure		
Notes: (Field Notes, Review Comments, etc.) References:		

Severity	Frequent (F)	Likely (L)	Occasional (O)	Seldom (S)	Unlikely (U)
Catastrophic (C)	E	E	H	H	M
Critical (Cr)	E	H	H	M	L
Marginal (M)	H	M	M	L	L
Negligible (N)	M	L	L	L	L

Step 1: Review each "Hazard" with identified safety "Controls" and determine RAC (See above).
The RAC is developed after correctly identifying all the hazards and fully implementing all controls.

P "Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent (F), Likely (L), Occasional (O), Seldom (S) or Unlikely (U).

S "Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic (C), Critical (Cr), Marginal (M), or Negligible (N)

Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.

RAC Chart
E = Extremely High Risk
H = High Risk
M = Moderate Risk
L = Low Risk

Job Steps	Hazards	Controls	P	S	RAC
1. All Site Work	1.1 Slips/trips/falls from slick surfaces or objects in travel path resulting in bodily injury.	1.1.1 Remove debris, supplies, cords and equipment from the walking path. If objects cannot be moved, mark with cones or high vis tape. 1.1.2 Do not run during any task. Do not talk on cell phone while walking, keep hands out of pockets while walking – no cell	O	M	M

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Job Steps	Hazards	Controls	P	S	RAC
		phone use on when walking. 1.1.3 Plan path of travel to limit walking on slick surfaces and remove objects from travel path when possible.			
	1.2 Unfamiliarity with site operations and task resulting in injury	1.2.1 Site safety meetings will be held on site on daily basis prior to start of work. 1.2.2 All contractors shall attend coordinated and consolidated site safety meeting as well as task specific pre-job meetings if working in the field.	S	M	L
	1.3 Struck by vehicle resulting in injury/death	1.3.1 Use location barriers to protect employees when working in the presence of vehicular traffic. 1.3.2 Use a spotter to function as a lookout when backing, or near obstacles, maintain eye contact with driver, pre-plan route. 1.3.3 Maintain 3 feet of space cushion around vehicle 1.3.4 At all times on site, outside of designated 'office' areas, wear high visibility vest, and hard hat to be more visible to drivers.	O	M	M
	1.4 Working Around Heavy Equipment	1.4.1 Discuss and understand the overall hazards and operation of the heavy equipment with the contractor supervisor and operator. Understand procedures and lines of communication during operation of equipment. 1.4.2 Discuss and review overhead hazards with contractor supervisor and operator. 1.4.3 Discuss and review areas of heavy equipment were stored energy poses a line-of-fire risk and hazard. Avoid personnel being present in those areas during operations that pose a line-of-fire risk or hazard. 1.4.4 Discuss and review blind spots of various equipment. Understand lines of communication (line-of-sight, hand	L	Cr	H

Job Steps	Hazards	Controls	P	S	RAC
		signals, etc.) to the operator of such equipment. Avoid blind spots during operations. 1.4.5 Identify kill switches or procedure for de-energizing equipment in the event of an incident. 1.4.6 Understand site emergency signals and sirens from equipment.			
	1.5 Injury from inclement weather (heat stress, lightning strikes, struck by object blowing from high winds, etc..)	1.5.1 Stop work if lightning is seen and immediately seek shelter, stay in shelter until 30 minutes after last visible strike, if is wind greater than 30 mph, or rain more than 1 inch per hour, contact supervisor for direction on continuing work. 1.5.2 Personnel should remain hydrated throughout the workday. Drink plenty of water. 1.5.3 Wear clothing appropriate to weather (e.g., warm clothing on cold days and lighter clothes on warm days). 1.5.4 Use buddy system to monitor status of fellow worker, if any symptoms of heat/cold stress are present Stop Work.	S	M	L
	1.6 Biological Hazards (bit by animals/insect, etc.)	1.6.1 Where possible, landscape work area to reduce high grass. 1.6.2 Use a long-handled tool to disturb vegetation prior to stepping through the area. 1.6.3 Use insect repellant when in areas of high grass or in standing water. Reapply as directed by manufacturer. 1.6.4 Inspect work areas for indications of spiders, bees, or other harmful insects. 1.6.5 Stay at least 5 feet away from fire ant mounds.	S	M	L
	1.7 Site Hazards Material Exposure	1.7.1 Training and safety awareness of	O	M	M

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Job Steps	Hazards	Controls	P	S	RAC
		potential exposure to contaminates at the site. 1.7.2 Practice contamination avoidance work upwind if feasible, limit contact to the extent possible, and do not eat in areas with potential exposure, keep drink containers covered. 1.7.3 Appropriate PPE will be worn dependent on-site conditions and actions levels. 1.7.4 Must sign off on health and safety plan.			
2. Radio/General Communication	2.1 Unaware of emergency resulting in injury	2.1.1 Each crew will be equipped with a site 2-way radio that is charged, turned on and functional. 2.1.2 A radio check will be conducted at the start of each day. 2.1.3 Where radio transmissions are interrupted in any way, the operation will be stopped immediately.	S	M	L
3. Lifting / carrying materials or equipment	3.1 Sprains/strains to back, shoulders, legs from lifting supplies and equipment	3.1.1 Do not lift objects > 50 lbs. without assistance or use a mechanical means 3.1.2 Do not twist; maintain the load as close to the body as practical. 3.1.3 Bend at the knees, rather than the waist.	O	M	M
Equipment to be Used	**Training Requirements/Competent or Qualified Personnel**	**Inspection Requirements**			
1. Personal Protective Equipment. • Level D: Hard hats, safety glasses, gloves, steel-toed boots (or equivalent), high visibility vest. Gloves, ear plugs/muffs, if necessary.	1. SH&E Site Orientation. 2. PSHEP Review	1. PPE should be inspected prior to use.			

Activity Hazard Analysis (AHA)

Activity/Work Task: Soil Sampling/Augering	Overall Risk Assessment Code (RAC) (Use highest code)						M
Project Location: DTSC Exide Technologies Off-Site	Risk Assessment Code (RAC) Matrix						
Contract Number: 451405	Severity	Probability					
Date Prepared: 7/19/2018		Frequent (F)	Likely (L)	Occasional (O)	Seldom (S)	Unlikely (U)	
Prepared by: Darrell Pruitt, SH&E Manager	Catastrophic (C)	E	E	H	H	M	
	Critical (Cr)	E	H	H	M	L	
Reviewed by: Tom Blaney/Jeff Muller	Marginal (M)	H	M	M	L	L	
	Negligible (N)	M	L	L	L	L	
Employer/GBU: Parsons Infrastructure	Step 1: Review each "Hazard" with identified safety "Controls" and determine RAC (See above). The RAC is developed after correctly identifying all the hazards and fully implementing all controls.						
Notes: (Field Notes, Review Comments, etc.) References:	P "Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent (F), Likely (L), Occasional (O), Seldom (S) or Unlikely (U).	RAC Chart					
	S "Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic (C), Critical (Cr), Marginal (M), or Negligible (N)	E = Extremely High Risk					
	Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.	H = High Risk					
		M = Moderate Risk					
		L = Low Risk					

Job Steps	Hazards	Controls	P	S	RAC
1. Soil Sampling (Accessing work site and setup)	1.1 Slips, trips, and falls	1.1.1 Walk and inspect each proposed sampling area prior to commencing sampling activities and establish common paths of travel; Remove debris, supplies, cords and equipment from the walking path. If objects cannot be moved, mark with cones or high vis tape. 1.1.2 Do not run during any task. Do not talk on	S	Cr	M

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Job Steps	Hazards	Controls	P	S	RAC
		cell phone while walking, keep hands out of pockets while walking – no cell phone use on when walking. 1.1.3 Plan path of travel to limit walking on slick surfaces and remove objects from travel path when possible. 1.1.4 Job site will be kept clean and orderly, debris shall be stored properly.			
	1.2 Traffic	1.2.1 Attempt parking on the same side of the street as the project location to minimize the risk of being struck by a moving vehicle while unloading equipment. 1.2.2 If crossing the street is needed, cross at locations with the highest visibility. 1.2.3 Look both ways before crossing. 1.2.4 Avoid crossing the street from between two vehicles as this lower the chances of a driver in a moving vehicle seeing you. 1.2.5 Using a spotter when maneuvering vehicles in or out of driveways.	O	M	M
	1.3 Animal (dog) bites	1.3.1 Prior to accessing the site, make sure there are no animals (dogs) on the property. Make noise, tap a gate or fence in the event a loose animal (dog) may be in the back of the property.	O	M	M
2. Soil Sampling using hand tools including tool inspection	2.1 Injury Due to Faulty Equipment	2.1.1 Perform inspections routinely; tools to be removed from service if any problems exist. Dispose of or tag out faulty tools.	S	M	L
	2.2 Back Injury Lifting and Bending Over to Pick Up Tools	2.2.2 Keep your back straight, bend knees, lift with legs, avoid twisting.	S	Cr	M
	2.3 Formation of Blisters on Hand	2.3.1 Use proper gloves called out for this task. Use the tool specific to the task as it is designed. Do not over exert yourself. Take necessary breaks.	S	U	L
	2.4 Slips, trips, and falls	2.4.1 Do not run during any task. Do not talk on cell phone while walking, keep hands out of pockets while walking – no cell phone use on when walking. 2.4.2 Plan path of travel to limit walking on slick	S	Cr	M

Job Steps	Hazards	Controls	P	S	RAC
		surfaces and remove objects from travel path when possible. 2.4.3 Job site will be kept clean and orderly, debris shall be stored properly, and collection containers shall be emptied at regular intervals or as needed 2.4.4 Tools, equipment, materials, and supplies will be stored in an orderly manner and decontaminated immediately after use. 2.4.5 Spills and silt shall be prevented from entering storm drainage systems or spilling on the ground. Cover all sampling surfaces with plastic or tarps.			
3. Use Hand Auger to collect Soil Samples	3.1 Contact with contaminants	3.1.1 Wear proper PPE - latex or nitrile outer glove must always be worn during soil sampling in addition to Level D modified as stated above. 3.1.2 Follow proper decontamination procedures when leaving the "exclusion zone" 3.1.3 Practice good personal hygiene; wash up before eating, eat or drink in designated clean areas 3.1.4 Wash skin that contacts suspected contaminated soil/water	S	M	M
	3.2 Back Strain / Overexertion	3.2.1 While operating the hand auger, be aware that it is easy to overexert yourself. • Be sure not to twist our upper body at the waist while using the auger. This motion can cause injury to your back. Use the strength in your upper arms to turn the hand auger. Add handle extensions as needed so that your back can remain straight and there is no need to bend your waist. Keep your feet	S	Cr	M

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Job Steps	Hazards	Controls	P	S	RAC
		shoulder width apart for stability. Keep your head away from the handle of the auger. Should this tool break loose during use you will avoid injury. Individuals who are involved in the work activity should remain clear of auger handle length plus 1ft away from where the auguring is occurring.			
	3.3 Encounter Live Utilities During Soil Sampling	3.3.1 Contact Dig Alert a minimum of 48 hours of any subsurface work and schedule a meet and mark. 3.3.2 Conduct and review the geophysical survey of the proposed work area. Inspect all utility markings prior to subsurface work. 3.3.3 Review as built plans prior to subsurface work. 3.3.4 Intrusive equipment until each sampling location has been cleared to at least 5 ft bgs. 3.3.5 If refusal is encountered during hand auger activity, inspect the hole to identify the cause. Do not use tools to hit the item causing the refusal as it may be a live utility pipe. If necessary, move the proposed sampling location.	S	Cr	M
4.Decontamination of sampling equipment	4.1 Spills	4.1.1 Set up a 3-stage decontamination using three 5-gallon buckets: one for dry decontamination; one for wash using water and Alconox; and one for rinse. 4.2.1 Set up all three buckets on a plastic sheet. 4.3.1 Using brushes to clean the all surfaces of the sampling equipment in the wash bucket. 4.4.1 Spills will be cleaned up immediately from all walking and working surfaces	S	M	L
Equipment to be Used	Training Requirements/Competent or Qualified Personnel	Inspection Requirements			

Job Steps	Hazards	Controls	P	S	RAC
1. Personal Protective Equipment. • Level D: Hard hats, safety glasses, gloves, steel-toed boots (or equivalent), high visibility vest. Leather and Nitrile Gloves, ear plugs/muffs, if Nessessary. Long sleeve shirt when work requires it. 2. Hand tools and hand auger	1.SH&E Site Orientation. 2.PSHEP Review	1. Daily equipment inspection 2. Daily tool inspection 3. Check PPE should be inspected prior to use.			

Activity Hazard Analysis (AHA)

Activity/Work Task: Use of Hand tools or mini excavator to "grub" the property, whereby sod, plants, top soil, roots, and very shallow soil is removed from the front and back yards (i.e. unpaved and landscaped areas)	Overall Risk Assessment Code (RAC) (Use highest code): M
Project Location: DTSC Exide Technologies Off-Site	
Contract Number: 451405	
Date Prepared: 11/07/2018	
Prepared by (Name/Title): Darrell Pruitt	
Reviewed by (Name/Title): Paul Boyajian/Jeff Muller	
Employer/GBU: Parsons Infrastructure	
Notes: (Field Notes, Review Comments, etc.) Level D: Hard hats, safety glasses, gloves, steel-toed boots (or equivalent), high visibility vest. Gloves, ear plugs/muffs, if Nessessary.	

Risk Assessment Code (RAC) Matrix

Severity	Probability				
	Frequent	Likely	Occasional	Seldom	Unlikely
Catastrophic	E	E	H	H	M
Critical	E	H	H	M	L
Marginal	H	M	M	L	L
Negligible	M	L	L	L	L

Step 1: Review each "Hazard" with identified safety "Controls" and determine RAC (See above).
The RAC is developed after correctly identifying all the hazards and fully implementing all controls.

P "Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.

S "Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible

Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.

RAC Chart

- E = Extremely High Risk
- H = High Risk
- M = Moderate Risk
- L = Low Risk

Job Steps	Hazards	Controls	P	S	RAC
1.0 Use a shovel to manually excavate next to structures, around trees, or in areas that are	1.1 Exposure to slips trips and falls 1.2 Back strain 1.3 Heat/Cold Stress, Weather, Storms	1.1.1 Walking surfaces may become slippery during or after a rain event, or during dust suppression of excavating activities. Inspect all walking surfaces and wear proper footwear. 1.2.1 Inspect the job site at the beginning of each shift for any potential	Seldom	Marginal	L

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Job Steps	Hazards	Controls	P	S	RAC
generally inaccessible to powered equipment		slip trips or fall hazards. 1.3.1 Conditions may change throughout the day: therefore, inspect all walking surfaces continuously. Address any hazards with the subcontractors on site. 1.4.1 Ensure designated walkways are clear. Avoid protruding parts of the material. Avoid stepping over obstacles such as tools, materials and cables. 1.5.1 Correct safety footwear shall be worn 1.6.1 Ensure adequate illumination/lighting provided 1.7.1 Good housekeeping shall be maintained in all work areas. 1.8.1 Use an EZ-up in designated work staging areas 1.2.1 Proper lifting techniques utilize mechanical methods to move heavy objects, no one shall lift more than 50 lbs. without assistance 1.3.1 Wear correct clothing for the weather along with the proper PPE. 1.3.2 Reduce exposure when possible. i.e. take breaks in shade 1.3.3 Stay hydrated during hot weather condition 1.3.4 Use skin protection like sun block, etc. during hot weather conditions.			
2.0 Use a Kubota or John Deer mini excavator to remove soils from larger, more accessible areas	2.1 Struck by and against, damage of property 2.2 Slips, trips, and falls 2.3 Live utilities 2.4 Hearing Loss	2.1.1 Create a working zone so that no one can be hit by mini excavator while in operation 2.1.2 Flying debris may occur during any potential demolition activities (e.g. concrete breaking, cutting of brushes). Stand a safe distance away from these activities and wear safety goggles at all time. 2.1.3 Do not stand behind equipment and other moving vehicles. Stand within line of sight of the equipment operator. If you need to approach moving equipment, signal the operator with a hand gesture and do not approach until the equipment operator has acknowledged you and the equipment is turned off. 2.1.4 Do not stand within the moving path of a mini excavator. Only stand a safe distance away from the mini excavator. 2.1.5 Use spotter when work activities deem Nessessary. 2.2.1 Walking surfaces may become slippery during or after a rain event, or during dust suppression of excavation activities. Inspect all	Occasional	Marginal	M

Job Steps	Hazards	Controls	P	S	RAC
		walking surfaces and wear proper footwear. 2.2.2 Inspect the job site at the beginning of every day. Conditions may change throughout the day: therefore, inspect all walking surfaces continuously. 2.3.1 Call Dig Alert (811) for each property at least 48 hours prior to work and review findings with the subcontractors 2.3.2 Review as-builts (if available) 2.3.3 Consult with property owners for knowledge of any utilities within the excavation areas (if available) 2.3.4 Identify the location of water, gas, and electrical meters in each property and protect them in place. 2.3.5 Conduct a subsurface utility survey at each proposed excavation site. Mark the location of each utility on the ground within the proposed excavation work and mark the location of utilities on a sketch. Review the survey with the excavation subcontractor. 2.3.6 Use spotter when work activities deem Nessessary. 2.4.1 Hearing protection shall be required if shouting is needed to hear someone 3 feet away or any activities with decibel readings or 85 or over shall require hearing protection.			

Equipment to be Used	Training Requirements/Competent or Qualified Personnel	Inspection Requirements
1.0 Hand tools (i.e. shovels, other digging tools, etc.) 2.0 Mini Excavator	1. *All personnel engaged in hazardous substance removal or other activities that expose or potentially expose them to hazardous substances or health hazards shall receive appropriate training as required by 29 CFR 1910.120(e), including, but*	1. Daily equipment inspection • Note: Any deficiencies found during the equipment inspection shall be reported to the project team immediately and the piece of equipment locked out until deficiencies are resolved. 2. Spill kit available at each worksite a mini excavator is working 3. Check PPE for abnormal wear and tear, rips, etc. 4. Look for objects that could pose potential trip hazards

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Job Steps	Hazards	Controls	P	S	RAC
	not limited to, initial 40-hour, 8-hour Supervisor and annual 8-hour refresher training. 2. *Only authorized trained operators shall run the mini excavator*	5. Survey work area for overhead hazards, flying debris/particulates or splashes, vehicle traffic or heavy equipment operation, loud noises, etc.			

Activity Hazard Analysis (AHA)

Activity/Work Task:	Transporting of Super Sacks	Overall Risk Assessment Code (RAC) (Use highest code)					M
Project Location:	DTSC Exide Technologies Off-Site	Risk Assessment Code (RAC) Matrix					
Project Number:	451405	Severity	Probability				
Date Prepared:	11/07/2018		Frequent	Likely	Occasional	Seldom	Unlikely
Prepared by (Name/Title):	Darrell Pruitt	Catastrophic	E	E	H	H	M
		Critical	E	H	H	M	L
Reviewed by (Name/Title):	Paul Boyajian/Jeff Muller	Marginal	H	M	M	L	L
		Negligible	M	L	L	L	L
Employer/GBU:	Parsons Industrial	Step 1: Review each "Hazard" with identified safety "Controls" and determine RAC (See above). The RAC is developed after correctly identifying all the hazards and fully implementing all controls.					
Notes: (Field Notes, Review Comments, etc.) Level D: Hard hats, safety glasses, gloves, steel-toed boots (or equivalent), high visibility vest. Ear plugs/muffs, if Nessessary.		P "Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.					RAC Chart
		S "Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible					E = Extremely High Risk
							H = High Risk
		Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.					M = Moderate Risk
							L = Low Risk

Job Steps	Hazards	Controls	P	S	RAC
1.0 Excavated soils are placed in Super Sacks (each holding approximately one cubic yard of impacted soil) Using a Kubota or John Deer mini excavator	1.1 Struck by and against, damage of property 1.2 Slips, trips, and falls	1.1.1 Create a working zone so that no one can be hit by mini excavator while in operation 1.1.2 Flying debris may occur during any potential demolition activities (e.g. concrete breaking, cutting of brushes). Stand a safe distance away from these activities and wear safety goggles at all time. 1.1.3 Do not stand behind equipment and other moving vehicles. Stand within line of sight of the equipment operator. If you need to approach moving equipment, signal the operator with a hand gesture and do not approach until the equipment operator has acknowledged you and the equipment is turned off. 1.1.4 Do not stand within the moving path of a mini excavator. Only stand a safe distance away from the mini excavator. 1.1.5 Use spotter when work activities deem Nessessary. 1.2.1 Walking surfaces may become slippery during or after a rain event, inspect all walking surfaces and wear proper footwear.	Occasional	Marginal	M

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Job Steps	Hazards	Controls	P	S	RAC
		1.2.2 Inspect the job site at the beginning of every day. Conditions may change throughout the day: therefore, inspect all walking surfaces continuously.			
2.0 Super sacks are picked up by an extendable forklift and placed in trucks for delivery	2.1 Struck by and against, damage of property 2.2 Exposure to collision with moving traffic 2.3 Traffic Control Setup/Takedown, Operations, Flagging	2.1.1 Create a working zone so that no one can be hit by forklift while in operation 2.1.2 Do not stand behind equipment and other moving vehicles. Stand within line of sight of the equipment operator. If you need to approach moving equipment, signal the operator with a hand gesture and do not approach until the equipment operator has acknowledged you and the equipment is turned off. 2.1.3 Do not stand within the moving path of a forklift. Only stand a safe distance away from the forklift while in operation. 2.1.4 Use spotter when work activities deem Nessessary. 2.2.1 Verify contractor has obtained approval from local authority to work in live road. 2.2.2 Verify that the area well cordoned off using adequate barriers & sign boards. 2.2.3 Verify moving traffic is rerouted. 2.2.4 Wear high visible safety vest. 2.2.5 Keep exposure time to a minimum. 2.3.1 Flaggers will be posted as Nessessary to assist pedestrians, workers and traffic. Make sure stripes on vertical panels face correct direction. Note: Follow MHTs. Watch traffic patterns. Receive and communicate specific instructions clearly, firmly, and courteously. 2.3.2 Move and maneuver quickly to avoid danger from errant vehicles. Understand and apply safe traffic control practices in stressful or emergency situations. Recognize dangerous traffic situations and warn workers in enough time to avoid injury. Don't turn your back to oncoming traffic. Where possible, leave an escape route in the event of an out-of-control vehicle. 2.3.3 Be alert when working around heavy equipment. Pay attention to backup alarms. Make sure there is adequate room for trucks delivering or removing materials. 2.3.4. Make sure signs and devices are secure on truck before moving.	Occasional	Marginal	M

Job Steps	Hazards	Controls	P	S	RAC
		Use beacon. 2.3.5 For daytime activity, flaggers shall wear safety apparel meeting the requirements of "American National Standard for High Visibility Apparel" and Labeled as meeting the ANSI 107-1999 standard performance for Class 2 risk exposure. Shall be visible from 1000 feet			
Equipment to be Used	**Training Requirements/Competent or Qualified Personnel**	**Inspection Requirements**			
1.0 Forklift	*1.0 All personnel engaged in hazardous substance removal or other activities that expose or potentially expose them to hazardous substances or health hazards shall receive appropriate training as required by 29 CFR 1910.120(e), including, but not limited to, initial 40-hour, 8-hour Supervisor and annual 8-hour refresher training.* *1.1 Only authorized trained operators shall run the forklift*	1. Daily equipment inspection • Note: Any deficiencies found during the equipment inspection shall be reported to the project team immediately and the piece of equipment locked out until deficiencies are resolved. 2. Spill kit available in areas forklift is working 3. Check PPE for abnormal wear and tear, rips, etc. 4. Look for objects that could pose potential trip hazards 5. Survey work area for overhead hazards, flying debris/particulates or splashes, vehicle traffic or heavy equipment operation, loud noises, etc.			

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Activity Hazard Analysis (AHA)

Activity/Work Task: Backfill and landscaping using skid steer or Bobcat. With assistance from wheel barrow, rakes, and shovels.	Overall Risk Assessment Code (RAC) (Use highest code)	M
Project Location: DTSC Exide Technologies Off-Site	Risk Assessment Code (RAC) Matrix	
Project Number: 451405	Severity / Probability	
Date Prepared: (mm/dd/yy) 11/07/2018		
Prepared by (Name/Title): Darrell Pruitt		
Reviewed by (Name/Title): Paul Boyajian/Jeff Muller		
Employer/GBU: Parsons Infrastructure		

Severity	Frequent	Likely	Occasional	Seldom	Unlikely
Catastrophic	E	E	H	H	M
Critical	E	H	H	M	L
Marginal	H	M	M	L	L
Negligible	M	L	L	L	L

Notes: (Field Notes, Review Comments, etc.)
Level D: Hard hats, safety glasses, gloves, steel-toed boots (or equivalent), high visibility vest. Ear plugs/muffs, if Nessessary.

Step 1: Review each "Hazard" with identified safety "Controls" and determine RAC (See above).
The RAC is developed after correctly identifying all the hazards and fully implementing all controls.

P "Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.

S "Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible

Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.

RAC Chart
- E = Extremely High Risk
- H = High Risk
- M = Moderate Risk
- L = Low Risk

Job Steps	Hazards	Controls	P	S	RAC
1.0 Use of skid steer or bobcat to place clean, imported soil in excavated areas	1.1Struck by and against, damage of property 1.2 Slips, trips, and falls	1.1.1 Create a working zone so that no one can be hit by skid steer or bobcat while in operation 1.1.2 Do not stand behind equipment and other moving vehicles. Stand within line of sight of the equipment operator. If you need to approach moving equipment, signal the operator with a hand gesture and do not approach until the equipment operator has acknowledged you and the equipment is turned off. 1.1.3 Do not stand within the moving path of a skid steer or bobcat. Only	Occasional	Marginal	M

Job Steps	Hazards	Controls	P	S	RAC
		stand a safe distance away from the skid steer or bobcat 1.1.4 Use spotter when work activities deem Nessessary 1.2.1 Walking surfaces may become slippery during or after a rain event, inspect all walking surfaces and wear proper footwear. 1.2.2 Inspect the job site at the beginning of every day. Conditions may change throughout the day: therefore, inspect all walking surfaces continuously.			
2.0 Use of wheel barrow, rakes, and shovels to manually distribute clean fill soils placed in excavation areas	2.1 Exposure to slips trips and falls 2.2 Back strain 2.3 Heat/Cold Stress, Weather, Storms	2.1.1 Walking surfaces may become slippery during or after a rain event, or during dust suppression of excavating activities. Inspect all walking surfaces and wear proper footwear. 2.2.1 Inspect the job site at the beginning of each shift for any potential slip trips or fall hazards. 2.3.1 Conditions may change throughout the day: therefore, inspect all walking surfaces continuously. Address any hazards with the subcontractors on site. 2.4.1 Ensure designated walkways are clear. Avoid protruding parts of the material. Avoid stepping over obstacles such as tools, materials and cables. 2.5.1 Correct safety footwear shall be worn 2.6.1 Ensure adequate illumination/lighting provided	Seldom	Marginal	L

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Job Steps	Hazards	Controls	P	S	RAC
		2.7.1 Good housekeeping shall be maintained in all work areas. 2.8.1 Use an EZ-up in designated work staging areas 2.2.1 Proper lifting techniques utilize mechanical methods to move heavy objects, no one shall lift more than 50 lbs. without assistance 2.3.1 Wear correct clothing for the weather along with the proper PPE. 2.3.2 Reduce exposure when possible. i.e. take breaks in shade 2.3.3 Stay hydrated during hot weather condition 2.3.4 Use skin protection like sun block, etc. during hot weather conditions.			
3.0 Use of gasoline-powered vibratory plate to compact fill soils.	3.1 Exposure to slips trips and falls 3.2 Back strain 3.3 Heat/Cold Stress, Weather, Storms 3.4 Hearing Loss	3.1.1 Walking surfaces may become slippery during or after a rain event, or during dust suppression of excavating activities. Inspect all walking surfaces and wear proper footwear. 3.2.1 Inspect the job site at the beginning of each shift for any potential slip trips or fall hazards. 3.3.1 Conditions may change throughout the day: therefore, inspect all walking surfaces continuously. Address any hazards with the subcontractors on site. 3.4.1 Ensure designated walkways are clear. Avoid protruding parts of the material. Avoid stepping over obstacles such as tools, materials and cables. 3.5.1 Correct safety footwear shall be worn	Seldom	Marginal	L

Job Steps	Hazards	Controls	P	S	RAC
		3.6.1 Ensure adequate illumination/lighting provided 3.7.1 Good housekeeping shall be maintained in all work areas. 3.8.1 Use an EZ-up in designated work staging areas 3.2.1 Proper lifting techniques utilize mechanical methods to move heavy objects, no one shall lift more than 50 lbs. without assistance 3.3.1 Wear correct clothing for the weather along with the proper PPE. 3.3.2 Reduce exposure when possible. i.e. take breaks in shade 3.3.3 Stay hydrated during hot weather condition 3.3.4 Use skin protection like sun block, etc. during hot weather conditions. 3.4.1 Hearing protection shall be required if shouting is needed to hear someone 3 feet away or any activities with decibel readings or 85 or over shall require hearing protection.			
4.0 Installation of sod on clean soils imported to the property	4.1 Exposure to slips trips and falls 4.2 Back strain 4.3 Heat/Cold Stress, Weather, Storms	4.1.1 Walking surfaces may become slippery during or after a rain event, or during dust suppression of excavating activities. Inspect all walking surfaces and wear proper footwear. 4.2.1 Inspect the job site at the beginning of each shift for any potential slip trips or fall hazards. 4.3.1 Conditions may change throughout the day: therefore, inspect all	Seldom	Marginal	L

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Job Steps	Hazards	Controls	P	S	RAC
		walking surfaces continuously. Address any hazards with the subcontractors on site. 4.4.1 Ensure designated walkways are clear. Avoid protruding parts of the material. Avoid stepping over obstacles such as tools, materials and cables. 4.5.1 Correct safety footwear shall be worn 4.6.1 Ensure adequate illumination/lighting provided 4.7.1 Good housekeeping shall be maintained in all work areas. 4.8.1 Use an EZ-up in designated work staging areas 4.2.1 Proper lifting techniques utilize mechanical methods to move heavy objects, no one shall lift more than 50 lbs. without assistance 4.3.1 Wear correct clothing for the weather along with the proper PPE. 4.3.2 Reduce exposure when possible. i.e. take breaks in shade 4.3.3 Stay hydrated during hot weather condition 4.3.4 Use skin protection like sun block, etc. during hot weather conditions.			

Equipment to be Used	Training Requirements/Competent or Qualified Personnel	Inspection Requirements
1.0 Hand tools (i.e. wheel barrow, rakes, shovels, etc.) 2.0 Gasoline-powered vibratory plate 3.0 Skid steer or Bobcat	*1.0 All personnel engaged in hazardous substance removal or other activities that expose or potentially expose them to hazardous substances or health hazards shall receive appropriate training as required by 29 CFR 1910.120(e), including, but not limited to, initial 40-hour, 8-hour Supervisor and annual 8-hour refresher training.*	1. Daily equipment inspection • Note: Any deficiencies found during the equipment inspection shall be reported to the project team immediately and the piece of equipment locked out until deficiencies are resolved. 2. Spill kit available in areas skid steer or bobcat is working 3. Review owner's manual of gasoline powered vibratory plate prior to use 4. Check PPE for abnormal wear and tear, rips, etc. 5. Look for objects that could pose potential trip hazards 6. Survey work area for overhead hazards, flying debris/particulates or splashes, vehicle traffic or heavy equipment operation, loud noises, etc.

Job Steps	Hazards	Controls	P	S	RAC
	2.0 *Only authorized trained employees shall run the gasoline-powered vibratory plate.* 3.0 *Only authorized trained operators shall run the skid steer or bobcat*				

APPENDIX D – TRAINING MATRIX

Employee Name / Employee Title / Employee Function	Required Compliance / Risk Control / Risk Management Training	Required Licenses / Designations of Authority / Competencies / Qualifications / Certifications	Frequency of Required Refresher Training / Assessment of Continuing Competency
Parsons and subcontractor field staff performing field work.	Site orientation / PSHEP review and sign-off (Parsons field staff) / SSHEP review and sign-off (Subcontractor field staff)	Sign PSHEP / SSHEP	Prior to working on site (or property (typical))
Parsons and subcontractor supervisors and managers performing field work.	Cultural Sensitivity Training	Completion of cultural sensitivity training event	Prior to working on site
Field staff directly involved in soil removal, specifically Parsons construction manager, site construction representatives, and subcontractor's field supervisors and managers	Cultural Resource Sensitivity Training	Completion of cultural resource sensitivity training event	Prior to working on site
Subcontractor field supervisor	Certified Lead Inspector/Assessor	Current and up to date certification	Prior to working on site
Subcontractor field laborer	California Certified Lead Sampling Technicians	Current and up to date certification	Prior to working on site
Subcontractor field supervisor	California Certified Lead Supervisors	Current and up to date certification	Prior to working on site
Subcontractor field laborer	California certified lead workers	Current and up to date certification	Prior to working on site
Subcontractors supervisor, landscape operators, and	8-Hr Lead Awareness Training	Obtain lead awareness training certificate	Minimum training for working on site

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laborers performing field work			
Parsons and subcontractor personnel performing field work	24 or 40-Hr Hazwoper Training	Obtain 24 or 40-hr Hazwoper training certificate	Minimum training for working on site
Parsons and subcontractor personnel performing field work	8-Hr Hazwoper Refresher Training	Obtain 8-hr Hazwoper refresher training certificate	Minimum training for working on site
One Parsons or subcontractor field supervisor or manager	Rule 1466 Dust Control Supervisor Training	Attend and receive valid certificate of completion for SCAQMD Fugitive Dust Control Class	Prior to working on site
Subcontractor supervisory and field staff as required	10-Hour OSHA Construction, PEC Safeland, or equivalent	10-Hour OSHA, PEC Safeland, or equivalent	Initial and required refreshers (if any)
One subcontractor field staff per property	First Aid / CPR / AED	Designated provider of first aid / CPR	Every 2 years (with bloodborne pathogens training)
Parsons and subcontractor field staff performing field work	Emergency Action Plan	Can be included in PSHEP review or provided verbally during tailgate safety meeting.	On initial assignment; upon material changes to emergency action plan changes
Parsons field staff including project manager, construction manager, site construction representatives, samplers, property representative, and subcontractor field staff	Hazard Communication	PSHEP review and location of SDS	On initial assignment; when new chemicals are added to the work environment
Project field personnel including visitors	Minimum PPE: Hardhats, gloves, eye protection, safety boots, safety vests and hearing protection (where required) Additional PPE as required by task specific AHAs	PSHEP review	On initial assignment; upon changes to PPE use

Orientation acknowledgment form

PARSONS Safety, Security, Health, and Environmental Orientation Acknowledgment

I, (printed name of new project employee)_____, acknowledge receiving, reviewing, and understanding the safety, security, health, and environmental orientation information for working on this project. I understand that I shall not perform work on this project unless I am knowledgeable and have received the Nessessary training to safely and effectively carry out the work I am assigned. I understand that I have the authority and responsibility to stop work and ask my supervisor about any safety, security, health, and environmental matters for which I am unsure or for which I am untrained.

Subject matter covered in my orientation included the following.

<Insert the new project employee's custom orientation plan subject matter here. Use two columns, if Nessessary.

Refer to the Sample Custom Orientation Plan in Appendix 14.4-1.>

_____ _____
Signature of New Project Employee Signature of New Project Employee's Supervisor

_____ _____
Date Signed by New Project Employee Signature of New Project Employee's Mentor

Signed acknowledgments shall be maintained in the new project employee's training file.

Intitial Contractor Employee Training Acknowledgment Form

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Initial Contractor Employee Training Acknowledgment

Name, title, and employer of trainer: _____
Training subject: _____
Training materials used: _____
Name of contractor employee trained: _____
Date of hire/assignment: _____

I, _____ (Printed Name of Contractor Employee), certify that I have received training as described above in the following areas.

- The potential occupational hazards in general in the work area and associated with my job assignment.
- General SH&E requirements indicate the safe work conditions, safe work practices, personal protective equipment, and environmental requirements required for my work.
- The hazards of any chemicals to which I may be exposed and my right to information contained on material safety data sheets for those chemicals, and how to understand this information.
- My right to ask questions, or provide any information to the employer on safety, health, or environment either directly or anonymously without any fear of reprisal.
- Disciplinary procedures the employer will use to enforce compliance with general safety requirements.

I understand this training and agree to comply with general safety requirements for my work area.

_____ _____

Contractor Employee Signature **Date**

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Risk Mitigation Two-Week Look-Ahead Form

PARSONS ESHARP 2-Week Look Ahead Meeting

SH&E Plan for Week Ending:		**Contractor:**	
Project/ Location:		**Meeting Date:**	
Plan Prepared by:		**Date Prepared:**	

Next Two Weeks' Scope of Work:

Identified SH&E Risks / Exposures / Hazards / Issues:

Identify Tasks requiring environmental construction permitting (e.g., storm water permit) or involving other environmental regulatory issues (e.g., generation of new, uncharacterized waste):

Tasks with environmental risk of significant spills or releases:

Control Measures:

Additional Activity Hazards Analysis Required:

Contractors and Subcontractors Mobilizing / Demobilizing:

Audits/Inspections Scheduled:

Competent Person Changes:

Planned Orientation / Training:

Recommendations / Comments / Concerns:

Note: This information shall be incorporated into the meeting minutes.

Notice of Noncompliance with Safety, Health and Envrionmental Regulations

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Notice of Noncompliance with Safety, Health and Environmental Regulations

Under conditions of this enforcement procedure check all items that apply:

☐	1.	You are being notified of this violation and should take corrective action to prevent a reoccurrence. The corrective action shall be documented to the Parsons Construction Management representative immediately.
☐	2.	You must submit a plan for compliance to your Parsons Construction Management representative and the Construction Safety Manager within two days of receipt of this letter. The compliance plan must include the means or methods of compliance and the date that the requirements for compliance will be completed. Once compliance has been achieved, a follow up letter must be sent to the Parsons Construction Management representative and Construction Safety Manager. Failure to comply will result in disciplinary action against your Company.
☐	3.	You are required to review the stated procedures with your Parsons Construction Management representative. Work may not commence on the site until the review is complete and the Subcontractor responds formally that the procedure is understood and will comply.
☐	4.	You are required to review the stated procedures with your Parsons Construction Management representative. Work may not commence on the site until the review is complete and you must confirm formally the disciplinary action to be taken against the supervisor and employees.
☐	5.	All work on the site will stop until the Parsons Construction Management representative reviews all the facts with the Subcontractor and determines if the contract between the parties will be terminated.

Sincerely,

Parsons Representative

cc:
Issuing Construction Manager Representative
Job File
BU SH&E Director
Project Manager

Notice of Subcontractor Nonconformance with Safety, Health, and Environmental Regulations

PARSONS

Notice of Subcontractor Violation of Safety and Health Regulations

PARSONS

Notice of Contractor Violation of Safety, Health and Environmental Regulations, Policies, Plans, or Procedures

				Date:			
Contractor Name:							
Address:							
Attention:							

This letter officially notifies you that you have been found to be in violation of the following safety, health, or environmental regulations, policies, plans, or procedures on (***DATE***) _____, by (***REPORTING INDIVIDUAL***) ____ .

Confined space entry	☐	Lock-out / tag-out	☐	Hot work	☐	Personal protective equipment	☐
Knowledge of environmental requirements	☐	Awareness of warning alarms	☐	Evacuation routes	☐	Backup alarms	☐
Assembly locations	☐	Fall protection	☐	Scaffolding	☐	Environmental / hazardous material storage	☐
Excavation / trenching	☐	Safe work practices	☐	Security practices	☐	Spill to the environment	☐
Waste storage or disposal	☐	Wastewater discharge	☐	Buried items	☐	Violation of environmental regulations	☐

Other:

The name of the involved employee(s) and associated work activities was/were _____

_____

_____

☐	1.	You are being notified of this violation and should take corrective action to prevent a reoccurrence. The corrective action shall be documented to an authorized Parsons representative (e.g., Project Manager or Project SH&E Representative) immediately.
☐	2.	You must submit a plan for compliance to an authorized Parsons representative (e.g., Project Manager or Project SH&E Representative) within 2 days of receipt of this letter. The compliance plan must include the means or methods of compliance and the date that the requirements for compliance will be completed. Once compliance has been achieved, a follow up letter must be sent to the authorized Parsons representative. Failure to comply will result in an adverse action against your firm.
☐	3.	You are required to review the stated procedures with an authorized Parsons representative (e.g., Project Manager or Project SH&E Representative). Work may not commence on the site until the review is complete and your firm responds formally that the procedure is understood and will comply.
☐	4.	You are required to review the stated procedures with an authorized Parsons representative (e.g., Project Manager or Project SH&E Representative). Work may not commence on the site until the review is complete, and you must confirm formally any corrective actions taken (including any disciplinary actions taken against the supervisor and involved employees).
☐	5.	All work on the site will stop until an authorized Parsons representative (e.g., Project Manager or Project SH&E Representative) reviews all the facts with your firm and determines whether the contract between your firm and Parsons will be terminated.

Sincerely,

Authorized Parsons Representative

cc:
Authorized Parsons Representative
Project File
Parsons GBU SH&E Director
Project Manager

PARSONS

Take 5 for safety

PARSONS

SAFETY – Make it personal! - Take 5 For Safety

Date: _____

Project/Task: _____

Your Name: _____

Before you begin any new task, pause for 5 minutes and ask yourself the following questions. Take corrective actions as Nessessary prior to beginning work.

- ☐ Do I know exactly what I am doing?
- ☐ Have I reviewed the AHA for this task?
- ☐ Do I have all the right people involved?
- ☐ Is there any potential that I or my coworkers could get hurt?
- ☐ Are there any questions I should be asking fellow employees?
- ☐ Should I talk to my supervisor?
- ☐ Have I read the work plan and fully understand the procedures relating to this job?
- ☐ Am I using the proper tools?
- ☐ Do I have the proper PPE?
- ☐ Will I be working as safely as I know how?
- ☐ Do I see anything that just doesn't look quite right?
- ☐ Am I in a hurry? Would I be safer if I slowed down?

You must honestly and completely answer "YES" to each of these questions before you begin your work. No task in Parsons is so important that you must jeopardize your safety. You can stop or pause any work activity if you need to.

Job Hazards? (List the hazards of the task and how you will be protected from them.)

1. Hazards: _____

   Protection: _____

2. Hazards: _____

   Protection: _____

3. Hazards: _____

   Protection: _____

Work Area	**Yes**	**No**
Work area clean?	☐	☐
Permits obtained?	☐	☐
Standard PPE being used *(hard hat, vest, eye protection, gloves, safety boots)?*	☐	☐
Any additional PPE needed? List it here and then go get it if you don't have it with you.		

Briefly review the hazards and protection again after taking a break