FINAL
HEALTH AND SAFETY PLAN

Contract No. W9126G-07-D-0028
Task Order No. DO11

Prepared for:

Camp Stanley Storage Activity
Boerne, Texas

Prepared by:

PARSONS
Austin, TX

March 2009

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ACRONYMS AND ABBREVIATIONS

AHA	Activity hazard analysis
CFR	Code of Federal Regulations
CRZ	Contamination reduction zone
CSSA	Camp Stanley Storage Activity
EMS	Emergency medical services
EZ	Exclusion zone
GBU	Global business unit
HASP	Health and Safety Plan
HAZWOPER	Hazardous Waste Operations and Emergency Response
IDW	Investigation-derived waste
PEL	Permissible exposure limit
PPE	Personal protective equipment
PSP	Project Safety Plan/Program
RFP	Request for proposal
SHSO	Site health and safety officer
SSP	Subcontractor Safety Plan
SZ	Support zone
TCEQ	Texas Commission on Environmental Quality
TRRP	Texas Risk Reduction Program
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
UXO	Unexploded ordnance

SECTION 1 – INTRODUCTION

1.1 PARSONS WORKPLACE HEALTH & SAFETY POLICY

STATEMENT OF POLICY:
As an industry-leading engineering, construction and technical services firm, Parsons is firmly committed to maintaining a safe and healthy working environment at all its offices and project facilities. We share the National Safety Council's Safety and Health Code of Ethics as the principles guiding our commitment to safety.

- We will hold safety and health as our highest core value.
- Executive management will lead the safety improvement process.
- Safety will be a responsibility shared by everyone in our organization.
- Safety performance will be a key indicator of our organizational excellence and will be incorporated into our business processes.
- We will communicate safety performance openly with employees.
- All employees will be given the knowledge and skills necessary to safely perform their jobs.
- We will extend our safety efforts beyond the workplace to include transportation, homes, and communities.
- We will continually strive to improve our safety and health processes.

To meet its health and safety objectives, all Parsons' employees are expected to act proactively with regard to health and safety issues. This requires the combined efforts of a concerned management, responsible and knowledgeable supervision, and conscientious, well-trained employees.

Parsons will take all reasonable action to meet or exceed the applicable occupational health and safety requirements, domestically and internationally, and will continuously monitor and improve operations, procedures, technologies and programs that are conducive to maintaining a safe and healthy working environment.

RESPONSIBILITIES:

Parsons Global Business Unit (GBU) management, project managers and site safety personnel are responsible to:

- Comply with this policy and ensure that the applicable health and safety requirements at each domestic and international office and project facility are effectively implemented and monitored at all times.
- Ensure that the applicable health and safety requirements at each domestic and international project facility are effectively integrated with the preparation of proposals, project planning, and project execution.

- Monitor subcontractor safety performance in accordance with contract specifications as required by the contract with the client.
- Ensure that safety information and statistics are reported to Parsons Corporate Safety Manager on a consistent and regular basis, as shown in *Appendix 1, Safety Monthly Report*.

Parsons Corporate Safety personnel are responsible to:

- Develop, communicate, and oversee Parsons' health and safety programs at all Parsons' business units.
- Provide assistance to Parsons' business unit managers regarding health and safety regulations, reporting requirements, safety training, and other related issues.
- Monitor the effectiveness of Parsons' health and safety programs, conduct investigations, develop OSHA reporting and worker's compensation claim procedures.
- Collect and maintain safety information and statistics for all Parsons' business units and operations, as shown in corporate policy Workplace Health and Safety, Appendix 2, OSHA Safety and Health Statistics.
- Keep senior management informed of significant internal and external developments regarding health and safety.

Parsons employees are responsible to:

- Exercise maximum appropriate care and good judgment at all times regarding health and safety, and adhere to safety procedures to prevent accidents and injuries.
- Promptly report all accidents and injuries to supervisory personnel.
- Promptly report any near misses, unsafe conditions, equipment, or practices to supervisory personnel.

REFERENCES:

National Safety Council Safety and Health Code of Ethics

Parsons Construction Health and Safety Manual

Parsons Injury and Illness Prevention Program (Cal-OSHA IIPP)

Parsons Safety Monthly Reports, Workplace Health and Safety – Appendix 1

Parsons Health and Safety Statistics, Workplace Health and Safety – Appendix 2

1.2 THE PROJECT SAFETY PLAN/PROGRAM

Parsons goal is zero accidents and zero injuries with work tasks designed to minimize or eliminate hazards to personnel, process, equipment, environment and the general public. No employees should ever perform tasks that may endanger their own safety and health or that of others.

This Project Health and Safety Plan/Program (HASP) outlines safety and health requirements and guidelines developed by Parsons for project work. When implemented, these requirements

will help protect site personnel, visitors, the public and environment from exposure to potential safety and health hazards.

This Plan will be updated as conditions change or situations change, usually by addenda to the model plan. All Parsons and subcontractor personnel must understand and implement the HASP and any addenda. This action is documented by having Parsons' employees sign an acknowledgement form stating that they understand the plan and its requirements.

Parsons has developed a programmatic safety plan for Camp Stanley Storage Activity (CSSA) that can be referenced at CSSA Health and Safety Plan (April 2005).

1.3 SUBCONTRACTOR SAFETY PLANS

Parsons' subcontractors must establish a safety program for their work and employees. Contract specifications require all subcontractors to accept Parsons' HASP, but also prepare their own Subcontractor Safety Plan (SSP) for presentation to Parsons Project Manager and Division Safety Manager before site mobilization. At a minimum, subcontractor safety and health plans must meet the requirements of this HASP and provide safety equipment and safeguards suitable for the hazards involved. This HASP may not cover all potential hazards on the project and subcontractors must ensure that appropriate safety and health information is available for all project tasks. The subcontractors listed below will be directly hired by Parsons.

All HASP requirements for Parsons' personnel (e.g., training, substance abuse screening, and incident reporting) also apply to subcontractor personnel and should be spelled out in the subcontractor's SSP.

If a subcontractor is performing activities that require specialized training (*i.e.* confined space entry, excavation/trenching, scaffold use, HAZWOPER, etc.), then copies of training certifications must be provided for applicable employees and the supervisor.

Subcontractor supervisors must possess the following certifications for applicable operations – HAZWOPER 8-hour Supervisor (29 CFR §1910.120(e)(4) - not to be confused with 8-hour annual refresher).

For this project, there will be six subcontractors directly hired by Parsons, one drilling subcontractor, one analytical laboratory, one electrical subcontractor, one carbon treatment systems contractor, one waste handling contractor, and one SCADA systems support contractor. Since the laboratory will not be involved in field activities for the project, they are not required to have the abovementioned certifications and are not given a safety evaluation grade.

The subcontractors directly hired by Parsons that will be involved in field activities on this project will be GeoProjects Inc. for drilling the B-3 Bioreactor supply well and well completion. Carbonair Environmental Services will exchange carbon in existing GAC systems as well as install new structures on GAC units. Morlandt will provide electrical support for various projects, USA Environment will provide waste handling support at SWMU closure sites, and Systems Controls and Information will provide SCADA support.

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SECTION 2 – SCOPE OF WORK

2.1 SCOPE OF WORK

Parsons, in their contracted role with the U.S. Army Corps of Engineers (USACE), is providing services for the work as specified in the Contract W9126G-07-D-0028, Task Order DO11.

Task 1 – Groundwater Monitoring

Under this contract, Parsons will perform four groundwater monitoring events at selected monitoring wells both on- and off-post, as well as semi-annual sampling events on four Westbay-equipped monitoring wells. Specific schedules and requirements for periodic monitoring shall be included in the Work Plan and SAP and shall conform to the approved well optimization study (LTMO) or project DQOs completed for Camp Stanley.

This task shall also include maintenance of the granular activated carbon (GAC) systems both on- and off-post between March 2009 and December 2009. The GAC system maintenance shall include effluent sampling and GAC carbon canister replacement as necessary for on- and off-post GAC systems. Two carbon exchanges will be performed at each of the five off-post GACs for the duration of this task. Replacement of the current off-post GAC structures will be scheduled in conjunction with the semi-annual carbon exchange. Four structures will be completely replaced and the fifth structure will be upgraded.

This task will also include an estimated 22 sampling events of outfalls 002 and 004 at Camp Stanley. The laboratory to be utilized for Westbay and outfall or GAC effluent sampling will meet the requirements of the Camp Stanley QAPP and Groundwater Monitoring DQOs as screening level data.

An update to the current Three-Tiered Long Term Monitoring Network Optimization Evaluation (LTMO) will be prepared to identify ways to streamline groundwater monitoring activities while still maintaining and effective monitoring program.

Task 2 – Treatability Study Systems Operations

The B-3 Bioreactor Operation and Maintenance task consists of periodic sampling of sumps, Westbay-equipped wells, and surrounding monitoring wells to assist in evaluating contaminant removal capacity of the bioreactor. Parsons will provide daily checks, sampling following rain events, sampling for twelve monthly events four of which will be quarterly events.

The SVE Treatability Study Operation and Maintenance task consists of performing O&M activities in accordance with the current approved version of the O&M Manual for the SVE systems at AOC-65. Parsons will operate the SVE systems at AOC-65 in accordance with the updated and approved O&M Manual. O&M activities shall consist of periodic sampling of air emissions at each system and the individual air flows to assist in evaluating mass removal capacity of the system. Parsons will provide a monthly emissions certification documenting emissions are below permitted requirements. An annual report will be prepared to summarize the results of one year of monitoring covering April 2009 through March 2010 and shall make

recommendations with regard to future SVE operation at the site. The draft annual SVE monitoring report will be submitted 30 days following the end of the year of monitoring.

Task 3 – Corrective Measures Study

Parsons will prepare a Corrective Measures Study for SWMU B-3 using the data available from the Remedial Investigation and subsequent treatability studies. Parsons will develop and evaluate corrective measures alternative(s) and include justification and recommendations of the corrective measure(s). Parsons will establish project objectives and goals for promoting human and environmental balance. These objectives and goals will be determined based on applicable or relevant and appropriate requirements (APARs). General project actions and applicable technologies will be identified along with alternatives that eliminate, control, and reduce risk. Each alternative selected will be analyzed in detail. The Corrective Measures Study may potentially be removed from the scope of work for this task order. A future modification may be issued that removes this task.

Task 4 – Administrative Order Recording and Management

Parsons will prepare, compile, and maintain the Administrative Record (Environmental Encyclopedia) and Document Management System containing pertinent information regarding project decisions under this task. An update of the Environmental Encyclopedia will include, but not be limited to: new plans, letters, meeting minutes, sampling and analysis plan, surveys, etc. Provide updates of the encyclopedia on hard copy and publish the Environmental Encyclopedia to the website. Provide updates to the electronic version of the Environmental Encyclopedia by ftp, CD-ROM, or DVD media to IT personnel for the host web server. Technical support will also be provided to the host web server for technical issues.

Task 5 – Site Investigations and Closures

Parsons will perform environmental investigation activities at AOC-68, AOC-69 and SWMU B-8. Requirements include environmental sampling; excavation and removal of material necessary to support the sampling effort; waste characterization and confirmatory sampling and analysis; and proper documentation of all activities, including closure reports for appropriate SWMUs or AOCs. All work shall be performed according to applicable federal, state, and local rules and regulations.

Additional removal actions will be performed to remove impacted media and waste located at sites AOC-68, AOC-69, and SWMU B-8. Removal actions will remove potential sources of contamination including metals impacted soils at AOC-68 and AOC-69. Additional activities to be conducted include stabilization of metals contaminated soil media at SWMU B-8 and transportation of the stabilized media from SWMU B-8 to the East Pasture firing range berm. Background information on the sites referenced can be found in Volume 3-1 of the CSSA Environmental Encyclopedia. Additional specific activities associated with these removal actions are described in the Resource Conservation and Recovery Act (RCRA) Facility Investigations (RFI) Interim Measures Waste Management Plan (Parsons 2006).

AOC-68

Soil sampling results from December 2007 and April 2008 indicated that removal of approximately 15 additional cubic yards (CY) of soil is required at AOC-68. Removal actions will remove lead and cadmium soils impacted above background levels. Excavated media will be placed into a roll-off box for off-post disposal as Class 2 nonhazardous contaminated media. The exact location of removal will be field-determined, but will remain near AOC-68.

AOC-69

AOC-69 is located on the western boundary of CSSA. Soil sampling results from 2001 and June 2008 indicated that removal of approximately 400 CY of soil is required at AOC-69. Removal actions will remove lead, barium, and copper impacted soil and debris (approximately 400 CY) located in the north and northeast portion of the site. Metal scrap encountered will be segregated and recycled. Removal actions will include temporary stockpile areas within the AOC-69 delineated area.

SWMU B-8

SWMU B-8 is located in the North Pasture area of CSSA. Soil sampling results from 2001 and June 2008 indicated that removal of approximately 1,000 CY of soil is required at SWMU B-8. Removal actions will remove lead, barium, and copper impacted soils. Removal actions will include temporary stockpile areas, silt fencing for sediment control, and storm water diversion berms constructed as documented in the Storm Water Pollution Prevention Plan for the SWMU B-8 Excavation (Parsons 2008). The exact location of these features will be field-determined, and will likely extend to the north as shown in the SWMU B-8 proposed removal area. Additional efforts at SWMU B-8 will include stabilization of lead and barium impacted soils (approximately 600 CY) to non-hazardous criteria with the use of PIMS® Apatite II material from PIMSNW, as approved by TCEQ letter dated May 7, 2008. Confirmation sampling of the excavated material will be conducted as described below. Soil mixing is expected to be accomplished within the SWMU B-8 boundary by use of heavy equipment such as a tracked excavator or wheeled front-end loaded. Transportation of confirmed non-hazardous soils to CSSA's East Pasture range berm will also be conducted. The stabilized soils will be spread appropriately with a dozer at the East Pasture range berm.

REMOVAL ACTION PROCEDURES

The upper soil cover and debris-free overburden will be removed and stockpiled nearby for future use as fill or top soil. For the media excavated, waste characterization sampling will occur at a frequency rate of 1 TCLP sample per 200 CY of media/waste for metals and for total petroleum hydrocarbons (TX 1005) for classification of waste to be disposed off-post. No ordnance material is anticipated to be present at the planned soil media removal action sites. Historical records and previously conducted investigations do not indicate that ordnance material will be encountered. Each site's contaminated soils will be managed in accordance with CSSA's RFI Interim Measures Waste Management Plan (Parsons 2006). Soil media from AOC-68 and AOC-69 are expected to meet Class 2 non-hazardous criteria for off-post disposal at Covel

Gardens Landfill in San Antonio, Texas or transported to CSSA's east pasture range berm. Metal debris that is deemed recyclable will be segregated into a scrap stockpile. Suspected hazardous or unknown materials will be segregated into separate stockpiles. The impacted soils at AOC-69 will be excavated to bedrock. It is anticipated that as much as 400 CY of excavated materials will require some form of management. CSSA will utilize the Area of Contamination concept in managing and treatment of contaminated media or waste. Treatment efforts at SWMU B-8 will also include the stabilization of hazardous inorganic impacted media *in situ* before generation, thus rendering the media non-hazardous before transportation to CSSA's East Pasture range management unit. Additionally, management of remediation waste will follow USEPA guidance memorandum issued October 14, 1998, Management of Remediation Waste under RCRA, EPA 530-F-98-026. All removal work will be performed in Level D personal protective equipment. The excavated material will be handled and disposed as determined by waste characterization testing. Sampling methodology and quality control are described in the SAP addenda (*Sampling and Analysis Plan Addendum, DY01*, Parsons April 2007).

Activities shall be planned and implemented in a manner that protects existing site utilities, structures, surface features, service operations, monitoring and other types of wells, and the general site environment. This includes the protection of trees, shrubs and other vegetation not in the affected zone from dust damage, soil compaction, and physical contact with machines and equipment. If appropriate, Parsons will conserve uncontaminated topsoil by removal, storage, or redistribution. All reasonable measures shall be taken to minimize and suppress fugitive emissions of dust, vapors, and other site materials during site work. All fill materials shall be non-contaminated to avoid recontaminating sites. Parsons will conduct all operations and activities with the intent of reducing the amount of pollution generated.

Task 6 – Environmental Program Support

This T&M task consists of the following subtasks, which are described in detail in the paragraphs below:

- Local Area Network (LAN) & Supervisory Control and Data Acquisition (SCADA) Support
- Geographic Information System (GIS) Support
- Environmental Management System (EMS) Compliance
- Monitoring and Treatability Study Systems Maintenance and Repair
- Meetings and Regulatory Support

LAN Support

Parsons will perform routine LAN and computer system maintenance for the CSSA environmental office computer system. Parsons will install hardware, software, software upgrades and anti-virus pattern updates to the system, as required and agreed by CSSA. The Parsons will assist CSSA in evaluating, installing, and further customizing data systems and security software.

SCADA Technical Support

As part of this task order, Parsons will provide technical support for the SCADA system. General technical support activities include actions associated with system troubleshooting, corrective actions, and minor service calls on equipment and instruments. Activities include telephone support, site visits for training, minor programming updates, interface development, and alarm maintenance. General technical support will also include additional data management and report customizations as requested by CSSA.

Also included will be coordinating advanced technical support with the SCADA systems integrator. Advanced support includes electronics/instrument calibration, repair, and/or replacement. Parsons will administer the SCADA systems integrator support, and will determine which technical support activities are service or installation warranty issues. Advanced technical support can also include system programming, data management, and software/firmware revisions to computers and electronic components.

SCADA System Enhancement or Expansion

Provisions for SCADA system enhancement or expansion are also included in this task order. This allows for the installation of additional work stations, instrumentation, or network expansion. When requested by CSSA, this work will be performed by the SCADA systems integrator and administered by Parsons.

SCADA Spare/Redundant Instrumentation and Replacement Parts

As a preventative maintenance action, CSSA should maintain shelf spares for the critical systems monitored by the SCADA system. This equipment generally includes components associated with water production, disinfection, and distribution, as well as instrumentation associated with wastewater treatment and discharge. In general, CSSA will need to maintain spare transducers, flowmeters, analyzers (chlorine, pH, dissolved oxygen and required calibration kits). Spare components for power quality monitoring and remote telemetry units (RTU) should also be considered. This equipment would be maintained under the Technical Support portion of the task order.

GIS Support

Parsons will provide technical support to CSSA for environmental management and GIS systems. Parsons will collect and record all data in a format compatible with the installation's GIS.

Environmental Management System (EMS) Compliance

Parsons will support CSSA's EMS program by preparing Standard Operating Procedures (SOPs) for processes and/or shops at CSSA. Perform activities and analyses including, but not limited to management of the local program, development of EMS program related guidance and perform internal and external evaluations of EMS programs encompassing all applicable EMS protocols, assessment of evaluation results, and correction of deficiencies at each designated installation or facility of interest. Develop implementation plans and strategies enabling installations and/or customers to adopt EMSs based on ISO 14000.

Monitoring and Treatability Study Systems Maintenance and Repair

Parsons will maintain and repair equipment associated with CSSA's environmental program wells and treatability study systems. Pumps, valves, and similar equipment associated with the operation of the treatability system that is found to be inoperational during the maintenance activities will be replaced or repaired by the manufacturer, as necessary.

Meetings and Regulatory Support

Parsons will attend a post award meeting/teleconference at CSSA. The purpose of the meeting shall be to become familiar with the work requirements, information, and/or site-specific data addressed under this task order. Parsons will prepare for and attend progress meetings with the installation, regulatory agencies, and/or USACE representative(s) throughout the period of performance of this project.

Parsons will provide support for public meetings, if a public meeting is required by the regulatory agencies. These meetings will present the information for CSSA to the public with government personnel representation and regulator participation. Parsons will prepare technical information for presentation to the public at the open house/public meeting to be scheduled. Parsons will provide technical experts to support CSSA during question and answer portions of the open house/public meeting.

Parsons will also provide support to CSSA for regulatory audits and requests for information.

Task 7 – Environmental Infrastructure

For the purposes of monitoring groundwater and providing water to the SWMU B-3 Bioreactor treatability study system, Parsons will install a groundwater monitoring well at the treatment location. The well installation will be performed by a subcontracted well driller licensed in the State of Texas. The well will produce groundwater from the Lower Glen Rose portion of the Middle Trinity aquifer, and will be of sufficient depth and diameter to meet the current demands of the treatment system. It is anticipated that drilling depth will be no deeper than 350 feet below ground surface, and the well will have a minimum diameter of 8 inches. The well will be drilled by a licensed well service contractor, and the surface completion will adhere to local and state regulations. In order to maximize yield and promote closed-loop circulation between the bioreactor and the aquifer, a minimum amount of surface casing is required. Upon completion, the well will be inspected by geophysical and video logging. A sufficiently-sized pump will be utilized during well development to ascertain the appropriate pump size for long-term pumping.

Once the well has been developed, a permanent submersible pump and motor controls will be installed at the well. The nearby electrical utility service will be extended to the wellhead as the power supply. From the well, a distribution system will be installed to convey groundwater to the Bioreactor. The operation of the well will be incorporated into the automated Bioreactor control system.

Task 8 – Task Order Management

Parsons will provide Task Order Management for the overall effort and scope involved with this Task Order. Parsons will also provide Task Order management including prime and subcontract support as required, internal AE project controls and QC, status reports on work being performed

under this task order, invoicing and pay requests, and other coordination and personnel support for the individuals assigned to this task order.

Subcontractor support will be required for drilling, electrical work, excavation activities, carbon exchange, SCADA programming and troubleshooting, and analytical services.

2.2 PROJECT SAFETY PLAN APPLICATION

This HASP and referenced documents applies to all locations, facilities, operations, and projects associated with contract work performed by Parsons and its subcontractors. Locations/sites covered under this contract include only CSSA, Boerne, TX.

SECTION 3 – PROJECT SAFETY MANAGEMENT RESPONSIBILITIES AND AUTHORITY

3.1 SAFETY RESPONSIBILITY MATRIX

Exhibit 3-1 summarizes the responsibilities of selected roles for Parsons Project, Division, GBU and Corporate personnel related to the primary safety activities identified in this HASP.

The Project team assigned to the project is outlined below:

Parsons Technical Director	Ross Miller, P.E.
Parsons Project Manager	Julie Burdey, P.G.
Parsons Deputy Project Manager	Kimberly Vaughn, P.G.
Parsons Project Health and Safety Manager	Brian Vanderglas, P.G.
Parsons Task Manager	Scott Pearson, P.G.
Parsons Task Manager	Samantha Elliott
Parsons Task Manager	Mike Stimets
Parsons Task Manager	Ken Rice
Parsons Site Health and Safety Officer	Julie Bouch
CSSA Project Manager	Glaré Sanchez
COE Contact	Wayne Elliott

Parsons project personnel responsibilities are outlined in the following table. The site safety organization is structured such that field team members report to the site Health and Safety Officer (SHSO) who, in turn, reports to the Project Health and Safety Manager for safety-related issues. Subcontractors report to their own health and safety personnel.

Personnel Responsibilities

Title	General Description	Responsibilities
Technical Director	Upper management. Assists project personnel on technical issues.	• Provide technical information for field activities. • Advise Project Manager.
Project Manager	Reports to upper-level management. Has authority to direct response operations. Assumes total control over site activities.	• Prepares and organizes the background review of the situation, the work plan, the site safety plan, and the field team. • Obtains permission for site access and coordinates activities with appropriate officials. • Ensures that the work plan is completed and on schedule. • Briefs the field teams on their specific assignments. • Uses the Site Health and Safety Officer to ensure that safety and health requirements are met. • Prepares the final report and support files on the response activities. • Serves as liaison with public officials.
Project Health and Safety Manager	Advises the Project Manager and Site Health and Safety Officer on	• Oversees preparation of Health and Safety Plan. • Approve SSP. • Provides information regarding project safety issues to

Title	General Description	Responsibilities
	safety related issues.	Site Health and Safety Officers. • Serves as a liaison with public officials.

Title	General Description	Responsibilities
Site Health and Safety Officer	Advise the Project Manager on all aspects of health and safety on-site. Stops work if any operation threatens worker or public health or safety.	• Periodically inspects protective clothing and equipment. • Ensures that protective clothing and equipment are properly stored and maintained. • Controls entry and exit at the access control points. • Coordinates safety and health program activities with project safety officer. • Confirms each team member's suitability for work based on a physician's recommendation. • Monitors the work parties for signs of stress, such as cold exposure, heat stress, and fatigue. • Implements the site safety plan. • Conducts periodic inspections to determine if the site safety plan is being followed. • Knows emergency procedures, evacuation routes, and the telephone numbers for ambulance , local hospital, poison control center, fire department, and police department. • Notifies, when necessary, local public emergency officials. • Coordinates emergency medical care. • Sets up decontamination lines and the decontamination solution appropriate for the type of chemical contamination on site. • Controls the decontamination of all equipment, personnel, and samples from the contaminated areas. • Assures proper disposal of contaminated clothing and materials. • Ensures that all required equipment is available. • Advises medical personnel of potential exposures and consequences. • Notifies emergency response personnel by telephone or radio in the event of an emergency.
Field Team Leader	Responsible for field team operations and safety.	• Manages field operations. • Executes the work plan and schedule. • Enforces safety procedures. • Coordinates with the Site Health and Safety Officer in determining protection level. • Enforces site control. • Documents field activities and sample collection. • Serves as liaison with public officials.

Title	General Description	Responsibilities
Work Team	The work party must consist of at least two people, one of whom is a Parsons employee.	• Safely complete the onsite tasks required to fulfill the work plan. • Notify project health and safety officer or supervisor of suspected unsafe conditions. Take precautions necessary to prevent injury to themselves and other employees. • Take precautions necessary to prevent injury to themselves and other employees. • Implement the site and personnel air monitoring program. • Comply with Health and Safety Plan. • Maintain visual contact between partners (buddy system). • Perform only those tasks they believe they can do safely. • Immediately report any accidents and/or unsafe conditions to the Field Team Leader, or any deviations from this plan.

Exhibit 3-1 – Roles and Responsibilities

	Work Elements	Project Manager	Project Safety Manager	Project Controls Manager	Project HR Manager	Sector Manager	Division Manager	GBU Safety Manager	GBU QC Manager	GBU Risk Manager	GBU President	Corporate Workers Compensation Analyst	Corporate Safety	Resident Engineer/ Superintendent	GBU BD Manager	Parsons CEO/President
	1. Zero Incident Techniques and SHARP Management	X	D	P	P	R	R	R	E	S	E		E	S	S	E
	2. Business Development Phase	X	P	P	P	R	E	S		S	E		E	P	D	E
Startup Phase	3. Initial Hazards Analysis and Planning	X	P	P	P	R	E	R	E	P	E	P		P		
Startup Phase	4. Project Safety Plan (PSP)	X	D		P	R	E	R		R	E		C			E
Startup Phase	5. Stakeholder PSP Alignment Meeting	X	D			E	E	P					C	P		
Administration/ Design Phase	6. Awareness Campaign	X	D	P	P	E	A	R					C	P		
Administration/ Design Phase	7. Employee Orientation	P	P	P	D	R	A	E					C	P		
Administration/ Design Phase	8. Training	X	D	P	P	R	A	E					C			E
Administration/ Design Phase	9. Health and Safety Committee	X	D	P	P	R	A	R					C			
Administration/ Design Phase	10. Incident Investigations	X	P	P	P	R	R	A				P	E			E
Administration/ Design Phase	11. Measurement and Reporting	X	D	P	P	R	R	S				P	E			E
Administration/ Design Phase	12. Audits, Inspections and Record Keeping	X	X	P	P	R	R	S	R	R			E			E
Construction or Field Phase	13. Preconstruction Safety Activities	X	X			E	E	R					C			
Construction or Field Phase	14. Project Site Orientation	X	D	P	P	E	E	S					C			
Construction or Field Phase	15. Meet Local OSHA, Building Trades, and Other Agencies	X	D			E	E	S					C			
Construction or Field Phase	16. Review Contractor/Subcontractor Safety Programs	E	X			E	E	S					C	P		
Construction or Field Phase	17. Subcontractor Premobilization Meeting	X	P	P		E	E	S					C	P		
Construction or Field Phase	18. Risk Mitigation Planning (Two-week Look-ahead)	P	P			E	E	S					E	X		
Construction or Field Phase	19. Activity Hazard Analysis	E	P			E	E	S					E	X		
Construction or Field Phase	20. Recurring Field Safety Meetings/Training	X	D	P	P			S					E	P		
Construction or Field Phase	21. Project Management Site Safety Inspections	X	D					S					E	P		
	Testing, Commissioning, Operations, and Decommissioning Phases	(to be developed)														
Closeout Phase	22. Lessons Learned and Final Safety Report	E	X		X	E	E	S	R				E	P		
Closeout Phase	23. Records Retention	E	X		P	A	A	R					E			

Legend:

A – Approves tools, plans, etc. established by the project.

C – Consultant providing expert advice to the development leader.

D – Development leader tasked to establish the tools, plans, etc. needed for the work element.

E – Sponsor responsible to reinforce the need to comply with the established requirements.

P – Participants in team or group implementation efforts, supporting the implementation leader.

R – Reviews and comments on tools, plans, etc. established by the project to achieve the goal of the work element.

S – Establishes requirements applicable to the project.

X – Accountable and responsible to ensure that the project develops and implements the work element in accordance with established requirements.

SECTION 4 – ADMINISTRATIVE PHASE

4.1 PROJECT SAFETY COMMITTEE

For this project, which has less than five full-time Parsons' employees or 25 subcontractors, no safety committee is required at the Project level.

4.2 PROJECT ORIENTATION

The field team leader, or designee, will conduct an orientation with all project personnel, including subcontractors.

The Project Safety Representative meets with new workers to review site procedures and requirements listed in the HASP Orientation. Topics covered in the HASP orientation include:

- Names of personnel responsible for site safety and health issues
- Reporting emergencies, incidents, and unsafe conditions
- Emergency/evacuation plans
- Safety, health, and other hazards at the site
- Review of all activities on site and related Activity Hazard Analyses (AHA)
- Proper use of personal protective equipment (PPE)
- Work practices by which a worker can minimize risk from hazards
- Safe use of engineering controls and equipment on site
- Acute effects of compounds at the site
- Decontamination procedures

All personnel, including subcontractors and visitors, on a project must receive a HASP orientation prior to starting work or accessing the site and sign an acknowledgment form indicating they received and understood the orientation. Any individual who is unsure of any information presented in the orientation must request clarification. Individuals who do not participate in the orientation or refuse to sign the applicable HASP acknowledgment cannot work on or access the site.

4.3 AWARENESS CAMPAIGN

The project has established an awareness program consistent with the Parsons' safety awareness campaign and its various elements (e.g., signs, posters, banners, and focus briefings). This program promotes worker awareness of safety goals and daily risks, hazards, and exposures in the field.

Safety bulletin boards for this project are located at CSSA in the Environmental Office. This HASP will be available at all times during the field activities for anyone to access by hard copy during field activities or electronically on the Environmental Encyclopedia.

4.4 STAKEHOLDER HASP ALIGNMENT MEETING

This project is considered a low health and safety risk because the activities associated with this project are performed regularly by the associated staff. As a result, the stakeholder HASP alignment meeting was incorporated into the project kickoff meeting.

4.5 TRAINING

The project has a comprehensive health and safety training program tailored to the scope of work. All employees receive a Project Orientation, as outlined in Section 4.2, upon assignment to the project. All Parsons new hires shall receive a facility Employee Orientation within the first 7 days of employment, provided by Human Resources, Facility Manager, Safety Representative and Staff Coordinator, or their designee. Specific training requirements for this project will include:

- *40-hour HAZWOPER and 8-hour annual HAZWOPER refresher. 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, including, but not limited to, initial 40-hour, 8-hour Supervisor and annual 8-hour refresher training.*

4.6 AUDITS AND INSPECTIONS

The Project Safety Representative has implemented an audit and inspection program in conjunction with the GBU and corporate safety and quality assurance departments. The Project Manager, together with the Project Safety Representative, or their designee, conduct safety inspections as deemed necessary. The standards are detailed in Section 6.5 of this HASP. Office work areas (including trailers) are audited according to those corporate office audit standards.

Additional information on audits and inspections during field activities is also provided in Section 6.5. The fieldwork portion of this project is expected to occur over several weeks. A formal audit or inspection is not anticipated to be necessary for this project.

4.7 MEETINGS

All project meetings of three or more people must begin with a safety topic. The meeting chairperson may present the safety topic or ask for a volunteer to open the discussion. In general, the "safety moment" is only 1-2 minutes long and is directly relevant to the work at hand or applicable to most individuals outside the workplace.

Daily toolbox safety meetings are held with all personnel at the beginning of each day of field activities to review current site conditions, incidents or injuries from the previous shift activities, safe or at-risk observations from the previous shift, activities planned for the current shift, anticipated hazards, engineering controls-work practices-PPE to protect against hazards, and any additional safety topic or comments. Toolbox safety meetings shall be documented and signed by all individuals accessing the site using a Safety Meeting Sign-In Sheet (Exhibit 7.2) or may be logged in the field logbook.

4.8 REPORTING AND MEASUREMENT

4.8.1 Reporting

To accurately measure performance and comply with corporate and regulatory requirements, Parsons utilizes an online safety reporting system to report monthly work hours, personnel injuries, property damage, environmental releases and near-miss incidents for its employees and subcontractors. Parsons Incident Reporting Guidelines include:

Procedures following a Parsons/Subcontractor Incident

- *Incident Definition: any unexpected or unplanned event involving the above. This includes near-misses, personal injuries, property damage or environmental releases.*
- *NOTE: Personal injuries involving medical treatment and incidents resulting in more than $1K shall be verbally reported and submitted on the PWeb within four (4) hours.*
- *Within four (4) hours, verbally notify the following:*
- *Parsons Program Manager, Project Manager and Safety Manager as well as CSSA Environmental Program Manager Glare Sanchez and Safety Officer Teresa Benavides.*
- *Within 72 hrs of an incident (except as noted otherwise):*
- *Enter incident information on the PWeb using the Online Safety Reporting System.*
- *Complete an incident investigation report to determine root causes and corrective actions to prevent recurrence.*

4.8.2 Measurement

The Safety Manager and Project Manager establish and post a measurement system to provide indicators of safety performance, including the following metrics for the project:

- *Project start date*
- *Days without a recordable injury – updated every month*
- *Date of last OSHA recordable injury (if applicable)*
- *Percent of safe observations from each monthly audit*

Subcontractors must submit a monthly report of exposure hours (hours worked on the project, paid or unpaid) to the Parsons Project Manager within 3 days after the end of each month. The Project Manager compiles the figures and submits them to the Program Manager (or via the online safety reporting system if instructed by the Program Manager) by the first Friday of each month. When necessary, estimated figures are acceptable. If a project involves air monitoring or personnel wearing any type of respirator, a monthly Field Project Report is also completed and submitted to the Division Safety Manager by the 3rd calendar day after the end of each month.

4.8.3 Incident Notification

An incident is any unplanned or unexpected event involving a Parsons employee or subcontractor that results (or could have resulted in the case of a near-miss) in a personal injury, property damage, or environmental release. Employees involved in or witnessing an incident or near-miss incident must immediately report it to the responsible supervisor or foreman, who in turn immediately relays the report to Parsons Project Manager, Julie Burdey (512-825-4281). Near-miss incidents that could cause significant injury or loss of life must be immediately

reported, in the same manner as an actual incident. No supervisor may decline to accept or relay a report of injury or significant near-miss incident from a subordinate.

The Project Manager must ensure that all incidents are reported to the GBU Safety Manager and other management personnel (as required) within 4 hours. The Project Manager (who has been trained on Parsons' reporting requirements and Online Safety Reporting System), or designee, then prepares and submits the incident information.

The GBU Safety Manager, or their designee, must notify the local OSHA office immediately if an accident involves the death of an employee or hospitalization of three or more workers.

4.9 INCIDENT INVESTIGATIONS

All incidents and significant near-miss incidents are investigated by an individual or team with training in accident investigation and root cause analysis. Subcontractors (if applicable) must investigate incidents involving their employees or activities and submit an investigation report to the Parsons Project Manager within 48 hours of an incident.

In Parsons, the GBU Safety Manager investigates or assigns an investigator to each significant incident. The investigator submits a final investigation report using the online safety reporting system within 72 hours of the incident. The Parsons' Site Health and Safety Manager maintains the investigation file.

4.10 RESPONSIBILITY/IDENTIFICATION OF KEY LINE PERSONNEL

A listing of the personnel that have the authority and responsibility for implementing the provisions of the Safety, Health, and Risk Program (SHARP) Management program are provided below.

Project Name/Office:	Environmental Program Support, Investigations, and Treatability Studies, USACE DO11, Austin, Texas	
Address:	8000 Centre Park Drive, Suite 200, Austin, Texas, 78754	
Telephone	Fax	Email
512-719-6000	512-719-6099	julie.burdey@parsons.com
Project Manager		Contact No.
Julie Burdey		512-825-4281
Project Health & Safety Representative		Contact No.
Brian Vanderglas		512-719-6059
Site Health & Safety Representative		Contact No.
Julie Bouch		210-376-0809
Field Team Leader		Contact No.
Samantha Elliott		210-347-6012

4.11 MEDICAL REQUIREMENTS AND WORKERS COMPENSATION

In accordance with corporate requirements the Division Safety Manager has established and implemented the medical requirements described below for the project.

4.11.1 Functional Capacity Exams

Functional Capacity Exams are not applicable for this project.

4.11.2 Substance Abuse and Alcohol Testing

The Division Safety Manager administers required substance abuse tests, including random drug and alcohol testing. A link to the corporate policy follows:

Parsons corporate policy on drug and alcohol testing.

The project/client does not require drug and/or alcohol testing.

4.11.3 Medical Services and Panel of Physicians

The Project Manager in conjunction with the Parsons Workers Compensation Analyst establishes a panel of medical providers for the project and selects medical facilities to treat nonemergency work-related injuries and illnesses, as follows:

- *Methodist Hospital, 7700 Floyd Curl Drive, San Antonio, TX (210) 575-4000*

NOTE: Transportation to a medical facility for nonemergencies must be done by at least two (2) individuals (i.e. driver and observer).

Directions to Methodist Hospital from CSSA:

- Exit CSSA at the main gate of the facility
- Travel south (left) 0.75 mile on Ralph Fair Road to Interstate 10
- Travel south (left) 12.5 miles on Interstate 10
- Exit at Medical Drive and west (right) onto Medical Drive
- Travel west on Medical Drive to the intersection of Medical Drive and Floyd Curl Drive
- Methodist Hospital is on the left

A map of the hospital route is included at the end of this HASP. It is approximately 15 minutes from CSSA to Methodist Hospital during routine traffic.

4.11.4 Emergency Medical Response

This HASP with emergency telephone numbers and locations of facilities will be present in the project area.

Emergency Contacts for CSSA	
Organization	**Telephone Number**
CSSA Security, Building 79	(210) 295-7408
Camp Bullis Fire Department	(210) 295-7517
CSSA Project Manger – Glaré Sanchez	(210) 698-5208
CSSA Safety Coordinator – Teresa Benavides	(210) 698-5208
Poison Control Center	(800) 492-2414
National Response Center	(800) 424-8802
Parsons Project Health and Safety Manager – Brian Vanderglas	(512) 719-6059
Parsons Site Health and Safety Officer – Julie Bouch	(210) 376-0809
Parsons Project Manager – Julie Burdey	(512) 825-4281
USACE Project Manager –Wayne Elliott	(817) 886-1666
Medical Emergency Contacts	
Hospital	Methodist Hospital 7700 Floyd Curl Drive San Antonio, TX (210) 575-4000
Ambulance *	911

** Always call Camp Stanley security before calling 911.*

Note: When dialing toll-free and local numbers from a post phone you must dial "99" first, and when dialing long distance you must dial "97" first then enter the account # following the phone number (account # is located in the Parsons Phone Log in Building 606).

Should any suspected unexploded ordnance (UXO) be found during field activities during this project, Parsons personnel will leave the item in place and immediately contact Glaré Sanchez (210-698-5208). Roland Abney (210-859-9780) or John Ferguson (210-240-5677) will then coordinate the notification of Fort Sam Houston personnel through CSSA security. Fort Sam Houston will be responsible for assessing the item and rendering the material inert, destroying, recycling, and disposing of any UXO item(s).

Access into the north and east pastures must be cleared with the Installation Manager Jason Shirley (210-295-7416) and security must be informed to open the gates.

4.11.5 Workers Compensation Program

The Corporate Risk Management department establishes the appropriate workers compensation carrier. If a workers compensation loss occurs, the Corporate Workers Compensation Analyst (Donna Miller, 661-904-0978) handles all communication with the carrier.

4.11.6 Medical Surveillance Programs and/or Monitoring

All personnel engaged in activities that result in the 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, even if they are not required to participate in a medical surveillance program under 29 CFR §1910.120(f).

Based on the activities listed in Section 2.1, the following potential hazards or activities are associated with this project. As a result of potential chemical exposure, medical surveillance will be required.

Name/Job Classification	Hazard/Activity	Medical Surveillance/Training
Field sampling crew, drilling and trenching crew	Chemical exposures – sampling activities Drilling hazards	If an employee is exposed at or above the PEL of a chemical for more than 30 days in a year, they must participate in a Medical Surveillance Program.

SECTION 5 – PRE-FIELD WORK PHASE

5.1 RISK ANALYSIS AND SAFETY SPECIFICATION DEVELOPMENT

Procurement procedures require that a site-specific risk analysis be conducted before issuance of investigation and remediation request for proposals (RFP). Using the pre-bid risk analysis checklist (attached), the Project Manager, or designee, leads this analysis, which documents existing exposures that may impact the work, surrounding facilities, equipment, workers, or the public at large. The analysis includes locating, documenting, and photographing items such as:

- Overhead and underground power lines
- Sewer and water utilities
- Existing building interferences
- Heavy equipment access ways
- Traffic
- Security
- Fences
- Water hazards
- Existing geographical and environmental conditions
- Investigation-derived waste (IDW) Disposal
- Confined spaces

Upon completion of the site risk analysis, high-risk activities are listed in the RFPs (as applicable), and bidders must describe controls and mitigation strategies in their proposals. The RFP notes that the list is representative and that the selected contractor must identify and control all work-related hazards.

Pre-field work activities include a detailed analysis of the scope of work and safety specifications in the prime contract, Parsons' project schedule and HASP, draft RFPs, and proposed subcontractor agreements. The Project's standard safety specifications are given below.

- Pre-Field Work Safety Meeting Checklist – *Exhibit 5-1*
- Subcontractor Prequalification Scorecard – *Exhibit 5-2*
- Mobilization/Kickoff Safety Meeting Checklist – *Exhibit 5-3*

5.2 DESIGN AND REMEDIAL ACTION REVIEW

Periodic remedial action reviews are held in accordance with the project management plan. The Parsons Site Health and Safety Manager, or designee, participates in the review to ensure that safety issues are adequately addressed. During the remedial action review, the discussion focuses on how work is sequenced, interferences with continuing operations, and safe work approaches. Specific activity hazards analyses conducted before the scheduled work can mitigate identified/presumed risks.

Remedial action reviews will be scheduled as deemed necessary by the project manager.

5.3 PRE-BID MEETING

A pre-bid meeting may be held pending judgment of the project manager. Subcontractors must complete a Parsons Safety Evaluation package as outlined in Section 5.4, prior to attending a pre-bid meeting. During the pre-bid meeting, the Project Manager, or designee, uses the Pre-Field Work Safety Meeting Checklist (Exhibit 5-1) to review project safety philosophy, principles, and Parsons requirements with all prospective bidders. Although this information is included in the RFP, the meeting reinforces the message.

5.4 CONTRACTOR SAFETY EVALUATION

Project procurement procedures require that all contractors (and any lower tier subcontractor) submit prequalification documentation for evaluation. The Procurement Manager or Division Safety Manager conducts the safety evaluation in accordance with the Parsons Contractor Safety Evaluation process and package posted on ParShare.

For this project, there will be five field subcontractors directly hired by Parsons. The subcontractor prequalification scorecard is included as Exhibit 5-2.

5.5 PRE-FIELD WORK MEETING

The Project Manager, or designee, holds a pre-field work safety meeting before the subcontractor begins work. The meeting includes subcontractor representatives and Parsons' representatives. During the safety review, the meeting participants review specific safety site/area and site-specific safety plan requirements. In addition, the Project Manager, or designee, obtains a safety point-of-contact and emergency management information. The attached Mobilization/Kickoff Safety Meeting Checklist (Exhibit 5-3) is attached to document the meeting. If this form is not used, documentation of safety discussions must be completed in the field logbook.

5.6 COMPETENT PERSON SUBMISSION REVIEW

Parsons and its subcontractors must identify OSHA-regulated and certified competent persons for work or tasks requiring that level of supervision. A competent person certification will be required for equipment operators who will accomplish the trenching activities. A driller licensed in the state of Texas will be required for the borings to be installed. The Parsons personnel listed below will be assigned to the project. Other individuals not yet identified may also provide field or technical support. A current list of training for Parsons employee(s) can be obtained from the Austin, Texas records maintained by Peggy Bogdansky (Health and Safety Administrator), and at least one of these individuals will be on site at all times when work is being performed and will have a valid certificate in CPR and first aid:

Julie Bouch, Samantha Elliott, Eric Tennyson, Ken Rice, or Adrien Lindley.

Exhibit 5-1 – Standard Pre-Field Work Safety Meeting Checklist

PARSONS

Pre-Field Work Safety Meeting

Date:		Project/Location:	
Subcontractor Representative:		Parsons Project Manager:	
Phone:		Phone:	
Subcontractor Safety Rep:		Parsons Safety Manager:	
Phone:		Phone:	

The following items were identified and reviewed with the subcontractor.

Health & Safety		Medical	
Site-Specific Safety Plans/Model Program		Substance Abuse Screening	
Competent/Qualified Person Documentation		Emergency Procedures	
Safety Audits/Inspections		Site Security	
Subcontractor Responsibilities		Smoking Policy	
Site Orientation Requirements		Medical Services Requirements	
Mobilization/Kickoff Safety Meeting/Date		Treatment Locations/Addresses/Phone List	
Crane Inspection Certification		Other	
Personal Protective Equipment (PPE)			
Environmental Hazards			
Other			

Additional Notes/Comments:

Exhibit 5-2 – Subcontractor Prequalification Scorecard

PARSONS

Parsons employee completing and/or reviewing this Scorecard: _____

Date: _____

Project: _____

Site location: _____

Subcontractor: _____

Please answer the following questions.

1. ___Yes ___No Do you have a written safety program? If yes, provide a copy of the table of contents and a copy of your firm's policy statement.
2. ___Yes ___No Do your safety procedures comply with government agency requirements? If yes, provide name of agency/agencies._____
3. ___Yes ___No Do you require and use site-specific safety plans?
4. ___Yes ___No Does your worker's compensation carrier provide site audits on a regular basis?
5. ___Yes ___No Does your company have a written drug/substance abuse policy?
6. ___Yes ___No Do you have an orientation program for new hires?
7. ___Yes ___No If you have an orientation program for new hires, does it include subcontractors?
8. ___Yes ___No Do you require subcontractors to submit safety plans?
9. ___Yes ___No Do you hold site safety meetings for field supervisors?

   How often? Weekly___ Biweekly___ Monthly___ Daily___
10. ___Yes ___No Do you hold craft toolbox safety meetings?

    How often? Weekly___ Biweekly___ Monthly___ Daily___
11. ___Yes ___No Have you been inspected by OSHA or received any OSHA citations in the past 3 years? If yes, provide an attachment describing the outcome of the inspection along with copies of citations received. Provide a description of the actions taken to abate the citations as an attachment to this application. Respond to any open citations shown on the OSHA website (www.osha.gov).
12. Identify below by name, phone number, and title the person in your firm directly responsible for the firm's Safety Program management and attach a copy of his or her résumé to this application.

    _____
13. How do you conduct project safety inspections, and how often are they performed?

    _____

    _____

    _____
14. Describe your firm's program to motivate, encourage, and monitor safe work performance.

    _____

    _____

    _____

OSHA INFORMATION:

*Please use your OSHA 200 Log and/or 300 Log to fill in the number of injuries and illnesses for the last 3 years					Total employee hours worked in the last 3 years (do not include any nonwork time, even though paid)
Year		1	2	3	Year / Hours (B) 1 _____ 2 _____ 3 _____
Number of lost/restricted workday cases (Totals OSHA 200 Log, columns 2 and 9; Totals OSHA 300 Log, columns K and L).		____	____	____	Recordable Injury Frequency Rate Multiply total for each year (A) x 200,000 and divide by total employee hours for that year (B) A x 200,000 / B Year / Rate 1 _____ 2 _____ 3 _____
Number of recordable cases without restricted activity or lost workdays (Totals OSHA 200 Log, columns 6 and 13; Totals OSHA 300 Log, column I and J).	+	____	____	____	
Number of fatalities (Totals OSHA 200 Log, columns 1 and 8; Totals OSHA 300 Log column G).	+	____	____	____	Experience Modification Rate (EMR) Policy Year / EMR 1 _____ 2 _____ 3 _____
Total OSHA Log (A)		____	____	____	

Are the following accident records and accident summaries kept? How often are they recorded?	No	Yes	Monthly	Annually
Accidents totaled for the entire company	_____	_____	_____	_____
Accidents totaled by project	_____	_____	_____	_____

The Applicant shall maintain records of such evaluations and make them available for review and approval of Parsons representatives at all reasonable times should Applicant be awarded a contract based on this application.

By submitting this application, the Applicant agrees to use the above criteria and this form when selecting lower tier subcontractors.

5.7 SUBCONTRACTOR SAFETY PLAN SUBMISSION REVIEW

All subcontractors must submit safety programs to the Parsons Project Manager and Division Safety Manager for review before they begin work on site. The Plan will be reviewed for adequacy in accordance with the SSP template provided to the subcontractor during procurement. For this project, there will be five field subcontractors directly hired by Parsons.

5.7.1 Subcontractor Site-Specific Safety Plans

Before work begins, each subcontractor must submit two copies of its SSP to the Parsons Project Manager and Division Safety Manager for review. The Project Manager and Division Safety Manager review the SSP to ensure that it meets Parson's requirements.

If a subcontractor needs assistance developing an SSP, an electronic copy of Parsons' HAZWOPER Model SSP template will be provided.

The SSP must address the following elements:

- Responsibility
- Compliance
- Communication
- Hazard assessment
- Accident exposure and investigation
- Hazard correction
- Training and instruction
- Recordkeeping

The SSP must include applicable requirements of Parsons HASP and OSHA CFR §1910/1926:

- Scope-of-work evaluation that describes the sequence of work and associated hazardous activities.
- Specific AHA.
- A project site employee orientation program that addresses location specific issues relative to safety and health.
- A site-specific emergency action plan that includes a list of key management contacts with home office, project site, home, and cellular telephone numbers.
- A site-specific medical emergency plan that lists qualified first aid personnel by name and includes copies of their current certificates.
- Key line management personnel, by name and position, who will enforce the SSP.
- Key competent or qualified personnel by name and copy of current documentation identifying specific certified competency (e.g., scaffolding, excavations, and fall protection).
- Written progressive disciplinary program for violations of safety procedures.
- HAZWOPER training documentation (if applicable).
- Subcontractor task hazard planning.

- Subcontractor weekly safety planning submission.
- Subcontractor workers daily task safety planning.

5.8 MOBILIZATION/KICKOFF SAFETY MEETING

Project Manager, or designee, conducts the Mobilization/Kickoff Safety Meeting on the first day of subcontractor mobilization in the field and at the work site. Exhibit 5-3 shows the checklist used for the safety portion of this meeting.

Exhibit 5-3 – Mobilization/Kickoff Safety Meeting Checklist

PARSONS

Mobilization/Kickoff Safety Meeting

Date: _____ Project/Location: _____

Parsons Representative: _____Subcontractor Representative: _____

The following project site safety, health and security requirements, procedures, and hazards have been identified and reviewed with the Subcontractor.

SSP/Emergency Planning/Response Plan			Demolition	
Competent/Qualified Person			Personal Protective Equipment	
Hazardous Materials/Waste			Cranes/Hoists/Annual Inspection Certificate	
Vehicle/Heavy Equipment			Overhead Power Lines	
Lockout/Tagout			Confined Spaces (Permit/Nonpermit)	
Electrical			Excavations/Trenching	
Fire Protection			Site Security/Visitor Control/Public Exposure	
Hot Work/Welding/Cutting			Process Safety Management (PSM)	
Fall Protection/Guardrails/ Scaffolding/Ladders			Permits (Excavation/Scaffolding/Demolition/Traffic/ Confined Space/etc.)	

Additional Project Concerns:

_____

_____

_____

_____

_____

Other Attendees:

Name	Title	Company

SECTION 6 – REMEDIATION PHASE

6.1 SITE RISK ANALYSIS

Before work begins, Project Manager, or designee, will lead a team that performs a risk analysis at each work site to identify hazards that require specific control measures. This analysis will be conducted in conjunction with the mobilization/kick-off safety meeting. Site-specific activities requiring an AHA will be reviewed and the AHA completed at this time. Potential hazards for this project are listed below.

- *Environmental – cold/heat stress, animals, insects, poisonous plants/vegetation*
- *Heavy equipment operation*
- *Lifting heavy loads*
- *Noise*
- *Overhead and underground electrical*
- *Potential for ordnance material*
- *Hazardous materials*
- *Traffic*

6.2 FIVE HAZARD CONTROL MEASURES – ORDER OF PRECEDENCE

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:

1. **Engineer/design to eliminate or minimize hazards.** A major component of the design phase is to select appropriate safety features to eliminate a hazard and render it fail-safe or provide redundancy using backup components.

2. **Guard the hazard.** Hazards that cannot be eliminated by design must be reduced to an acceptable risk level by safety guards or isolation devices that render them inactive.

3. **Provide warnings.** Hazards that cannot be totally eliminated by design or guarding are controlled through using a warning or alarm device.

Should workers be required to work in known contaminated areas, a designated work zone or exclusion zone (EZ) will be established for those areas of the work site with known or suspected contamination. The EZ represents the area of the work site where there is the greatest likelihood of exposure to physical or chemical hazards. The need for establishing an EZ will be limited to those areas where active work is being performed. The size and shape of the EZ will be determined by the SHSO based upon potential hazards, site-specific conditions, site limitations, and the nature of the work tasks to be performed. The EZ will be limited to appropriately trained, qualified, and authorized field personnel. The EZ will be clearly marked at a minimum radius of 20 feet from the sampling location and all operation work vehicles (i.e., drilling rigs, support vehicles, and trailers). Visitors must supply their own PPE.

A contamination reduction zone (CRZ), will be established, if deemed necessary by the SHSO, to provide a buffer zone where personnel will conduct personal and equipment decontamination. The support zone (SZ) will constitute the clean safe area used for work site support and administrative activities. The SZ, if possible, should be located in an area of the work site upwind of the EZ and CRZ.

4. **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.

5. **Personnel Decontamination**: All disposable PPE and other equipment will be discarded and properly disposed of in plastic trash bags. Any reusable PPE that has been in contact with hazardous substances or contaminated media will be decontaminated in accordance with the following procedures:

- When air-purifying respirators are used, the following doffing and decontamination sequence will be followed:
- Exit EZ, or designated workzone, and enter the pre-established CRZ.
- Remove respirator by loosening straps and gently pulling the respirator over the top of the head.
- Remove cartridges and dispose of in plastic trash bag or lined container.
- Place respirator on clean plastic sheet or in plastic bags for subsequent cleaning, disinfection, inspection, and storage.
- Boots encrusted or heavily soiled with potentially contaminated soils or other substances will be cleaned using a stiff brush and water. All disposable coveralls and outer gloves will be discarded in a lined trash can or plastic bag for subsequent disposal.
- Rubber boots are to be washed using a scrub brush and a nonphosphate detergent-water solution (Alconox or Liquinox) followed by a thorough rinse with clean water.
- Hard hats and safety glasses will be cleaned with a damp cloth or paper towel and rinsed with clean water.
- Personnel will remove gloves, protective coveralls, or other protective outer garments using the inside-out method. All disposable items will be deposited in a lined trash can or plastic bag.
- Personnel are encouraged to shower or bathe as soon as possible after leaving the work site.

A system of sequential decontamination stations will be established only if deemed necessary by the SHSO. The stations, when practical, should be separated by a minimum distance of 3 feet to reduce the spread of contaminants during decontamination procedures and doffing of PPE.

Equipment Decontamination: Much of the sampling and light equipment used at the work site will be disposable. Reusable equipment will be decontaminated by washing, or a series of washings, using a detergent-water solution (Alconox or Liquinox) followed by a series of rinsing using generous amounts of water. Equipment decontamination will take place on-site and may generate liquids from washing and rinsing procedures. All liquids will be

containerized and disposed in accordance with the approved workplan. The rinse water will be collected in clean containers for appropriate disposal. Changes in the equipment decontamination may be made at the discretion of the SHSO. Decontamination equipment will include all or some of the following:

- Plastic buckets and pails;
- Scrub brushes and long-handled brushes;
- Detergent (e.g., Alconox or Liquinox);
- Isopropyl alcohol;
- Paper towels;
- Plastic garbage bags;
- Potable water;
- Disposal drums;
- Plastic liner material;
- **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.

6.3 ACTIVITY HAZARDS ANALYSIS

Parsons and its subcontractors will conduct an AHA for applicable aspects of the work. The AHA consists of the following three steps:

- Identify the key task and break it down into steps.
- Identify the primary hazards associated with the task.
- Identify the specific hazard control measure used for each step in accordance with the order-of-precedence method of control.

The following have been identified as possible activities to be included under this SOW:

- **Field Activities.** Many different types of activities occur in the field from drilling, soil sampling, and trenching. A variety of hazards could be incurred with each activity such as biological, slip/trips/falls, and lacerations. An activity hazard analysis has been prepared for each different field activity to identify the hazards and controls. AHAs for the field activities anticipated on this project are presented in Exhibit 6-5.
- **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.** Evaluate the use of heavy equipment in operations such as site clearing, grading, drilling and excavation or lifting. Controls should include

equipment alarms, use of qualified and competent operators, equipment inspections, and any specific OSHA regulatory requirements.

- **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.
- **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. Operating off-road vehicles such as an All-Terrain Vehicle also require training.

Exhibit 6-1 is a sample activity hazards analysis form. Exhibit 6-2 shows a training record to be completed and kept on file for each activity hazards analysis.

Exhibit 6-5 includes the activity hazards analyses created for this project.

Exhibit 6-6 includes a Hot-Work Permit Form. A hot-work permit is not anticipated for this SOW. However, in the event one is needed, the following procedure is in place:

- The use of spark, flame, or heat producing devices requires a Hot-Work Permit issued by the Camp Bullis Fire Department.
- A 24-hour notice is required.

- Contact the Safety Officer, Teresa Benavides, at (210) 295-7356 to coordinate with the Camp Bullis Fire Department. The Camp Bullis Fire Department can be reached at (210) 295-7514 or 295-7600.
- All operations using any type of heat spark, or flame producing devices MUST cease at least 30 minutes prior to the end of the workday.

Exhibit 6-1 – Activity Hazards Analysis Form

PARSONS

Activity Hazards Analysis

Page____ of _____

Project Name & Number:	**AHA No. 1**	**Date:**	**New:**
Location:	**Contractor:**		**Revised:**
Required Personal Protective Equipment:		**Analysis by:**	**Date:**
	Superintendent/Competent Person	**Reviewed by:**	**Date:**
Work Task/Activity:		**Approved by:**	**Date:**

Job Step	Potential Hazards	Preventive or Corrective Measures	Inspection Requirements

Training Requirements:

All assigned employees are required to familiarize themselves with the contents of this AHA before starting a work activity and review it with their Supervisor during their Daily Safety Huddle.

Note: Any additional hazards noted during the project that are not included in this AHA will be logged in the project field book.

Exhibit 6-2

PARSONS

Activity Hazards Analysis Training Record

JOB NUMBER_____

AHA NUMBER_____

JOB LOCATION_____

DATE:_____

NAME OF TRAINER:_____

SUBJECTS COVERED:_____

_____

_____

_____

TRAINING AIDS USED:_____

_____

_____

ATTENDEES (PLEASE SIGN NAME LEGIBLY):

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

(Use additional sheets if necessary)

6.4 SAFETY SYSTEMS ANALYSIS

GBU Safety Managers use the safety systems analysis for field staff and subcontractors whose work requires that they be on site for over 6 months. The analysis provides management with a rating that reflects the safety and health program effectiveness. Appendix 3 of the SHARP Management manual provides the program, protocol, and methodology.

Text of link: https://parsharesites.parsons.com/parcomm/indsafety/safety/forms/allitems.aspx

6.5 REMEDIATION SITE INSPECTION

The remediation site inspection is a protocol designed to identify and correct unsafe acts and conditions, as well as recognize safe work practices and accomplishments, in Parsons' or subcontractors' scope-of-work. The Project Manager or Parsons Site Health and Safety Manager should develop standard safety checklists appropriate to the work being performed. Exhibit 6-3 is an example of a simple checklist to evaluate a project's status. The Project Manager shall develop a checklist based on questions from the audit programs in Appendix 3 taken from the SHARP Manual.

Items found to be out-of-compliance must be assigned to the responsible party for corrective action and the corrective action tracked to completion. Subcontractors shall be advised of noncompliance items using a Notice of Subcontractor Violation, included as Exhibit 6-4.

6.6 DAILY SITE WALK CHECKLIST

Depending on the scope of work, type of activities (i.e. low risk versus high risk), and duration of the project, the Project Manager or their designee shall conduct a daily safety site walk using the Remediation Safety and Health Inspection Checklist in Exhibit 6-3 to identify problem areas. Items found to be out-of-compliance must be assigned corrective action and the corrective action tracked to completion.

Exhibit 6-3: Remediation Safety and Health Inspection Checklist

Project: _____ *Date:* ___

Inspector: _____ *Time:* ___

Any items that have been found deficient must be corrected before work or use.

This checklist includes, but is not limited to, the following:

	Yes	No
Safe Access and Workspace		
Are safe access and adequate space for movement available for:		
Emergencies		
Work area		
Walkways and passageways		
Are ladders, stairways, and elevators properly located and functioning?		
Is protection provided for excavations and trenches?		
Is overhead protection provided for all areas of exposure?		
Is lighting adequate?		
Planning Work for Safety		
Are employees provided with all required personal protective equipment (PPE)?		
Have other contractors and trades been coordinated with to prevent congestion and avoid hazards?		
Is air monitoring necessary to determine whether any chemical exposure exists?		
Utilities and Services Identification		
Has the Parsons Drilling Protocol been followed?		
Have all utilities been identified by signs/markout?		
Have high voltage lines been moved or de-energized, or barriers erected to prevent employee contact?		
Sanitary Facilities		
Is drinking water available?		
Are toilet facilities adequate?		
Work Procedures – Materials Handling		
Is material handling space adequate?		
Is material handling equipment adequate and proper?		
Is material handling equipment in good condition?		
Are workers properly trained to operate equipment and handle hazardous materials?		

Comments:

6.7 SAFETY AND HEALTH ENFORCEMENT

Parsons and its subcontractors enforce all applicable requirements of OSHA 29 CFR §§1910 and 1926 as well as EM 385.1, where applicable. In addition, subcontractors must comply with and enforce Parsons' site requirements.

Parsons and its subcontractors have written progressive disciplinary systems available for review in the respective Human Resources departments.

6.8 NOTICE OF VIOLATION OF SAFETY AND HEALTH REGULATIONS

The project has a formal notice of subcontractor violation of safety and health regulations program to ensure that violations are issued in an immediately dangerous to life and health (IDLH) situation or when the subcontractor repeatedly fails to comply with safety and health requirements.

The notice (Exhibit 6-4) 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.

6.9 COMPETENT FIRST AID PERSON

The OSHA Regulations (29 CFR §§1910.151 and 1926.50) state the employer shall ensure the ready availability of medical personnel for advice and consultation on matters of occupational health. In the absence of an infirmary, clinic, hospital, or physician, that is reasonably accessible in terms of time and distance to the worksite (*i.e.* 4 minutes for activities that can be expected to result in an accident involving suffocation, severe bleeding, or other life threatening or permanently disabling injury or illness and 15 minutes for other types of injuries), which is available for the treatment of injured employees, a person who has a valid certificate in first-aid training from the U.S. Bureau of Mines, the American Red Cross, or equivalent training that can be verified by documentary evidence, shall be available at the worksite to render first aid. First-aid supplies must be accessible for immediate use and be of sufficient size and number to handle common first aid incidents.

The response time and distance to the nearest clinic, hospital or physician identified in section 4.11.4 has been determined to be 15 minutes. Since the response time for Emergency Medical Services (EMS) based on the activities for this project is reasonably accessible, the project will require at least one individual on site, at all times that work is being performed, to have a valid certificate in CPR and first aid. A current list of training for Parsons employee(s) can be obtained from the Austin, Texas records maintained by Peggy Bogdansky (Health and Safety Administrator), and at least one of these individuals will be on site at all times when work is being performed and will have a valid certificate in CPR and first aid.

CSSA Security personnel all maintain current First Aid certifications and can be used as alternative First Aid responders in the case of a health emergency occurring at the project site.

Exhibit 6-4 – Notice of Subcontractor Violation of Safety and Health Regulations

PARSONS

Notice of Subcontractor Violation of Safety and Health Regulations

Date: _____

Contractor Name: _____
Address: _____

_____

_____

Attention: _____

This letter officially notifies you that you have been found to be in violation of the following Safety Regulations:

_____

on (date) _____, by _____.

Confined Space Entry	___	Lockout/Tagout	___	Hot Work	___	Personal Protective Equipment	___
Knowledge of the environment	___	Awareness of warning alarms	___	Evacuation routes	___	Back-up Alarms	___
Assembly locations	___	Fall Protection	___	Scaffolding	___	Environmental/Hazardous Material Storage	___
Trenching	___	Safe Work Practices	___	Security Practices	___		

Other: _____

_____

_____

This/These violations occurred at the following locations: _____

_____

at the following times _____ and dates _____

The name of the employees was/were _____

under the supervision of _____.

PARSONS

Notice of Noncompliance with Safety and Health 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
GBU Safety Manager
Project Manager

Exhibit 6-5 Activity Hazards Analyses

PARSONS

Activity Hazards Analysis

Project Name & Number: 746545/746546 CSSA GW Monitoring, Well Installation, B-3/SVE Treatability Studies	**AHA No. 746545-1**	**Date: 3-Oct-07**	**New:**
Location: CSSA, Boerne, Texas	**Contractor: Parsons**		**Revised:**
Required Personal Protective Equipment:	**Level D**	**Analysis by: Teresa Anderson**	**Date: 3-Oct-07**
Superintendent/Competent Person:	**Julie Bouch**	**Reviewed by: Kimberly Vaughn**	**Date:**
Work Task/Activity:	**Moving groundwater sampling equipment**	**Approved by: Brian Vanderglas**	**Date:**

Job Step	Potential Hazards	Preventive or Corrective Measures	Inspection Requirements
Operation of Motor Vehicle	General	Drivers will have a valid driver's license and will wear a seat belt at all times. Drivers are prohibited from using any communication devices (e.g., cell phones) while operating any motor vehicles. Be aware of road conditions and hazards. Observe posted speed limits.	
	Unfamiliar Vehicles	Make adjustments to mirrors, seats, electronic controls, and steering wheel before driving vehicle.	
	Navigating in Unfamiliar Areas	Read and memorize directions prior to driving. Obtain map of area from rental car agency. Do not attempt to read maps or directions while driving. Be aware of local laws applicable to motor vehicle operation.	
	Unsafe Vehicles	Do not attempt to drive a vehicle that is known to be unsafe. Perform vehicle inspection prior to operation.	

PARSONS

Activity Hazards Analysis

Project Name & Number: 746545/746546 CSSA GW Monitoring, Well Installation, B-3/SVE Treatability Studies	**AHA No. 746545-1**	**Date: 3-Oct-07**	**New:**
Location: CSSA, Boerne, Texas	**Contractor: Parsons**		**Revised:**
Required Personal Protective Equipment:	**Level D**	**Analysis by: Teresa Anderson**	**Date: 3-Oct-07**
Superintendent/Competent Person:	**Julie Bouch**	**Reviewed by: Kimberly Vaughn**	**Date:**
Work Task/Activity:	**Moving groundwater sampling equipment**	**Approved by: Brian Vanderglas**	**Date:**

Job Step	Potential Hazards	Preventive or Corrective Measures	Inspection Requirements
Refueling	General	No smoking during refueling. All motor vehicles shall be shut down prior to and during fueling operations. Workers shall be required to guard carefully against any part of their clothing becoming contaminated with flammable or combustible fluids. They shall not be allowed to continue work when their clothing becomes so contaminated. Remain outside the vehicle during refueling.	
Hauling equipment in vehicles transporting to and from areas oversize loads loading and unloading equipment	Road and traffic hazards, Load width and weight-load movement Obscured vision	Check for distribution of weight, Secure load with chains and cables or tie downs. Utilize an assistant driver to warn of any danger. Practice Defensive Driving	

Training Requirements:

All assigned employees are required to familiarize themselves with the contents of this AHA before starting a work activity and review it with their Supervisor during their Daily Safety Huddle.

Note: Any additional hazards noted during the project that are not included in this AHA will be logged in the project field book.

PARSONS

Activity Hazards Analysis

Project Name & Number: 746545/746546 CSSA GW Monitoring, Well Installation, B-3/SVE Treatability Studies	**AHA No. 746545-2**	**Date: 3-Oct-07**	**New:**
Location: CSSA, Boerne, Texas	**Contractor: Parsons**		**Revised:**
Required Personal Protective Equipment:	**Level D**	**Analysis by: Teresa Anderson**	**Date: 3-Oct-07**
Superintendent/Competent Person	**Julie Bouch**	**Reviewed by: Kimberly Vaughn**	**Date:**
Work Task/Activity:	**Site Visits for Sampling**	**Approved by: Brian Vanderglas**	**Date:**

Job Step	Potential Hazards	Preventive or Corrective Measures	Inspection Requirements
Driving to the site	Operation of Motor Vehicle	Drivers will have a valid driver's license and will wear a seat belt at all times. Drivers are prohibited from using any communication devices (e.g., cell phones) while operating any motor vehicles (Parsons only). Visitors will be aware of road conditions and hazards. Visitors will practice defensive driving techniques.	
Walking at the Site	Tripping Hazards	Visitor awareness of potential slippery surfaces and tripping hazards. Inform field coordinator or Site Safety Manger of any slip, trip, or fall hazards.	
Walking at the Site	Biological Hazard (ticks, bees, mosquitoes, snakes, spiders, etc.)	Personnel awareness of potential exposure to biological hazards. Wear appropriate clothing (hat, long-sleeve shirt, long pants, gloves, and boots) and insect repellants.	
Walking at the Site	High Noise Levels	• Use hearing protection when exposed to excessive noise levels (greater than 85 dBA over an 8-hour work period) • The need to raise your voice at 1 foot or shout at 3 feet is a sign hear protection is required	Use hearing protection as necessary
Walking at the Site	Vehicle and heavy equipment traffic in work area	Visitors will be alert when walking around heavy equipment.	

Training Requirements:
All assigned employees are required to familiarize themselves with the contents of this AHA before starting a work activity and review it with their Supervisor during their Daily Safety Huddle.
Note: Any additional hazards noted during the project that are not included in this AHA will be logged in the project field book.

PARSONS

Activity Hazards Analysis

Project Name & Number: 746545/746546 CSSA GW Monitoring, Well Installation, B-3/SVE Treatability Studies	**AHA No. 746545-3**	**Date: 3-Oct-07**	**New:**
Location: CSSA, Boerne, Texas	**Contractor: Parsons**		**Revised:**
Required Personal Protective Equipment:	**Level D**	**Analysis by: Teresa Anderson**	**Date: 3-Oct-07**
Site Safety Officer: Julie Bouch	**Superintendent/Competent Person**	**Reviewed by: Kimberly Vaughn**	**Date:**
Work Task/Activity:	**Drilling and Sampling**	**Approved by: Brian Vanderglas**	**Date:**

Job Step	Potential Hazards	Preventive or Corrective Measures	Inspection Requirements
Groundwater Sampling	Inhalation and contact with hazardous substances	Provide field personnel with proper skin, eye, and respiratory protection based on the exposure hazards Review hazardous properties of site contaminants and control measures, including PPE, prior to field operations Orient operator cross-wind; stay upwind Keep all sampling supplies and bottles upwind or cross-wind	Tyvek® coveralls, nitrile gloves, latex or neoprene boots
	Electrical hazards	Electrical work will be performed only by qualified and authorized contractor personnel Assume all electrical wires and circuits as “live” unless positively determined otherwise All electrical equipment/tools will be properly grounded and class-approved No safety devices will be made inoperative by removing guards Ground fault circuit interrupter receptacles and circuit breakers will be installed as required by National Electric Code and regulations	

PARSONS

Activity Hazards Analysis

Project Name & Number: 746545/746546 CSSA GW Monitoring, Well Installation, B-3/SVE Treatability Studies	**AHA No. 746545-3**	**Date: 3-Oct-07**	**New:**
Location: CSSA, Boerne, Texas	**Contractor: Parsons**		**Revised:**
Required Personal Protective Equipment:	**Level D**	**Analysis by: Teresa Anderson**	**Date: 3-Oct-07**
Site Safety Officer: Julie Bouch	**Superintendent/Competent Person**	**Reviewed by: Kimberly Vaughn**	**Date:**
Work Task/Activity:	**Drilling and Sampling**	**Approved by: Brian Vanderglas**	**Date:**

Job Step	Potential Hazards	Preventive or Corrective Measures	Inspection Requirements
	Struck by/against flying particles, protruding objects, liquid splashes	Wear hard hats, safety glasses with side shields, and steel-toed safety boot at all times Wear safety glasses when cleaning or decontaminating equipment Wear safety glasses when filling sample bottles and performing field test kit analyses.	
	High noise levels	Use hearing protection when exposed to excessive noise levels (greater than 85 dBA over an 8-hour work period) The need to raise your voice at 1 foot or shout at 3 feet is a sign hear protection is required	
	Back injuries; musculoskeletal disorders (MSD)	Observe proper lifting/carrying techniques Obey sensible lifting limits (60 lb. maximum per person for manual lifting) Use mechanical lifting equipment (handcarts, trucks) or more than one person to move large, awkward loads	

PARSONS

Activity Hazards Analysis

Project Name & Number: 746545/746546 CSSA GW Monitoring, Well Installation, B-3/SVE Treatability Studies	**AHA No. 746545-3**	**Date: 3-Oct-07**	**New:**
Location: CSSA, Boerne, Texas	**Contractor: Parsons**		**Revised:**
Required Personal Protective Equipment:	**Level D**	**Analysis by: Teresa Anderson**	**Date: 3-Oct-07**
Site Safety Officer: Julie Bouch	**Superintendent/Competent Person**	**Reviewed by: Kimberly Vaughn**	**Date:**
Work Task/Activity:	**Drilling and Sampling**	**Approved by: Brian Vanderglas**	**Date:**

Job Step	Potential Hazards	Preventive or Corrective Measures	Inspection Requirements
	Injuries from improper use of hand tools and equipment	Maintain all tools in a safe, good working condition Provide training on proper operation of tools and equipment Keep guards in place during use All power tools will have insulated handles, be electrically grounded, or be double insulated When using cutting tool, always cutting away from body and hands Take damaged or worn tools out of service	Leather gloves and proper cutting tool
Groundwater Sampling	Caught in or between moving parts	Identify and understand parts of equipment that may cause crushing, pinching, rotating, or similar injuries Assure that guards are in place to protect from these parts of equipment during operation Provide and use proper work glove when the possibility of pinching or other injury may be caused by moving or handling large or heavy objects Maintain all equipment in safe condition Keep all guards in place during use De-energize and lock-out machinery before maintenance or service	

PARSONS

Activity Hazards Analysis

Project Name & Number: 746545/745546 CSSA GW Monitoring, Well Installation, B-3/SVE Treatability Studies	**AHA No. 746545-3**	**Date: 3-Oct-07**	**New:**
Location: CSSA, Boerne, Texas	**Contractor: Parsons**		**Revised:**
Required Personal Protective Equipment:	**Level D**	**Analysis by: Teresa Anderson**	**Date: 3-Oct-07**
Site Safety Officer: Julie Bouch	**Superintendent/Competent Person**	**Reviewed by: Kimberly Vaughn**	**Date:**
Work Task/Activity:	**Drilling and Sampling**	**Approved by: Brian Vanderglas**	**Date:**

Job Step	Potential Hazards	Preventive or Corrective Measures	Inspection Requirements
	Flammable, explosive atmospheres	Turn engines or generators off before refueling Eliminate sources of ignition from the work area Monitor for O2 and LEL. Prohibit smoking in well or treatment system area Provide ABC (or equivalent) fire extinguishers Store flammable liquids in well ventilated areas Prohibit storage of flammable liquids in plastic containers Store combustible materials away from flammables Separate flammables and oxidizers by 20 feet minimum	
	Heat stress	Monitor for heat stress in accordance with health and safety procedures Provide fluids to prevent work dehydration Give frequent breaks	
Groundwater Sampling	Slip, Trip, Fall, Loss of Balance	Site safety briefing Stay alert Maintain firm footing Use "buddy" system Watch for obstacles	

Training Requirements:

All assigned employees are required to familiarize themselves with the contents of this AHA before starting a work activity and review it with their Supervisor during their Daily Safety Huddle.

Note: Any additional hazards noted during the project that are not included in this AHA will be logged in the project field book.

PARSONS

Activity Hazards Analysis

Project Name & Number: 746545/746546 CSSA GW Monitoring, Well Installation, B-3/SVE Treatability Studies	**AHA No. 746545-4**	**Date: 3-Oct-07**	**New:**
Location: CSSA, Boerne, Texas	**Contractor: Parsons**		**Revised:**
Required Personal Protective Equipment:	**Level D**	**Analysis by: Teresa Anderson**	**Date: 3-Oct-07**
Superintendent/Competent Person:	**Julie Bouch**	**Reviewed by: Kimberly Vaughn**	**Date:**
Work Task/Activity:	**Office Hazards**	**Approved by: Brian Vanderglas**	**Date:**

Job Step	Potential Hazards	Preventive or Corrective Measures	Inspection Requirements
Working with file cabinets	Shifting weight causes cabinet to fall	Close all drawers went not in use to prevent weight of drawers from causing cabinet to tip.	
	Cuts, abrasions, bruises to the skin	Ensure that hands and fingers are clear before opening and closing drawers. Use hand protection if tasks will require that the hands are subject to injury	
	Falls or trips	Keep drawers closed after use to avoid tripping	
	Pinch point injuries	Keep hands clear of drawer edges when closing. Use drawer handle to close drawer and always close slowly	
Servicing copier machines	Electrical shock	De-energize machine before services	
	Burns to skin	Be familiar with the equipment and manufacturers' recommended procedures and warnings.	

PARSONS

Activity Hazards Analysis

Project Name & Number: 746545/746546 CSSA GW Monitoring, Well Installation, B-3/SVE Treatability Studies	**AHA No. 746545-4**	**Date: 3-Oct-07**	**New:**
Location: CSSA, Boerne, Texas	**Contractor: Parsons**		**Revised:**
Required Personal Protective Equipment:	**Level D**	**Analysis by: Teresa Anderson**	**Date: 3-Oct-07**
Superintendent/Competent Person:	**Julie Bouch**	**Reviewed by: Kimberly Vaughn**	**Date:**
Work Task/Activity:	**Office Hazards**	**Approved by: Brian Vanderglas**	**Date:**

Job Step	Potential Hazards	Preventive or Corrective Measures	Inspection Requirements
	Chemical irritation to skin or eyes	All harmful chemicals shall only be handled under the supervision of a qualified person. Use protective clothing if necessary and immediately wash chemicals from skin if contact occurs.	
	Becoming entangled in machinery by jewelry or extremities	Be careful not to wear loose or dangling jewelry when servicing equipment. Do not attempt to correct malfunctioning equipment with hands unless you are a qualified service technician authorized to make repairs.	
Walking to and from offices during ice, snow or rain conditions	Falls from loss of footing	Take the necessary steps to clear walkways of snow or ice by machinery or chemical thawing agents.	
Operating standard office equipment	Electric shock	Make sure outlets are properly grounded. Make sure equipment is not used if there are frayed or damaged electrical cords.	
Moving equipment or office furnishings	Back strain	Use proper lifting techniques Use back support while attempting to lift moderate or heavy loads	

PARSONS

Activity Hazards Analysis

Project Name & Number: 746545/746546 CSSA GW Monitoring, Well Installation, B-3/SVE Treatability Studies	**AHA No. 746545-4**	**Date: 3-Oct-07**	**New:**
Location: CSSA, Boerne, Texas	**Contractor: Parsons**		**Revised:**
Required Personal Protective Equipment:	**Level D**	**Analysis by: Teresa Anderson**	**Date: 3-Oct-07**
Superintendent/Competent Person:	**Julie Bouch**	**Reviewed by: Kimberly Vaughn**	**Date:**
Work Task/Activity:	**Office Hazards**	**Approved by: Brian Vanderglas**	**Date:**

Job Step	Potential Hazards	Preventive or Corrective Measures	Inspection Requirements
	Electrical shock	Disengage electrical supplies before moving equipment	
	Pinch points	Ensure that there is adequate clearance before moving furnishings or equipment Be sure of your physical abilities and do not attempt a job outside of the employee's strength	
	Cuts or abrasions to skin	Inspect hand hold locations before attempting to lift and/or move objects	

Exhibit 6-6 CSSA Hot-Work Permit

HOT-WORK PERMIT

For use of this form, see AR 420-90; the proponent agency is ACSIM

1. LOCATION	2. DATE	3. PERMIT NO.
4. TYPE OF WORK	5. START TIME	6. FINISH TIME
7.a. NAME OF PERSON RESPONSIBLE FOR HOT-WORK AT JOB SITE *(Contractor/Government Employee)*	7.b. SIGNATURE	

PRECAUTIONS BEFORE OPERATIONS

CHECKLIST	CHECK ONE YES	NO
8. Did Fire Department Inspector inspect site?		
9. Are there procedures for Fire Department emergency notification? *(Emergency No.)*		
10. Are combustibles in area noted?		
11. Should combustibles be covered? *(If yes, note in remarks)*		
12. Are proper extinguishers on hand?		
13. Is wet-down necessary? *(If yes, note in remarks)*		
14. Is smoking permissible at work sites?		
15. Is continuous fire watch required?		
16. Is Fire Department standby required?		
17. Are other precautions required? *(If yes, note in remarks)*		

18.a. FIRE DEPARTMENT INSPECTOR'S SIGNATURE	18.b. DATE

PRECAUTIONS AFTER OPERATIONS

CHECKLIST	CHECK ONE YES	NO
19.a. Was Fire Department notified after hot-work operation was completed?		
19.b. Time:		
20.a. Did Fire Department inspector inspect work site?		
20.b. Time:		
21. Are after work conditions safe? *(If no, note in remarks)*		
22. Are heat producing devices safe if left at work site?		

23.a. FIRE DEPARTMENT INSPECTOR'S SIGNATURE	23.b. DATE

24. REMARKS

NOTE: PERMIT VALID ON DAY OF OPERATION AT ONE LOCATION ONLY

DA FORM 5383, AUG 2006 EDITION OF SEP 92 IS OBSOLETE APD V1.00

SECTION 7 – SAFETY TRAINING

7.1 PROJECT SAFETY ORIENTATION

The Parsons Project Manager, Project Engineer, or Parsons Site Health and Safety Manager conducts the site-specific orientation for all new Parsons staff and subcontractor management personnel.

The Orientation takes approximately 0.5 hours to complete and consists of applicable owner, Parsons, and regulatory reference material, including:

- Owner – Contractor Safety Program and Manual of Safety Regulations Handbook and security requirements
- Applicable OSHA 1910 General Industry and 1926 Construction Regulations and others as required
- Parsons applicable requirements, including items covered in Section 4.2
- Subcontractor requirements

All visitors must receive a brief orientation as described in Section 4.2, and be escorted by the Project Manager, Project Engineer, Parsons Site Health and Safety Manager or a designee familiar with the potential hazards on the project.

Subcontractors must conduct similar orientations for their staff and craft employees and must document all orientations using the Employee/Subcontractor Training Acknowledgement and sample form (Exhibit 7-1). The Project Manager maintains the orientation documents and acknowledgement forms.

7.2 PARSONSU SAFETY MODULES AND START TRAINING – ZERO INCIDENT TECHNIQUES

Consistent with Parsons corporate initiatives in safety training, the Project Manager will identify all applicable personnel (i.e. managers, engineers and supervisors, including subcontractor personnel), that shall be current in the completion of safety modules on ParsonsU and that should receive START training to further Parsons' goal of zero incidents.

The GBU and Division Safety Manager serve as the certified trainers for periodic START training sessions for new personnel. They should be contacted if personnel need to receive training.

Exhibit 7-1

PARSONS

Employee/Subcontractor Training Acknowledgement

Name of Trainer: _____

Training Subject: _____

Training materials used: _____

Name of employee: _____

Date of hire/assignment: _____

I, _____, hereby certify that I have received training as described above in the following areas:

- Names of personnel responsible for site safety and health.
- Safety, health or other hazards at the site.
- The proper use of personal protective equipment.
- The potential occupational hazards in general in the work area and associated with my job assignment.
- Work practices by which a worker can minimize risks from hazards.
- Safe use of engineering controls and equipment on the site.
- Acute effects of compounds on the site.
- Decontamination procedures.
- General safety requirements indicate the safe work conditions, safe work practices and personal protective equipment 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 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.

_____ _____

Employee Signature Date

Exhibit 7-2 - Safety Meeting Sign-In Sheet

Safety Meeting Presenter: _____ Date: _____

Current Weather Conditions:

Temperature (^{o}F) = _____ Wind Direction = _____ Wind Speed = _____

Clear - Sunny – Cloudy – Rain - Snow Forecast = _____

Current Site Conditions (circle as appropriate):

Dry - Wet - Muddy - Frozen - Snow Covered - Other (describe) _____

1. Incidents or Injuries to report from Previous Day Activities: No □ Yes □ - explain below:

_____

2. Safe and/or At-Risk Observations from Previous Day Activities:_____

_____

_____

3. Activities Taking Place Today: _____

_____

_____

3. Anticipated Hazards: _____

_____

_____

4. Engineering Controls-Work Practices-PPE to Protect Against Hazards: _____

_____

_____

5. Additional Safety Topic or Comments: _____

_____

PRINTED NAME	SIGNATURE	COMPANY

7.3 DAILY TOOLBOX SAFETY MEETINGS

Parsons and its subcontractors conduct daily safety meetings at the beginning of each day. These meetings include topics relevant to upcoming work and may include reviews of recent incidents on the project. The Project Manager, or designee, is responsible for the toolbox safety training content and documenting and retaining attendance records using Exhibit 7-2 or recording in the field logbook.

7.4 ACTIVITY HAZARDS ANALYSIS TRAINING

When activity hazards analysis is necessary, the Parsons Project Manager/Engineer/Supervisor or subcontractor conducts a training session with all employees involved with the analyzed task. The training may be informal and at the site where the task is performed. Employees should be given an opportunity to provide input regarding task steps, hazards identified, and appropriate control measures.

The Project Manager documents and maintains the activity hazards analyses using Exhibit 6-2 or the field logbook.

7.5 REGULATORY TRAINING PROGRAMS

OSHA regulations require specific training in certain circumstances. Based on the scope of work and meetings with regulatory officials, the following training topics are provided on the project:

- *Hazard Communication – as per 29 CFR §1910.1200*
- *General – all workers engaged in activities which are potentially exposed to hazardous substances and health hazards must be trained to meet 29 CFR §1910.120(e)(1). Annual 8-hour refresher training as per 29 CFR §1910.120(e)(3) is required for workers and supervisors must be trained to meet 29 CFR §1910.120(e)(4).*
- *CPR/AED/First aid – provided to personnel based on project activities identified in the Scope of Work (i.e. life threatening) and EMS response time (i.e. less than 15 minutes). See Section 6.9.*
- *Respiratory protection – as per 29 CFR §1910.134. Medical qualification by a physician is required to wear a respirator. Annual fit testing and training is also required.*
- *Signaling*

The Project Manager, or designee, determines the necessary training and coordinates the training with the Parsons Site Health and Safety Manager.

7.6 OSHA OUTREACH PROGRAMS

When applicable, the project may use qualified instructors and online courses to conduct OSHA 10-hour construction safety training. If applicable, supervisory staff must complete the 30-hour course. Depending on the scope of work, similar requirements may be included in all subcontracts. Participants successfully completing the course receive a certificate of completion from OSHA. This is not expected to be necessary for this project.

7.7 SPECIALIZED TRAINING AND ORIENTATIONS

Project personnel receive specialized training on client rules and requirements as well as the unique tools, equipment, and procedures used to perform the work. The project does not require any specialized training or orientations.

SECTION 8 – RECORDKEEPING AND POSTING

Parsons and its subcontractors must comply with the recordkeeping requirements of OSHA, Owner, Parsons Corporation, and this safety program, including:

- OSHA 300 logs
- Medical treatment and follow up
- Heavy equipment inspection logs
- Training
- Inspections
- Audits
- Others as required

The Project Manager is the official record keeper for files relating to Parsons employees. Each subcontractor maintains its files.

SECTION 9 – SAFETY AND HEALTH REQUIREMENTS

9.1 SAFETY AND HEALTH REQUIREMENTS

Table 9-1 represents OSHA, owner, and Parsons corporate regulations and requirements applicable to the project. Based on the most recent risk assessments, Parsons Project Manager and Parsons Site Health and Safety Manager update the listed topics periodically. Training and other requirements are updated in this HASP as required by changes to Table 9-1.

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.

Exhibit 9-1 – Competent Person and Activity Hazards Analysis Requirements

Safety and Health Requirement	OSHA Regulation	EM 385-1-1 Regulation	Competent Qualified Person-Supv	Training Required	AHA Required
1. General Safety & Health	40 CFR §1926.20	01.A	*Yes*	*Yes*	*Yes*
2. Safety Training	40 CFR §1926.21	01.B.01	*Yes*	*Yes*	*Yes*
3. Confined Spaces	40 CFR §§1910.146; 1926.21	06.01	*Yes; Supv*	*Yes*	*Yes*
4. Confined Space Permit System	40 CFR §1910.146	06.01	*Yes*	*Yes*	*Yes*
5. First Aid and Medical	40 CFR §§1926.23, 50	03.A	*Yes*	*Yes*	*Yes*
6. Fire Protection and Prevention	40 CFR §§1926.24, 150-155, 352	09.A	*Yes*	*Yes*	*Yes*
7. Housekeeping	40 CFR §1926.25	14.C	*N/A*	*N/A*	*N/A*
8. Illumination	40 CFR §§1926.26, 56	07.A	*Recommended*	*N/A*	*N/A*
9. Sanitation	40 CFR §§1926.27, 51	02.A	*N/A*	*N/A*	*N/A*
10. Personal Protective Equipment	40 CFR §§1926.28, 95-98, 100-107	05.A	*Yes*	*Yes*	*Yes*
11. Acceptable Certifications	40 CFR §1926.29		*Yes*	*Yes*	*Yes*
12. Incorporation by Reference	40 CFR §1926.31	Preamble	*N/A*	*N/A*	*N/A*
13. Emergency Employee Action Plans	40 CFR §1926.35	01.E	*Recommended*	*Yes*	*Yes*
14. Noise Exposure	40 CFR §§1910.95; 1926.52	05.C	*Yes*	*Yes*	*Yes*
15. Radiation Protection	40 CFR §§1926.53, 54		*Yes*	*Yes*	*Yes*
16. Gases, Vapors, Dusts and Mists	40 CFR §§1926.1926.55		*Yes*	*Yes*	*Yes*
17. Ventilation	40 CFR §§1926.57, 353		*Recommended*	*Yes*	*Yes*
18. Hazard Communication	40 CFR §1926.59	1.B.06	*Yes*	*Yes*	*Yes*
19. Process Safety Management	40 CFR §§1910.119; 1926.64		*Yes*	*Yes*	*Yes*
20. Hazardous Waste Operations and Emergency Response	40 CFR §§1910.120; 1926.65	28.A	*Yes* *Supv – 8 hr*	*Yes*	*Yes*
21. Accident prevention signs and tags	40 CFR §1926.200	08.A	*N/A*	*N/A*	*N/A*
22. Signaling	40 CFR §1926.201	08.B	*Recommended*	*N/A*	*Yes*
23. Barricades	40 CFR §1926.202		*N/A*	*N/A*	*N/A*
24. Material Storage	40 CFR §1926.250	14.B	*N/A*	*Yes*	*Yes*

Exhibit 9-1 – Competent Person and Activity Hazards Analysis Requirements (Contd)

Safety and Health Requirement	OSHA Regulation	EM 385-1-1 Regulation	Competent Qualified Person	Training Required	AHA Required
25. Rigging	40 CFR §1926.251	15.A	Yes	Yes	Yes
26. Waste Disposal	40 CFR §1926.252	14.D	Yes	Yes	Yes
27. Tools	40 CFR §§1926.300-307	13.A	N/A	N/A	Yes
28. Gas Welding and Cutting	40 CFR §1926.350	10.A	Recommended	Yes	Yes
29. Arc Welding	40 CFR §1926.351	10.E	Recommended	Yes	Yes
30. Electrical	40 CFR §§1926.400-415	11.E	Yes	Yes	Yes
31. General Electrical	40 CFR §1926.416	11.A	Yes	Yes	Yes
32. Lockout Tagout	40 CFR §§1910.147; 1926.417	12.A	Yes	Yes	Yes
33. Lockout Tagout Permit System	40 CFR §1910.147	12.A	Yes	Yes	Yes
34. Maintenance of Electrical Equipment	40 CFR §1926.431	11A	Yes	Yes	Yes
35. Environmental Deterioration of Electrical Equipment	40 CFR §1926.432		Yes	Yes	Yes
36. Batteries/Battery Charging Equipment	40 CFR §1926.441	11.E	N/A	Yes	Yes
37. Scaffolding	40 CFR §§1926.450-454	22.A	Yes	Yes	Yes
38. Aerial Lifts	40 CFR §1926.453	22.J and K	Yes	Yes	Yes
39. Fall Protection	40 CFR §§1926.500-503	21.A	Yes	Yes	Yes
40. Cranes, Derricks, Hoists, Elevators and Conveyors	40 CFR §1926.550	16.A	Yes	Yes	Yes
41. Motor Vehicles, Mechanized Equipment	40 CFR §§1926.600-603	18.A	Yes	Yes	Yes
42. Powered Industrial Trucks (forklifts)	40 CFR §1910.178		Yes	Yes	Yes
43. Site Clearing	40 CFR §1926.604	31.A	N/A	Yes	Yes
44. Marine Operations and Equipment	40 CFR §1926.606	16.F	Yes	Yes	Yes
45. Excavations	40 CFR §§1926.650-652	25.A	Yes	Yes	Yes
46. Excavation Permit	N/A	N/A	Yes	Yes	Yes
47. Concrete and Masonry Construction	40 CFR §§1926.700-706	27.A	Yes	Yes	Yes
48. Steel Erection	40 CFR §§1926.750-761 and SENRAC		Yes	Yes	Yes
49. Underground Construction	40 CFR §1926.800	26.A	Yes	Yes	Yes
50. Caissons	40 CFR §1926.801	26.H	Yes	Yes	Yes
51. Cofferdams	40 CFR §1926.802		Yes	Yes	Yes
52. Compressed Air	40 CFR §1926.803	26.I	Yes	Yes	Yes
53. Demolition	40 CFR §§1926.850-860 inclusive	23.A	Yes	Yes	Yes
54. Power Transmission and Distribution	40 CFR §§1926.950-960 inclusive	11.H	Yes	Yes	Yes
55. Rollover Protective Structures; Overhead Protection	40 CFR §§1926.1000-1003 inclusive		N/A	N/A	Yes
56. Stairways and Ladders Scope	40 CFR §1926.1050	21.A	N/A	Yes	Yes

Exhibit 9-1 – Competent Person and Activity Hazards Analysis Requirements (Contd)

Safety and Health Requirement	OSHA Regulation	EM 385-1-1 Regulation	Competent Qualified Person	Training Required	AHA Required
57. S/L General Requirements	40 CFR §1926.1051		*Yes*	*Yes*	*Yes*
58. Stairways	40 CFR §1926.1052	21.E	*Recommended*	*Yes*	*N/A*
59. Ladders	40 CFR §1926.1053	21.D	*Yes*	*Yes*	*Yes*
60. Ladder/Stair Training	40 CFR §1926.1060		*Yes*	*Yes*	*Yes*
61. Diving Scope	40 CFR §§1926.1071-1072	30.A	*Yes*	*Yes*	*Yes*
62. Dive Team Quals	40 CFR §1926.1076	30.A.08	*Yes*	*Yes*	*Yes*
63. Dive Safe Practices Manual	40 CFR §1926.1080	30.A.16	*Yes*	*Yes*	*Yes*
64. Predive Procedures	40 CFR §1926.1081		*Yes*	*Yes*	*Yes*
65. Procedures During Dive	40 CFR §1926.1082	30.A.15	*Yes*	*Yes*	*Yes*
66. Post Dive Procedures	40 CFR §1926.1083	30.A.22	*Yes*	*Yes*	*Yes*
67. SCUBA Diving	40 CFR §1926.1084	30.B	*Yes*	*Yes*	*Yes*
68. Surface-Supplied Air Diving	40 CFR §1926.1085	30.A.04	*Yes*	*Yes*	*Yes*
69. Mixed-gas Diving	1926.1086	30.D	*Yes*	*Yes*	*Yes*
70. Liveboating	1926.1087	30.A.05	*Yes*	*Yes*	*Yes*
71. Diving Equipment	1926.1090	30.E	*Yes*	*Yes*	*Yes*
72. Diving Recordkeeping Requirements	1926.1092	30.A.06	*Yes*	*Yes*	*Yes*
73. Internal Traffic Control	N/A	8.D	*N/A*	*Yes*	*Yes*
74. Traffic Movement Restriction Times	N/A	8.C	*N/A*	*Yes*	*Yes*
75. Line Breaking	40 CFR §§1910.119 and 1926.54		*Yes*	*Yes*	*Yes*
76. Major Material Movements	N/A	N/A	*N/A*	*Yes*	*Yes*
77. Right-of-way Restrictions	N/A	N/A	*N/A*	*Yes*	*Yes*
78. Bicycles/Golf Carts	N/A	18.D	*N/A*	*Yes*	*N/A*
79. IIPP/SSPP	Cal 3203	Cal 3203	*Yes*	*Yes*	*Yes*