
APPENDIX C – HEALTH AND SAFETY PLAN

FINAL TONAWANDA COKE SITES 109 & 110 PROJECT SAFETY, HEALTH, AND ENVIRONMENTAL PLAN ENVIRONMENTAL PLAN TONAWANDA, NEW YORK

Prepared For:

Honeywell

301 Plainfield Road
Suite 330
Syracuse, New York 13212

Prepared By:



301 Plainfield Road
Suite 350
Syracuse, New York 13212

Project Manager:

Ed Glaza

Date

Project Safety Manager:

Gregory Ertel, CIH, CSP

Date

JULY 2020

Project Key Personnel

Project Office:	Syracuse, New York		
Address:	301 Plainfield Road, Suite 350 Syracuse, NY 13212		
Telephone 315-451-9560	Fax 315-451-9570	Email	
Company Executive responsible for project		Contact No.	
Pratima Poplai		Direct Line: 732-537-3552 Cell Phone: 732-853-4957 Email: Pratima.Poplai@parsons.com	
Market SH&E Director		Contact No.	
John Barker		Cell: 704-558-4209 John.Barker@parsons.com	
Site Project Managers		Contact No.	
Ed Glaza		Direct Line: 315-552-9691 Cell: 315-730-4685 Edward.Glaza@parsons.com	
Program Safety Manager (PrSM)		Contact No.	
Greg Ertel		Cell Phone: 585-465-0557 gregory.ertel@parsons.com	
Site Safety Officer (SSO)		Contact No.	
TBD		TBD	
Client Project Management POC		Contact Information	
Steve Coladonato		Direct Line: 302-791-6738 Cell Phone: 973-216-2438 Email: Steven.Coladonato@Honeywell.com	

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LIST OF ACRONYMS

AED	Automated External Defibrillator
AHA	Activity Hazard Analysis
BBO	Behavior Based Observation
CPR	Cardiopulmonary Resuscitation
CRZ	Contamination Reduction Zone
CSE	Contractor Safety Evaluation
EBS	Employee Based Safety
ERT	Emergency Response Team
ESHARP	Environment, Safety, Health and Risk Management Program
EZ	Exclusion Zone
ft.	foot/feet
GFCI	ground fault circuit interrupters
HAZWOPER	Hazardous Waste Operations and Emergency Response
IMA	Industrial Medical Associates
JSA	Job Safety Analysis
LHA	Labor Harmony Agreement
LOTO	Lockout/Tagout
MOC	Management of Change
MRO	Medical Review Officer
NYDOT	New York Department of Transportation
OM&M	Operation, Maintenance, and Monitoring
OSHA	Occupational Health and Safety Administration
PFD	Personal Flotation Device
PM	Project Manager
PPE	Personal Protective Equipment
PrM	Program Manager
PSHEP	Project Safety, Health, and Environmental Plan
PrSM	Program Safety Manager
RFP	Request for Proposal
SDS	Safety Data Sheets
SH&E	Safety, Health and Environment
SOW	Scope of Work
SSHEP	Subcontractor Safety, Health, and Environment Plan
SSO	Site Safety Officer
TCC	Tonawanda Coke Corporation
UV	Ultraviolet Radiation
USEPA	United States Environmental Protection Agency

1.0 INTRODUCTION

This Project Safety, Health, and Environmental Plan (PSHEP) has been prepared for the Honeywell field operations at the Tonawanda Coke Site, Sites 109 and 110, located at 3875 River Road, Tonawanda, New York. This PSHEP covers Remedial Investigation (RI) activities including installation of groundwater monitoring wells, groundwater sampling, surface and subsurface soil sampling, surveying, and test pitting and is intended to be amended as needed to address subsequent site activities. Subcontractor activities will be covered by their own Subcontractor Safety, Health, and Environment Plan (SSHEP).

During field activities, Parsons' staff and its subcontractors may be exposed to hazards associated with the scope of work (SOW) activities. Employees will be required to use personal protective equipment (PPE) suitable for the task at hand. Upgrades to PPE will be implemented as necessary.

Field staff may also be exposed to other hazards that are encountered during field activities including slips, trip, and falls; working in proximity to heavy equipment, winches, suspended loads, hazardous energy sources, traffic hazards, and automobile use. Depending on the time of season, field staff may be exposed to biological hazards such as insect bites, stings, ticks, and snakes. Meteorological hazards such as lightning, wind, rain, and ultraviolet radiation may also be present. This PSHEP addresses the various hazards that may be encountered during completion of the SOW.

This PSHEP is based upon the Hazardous Waste Operations and Emergency Response (HAZWOPER) standard, The Parsons Environment, Safety, Health, and Risk Management Program (ESHARP) Manual, Version 7.0, April 2017, and the Parsons Corporate Safety and Health Manual. The Parsons Corporate Safety, Health, and Environment (SH&E) Policy is provided in Exhibit 1-1. Honeywell safety requirements have also been incorporated.

EXHIBIT 1-1 – PARSONS CORPORATE SH&E POLICY

PARSONS


Corporate Safety, Health & Environment Policy Statement

As an industry-leading engineering, construction, and technical services firm, Parsons is firmly committed to maintaining a safe, healthy, and environmentally compliant workplace at all its offices and project facilities. We have adopted the following code of ethics:

- We will hold Safety, Health and Environment (SH&E) as our highest core value.
- Executive management will lead the SH&E improvement process.
- SH&E will be a responsibility shared by everyone in our organization.
- SH&E performance will be a key indicator of our organizational excellence and will be incorporated into our business processes.
- We will communicate SH&E performance openly with employees.
- Employees will be given the knowledge and skills necessary to perform their jobs in a SH&E compliant manner.
- We will extend our SH&E efforts beyond the workplace to include travel, homes, and communities.
- We will continually strive to improve our SH&E processes.

To meet our SH&E objectives, all employees are expected to be actively engaged with regard to SH&E issues. This requires the combined efforts of a concerned management, responsible and knowledgeable supervision, and conscientious, well-trained employees.

Parsons will meet or exceed the applicable SH&E legal and other requirements and will continuously monitor and improve operations, procedures, technologies, and programs that are conducive to maintaining a safe, healthy, and environmentally compliant workplace.


Charles L. Harrington
Chairman and Chief Executive Officer

1.1 The Project Safety, Health, and Environment Plan

Parsons' goal is zero accidents using control measures designed to minimize or eliminate hazards to personnel, process, equipment, the general public and the environment. This PSHEP outlines SH&E requirements and guidelines developed by Parsons for project work. When implemented, these requirements will help protect site personnel, visitors, the public, and the environment from exposure from incidents caused due to SH&E hazards. Parsons employees should never perform a task that may endanger their own safety and health, the safety and health of coworkers or the public, or damage the environment.

This plan should be updated as conditions or situations change, usually by addenda to the PSHEP. All Parsons and subcontractor personnel must understand and implement the PSHEP and any addenda. Parsons documents this process by having employees sign an acknowledgement form stating that they understand the PSHEP and its requirements.

1.2 Subcontractor Safety, Health, and Environment Plans (SSHEPs)

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

All PSHEP requirements for Parsons' personnel (e.g., training, substance abuse screening, and incident reporting, etc.) also apply to subcontractor personnel and will be included in the SSHEP, if applicable.

If the subcontractor is performing activities that require specialized training (i.e., confined space entry, excavation/trenching, scaffold use, HAZWOPER, etc.), copies of training certifications must be provided for applicable employees AND the supervisor. Refer to Section 5 for more details on SSHEP requirements and Safety Evaluation information.

For these projects, there will be subcontractors directly hired by Parsons. Each contractor hired by Parsons, regardless of whether they are performing intrusive work activities, must complete the Parsons Online Contractor Safety Evaluation (CSE) Program and maintain a subscription with a satisfactory rating in the Honeywell ISNetwork system before being eligible to work for Parsons. Detailed information concerning the Parsons CSE Program is covered in Section 5.4.

Below are the names of subcontractors and the work activities each will be performing as part of the Honeywell – Tonawanda Coke Site 108.

SUBCONTRACTOR	CONSTRUCTION ACTIVITIES
Drilling Subcontractor (TBD)	Collection of subsurface soil samples and installation of groundwater monitoring wells
Analytical Laboratory (TBD)	Third party analytical work
Surveyor (TBD)	Survey groundwater monitoring wells and location of soil samples
Backhoe Subcontractor (TBD)	Excavation of test pits
Subsurface Utility Subcontractor (TBD)	Locate underground utilities using surface methods

1.3 Management of Change (MOC)

An important aspect of project management that is equally important to safety management is the process for Management of Change (MOC). In accordance with Parsons' ESHARP requirements, field modifications may be made to this document after discussion and approval by the Parsons Honeywell Program Safety Manager. Make note of any pertinent notations in the comment section below (insert additional rows as necessary).

Requirements for MOC include:

- Documentation of the proposed change, including identification of affected documents and the changed conditions
- Independent design review of potential safety, health, and environmental impacts
- Identification of modified or new hazards as a result of change
- Resolution of safety, health, and environmental concerns generated during all stages of the review
- Approval and authorization of the change
- Communication (and training, if needed) of the change to affected personnel

PSHEP Section	SSO Initials	Date	Comments

2.0 SCOPE OF WORK

Parsons, in its contracted role with Honeywell International Inc., will be conducting RI activities including excavation of test pits, surface soil and subsurface soil sampling, installation of groundwater monitoring wells, groundwater sampling, and surveying. The initial scope includes test pit installation, monitoring well installation, surface and subsurface soil sampling, and surveying at Sites 109 and 110 of the Tonawanda Coke Site. The anticipated scope is outlined below.

Test Pit Excavation

Test pits will be excavated using a backhoe. Prior to test pit excavation, the backhoe subcontractor will have called the New York State 1-800 dig safe number and provided Parsons with the confirmation number. An underground utility subcontractor will survey the proposed test pit areas to confirm that there are no underground utilities near the proposed area of each test pit. During test pit activities, no personnel other than the operator will be within the reach of the extended excavator arm. A spotter will be observing the excavation any time test pit operations are on-going. Soil samples will be collected from the backhoe bucket or directly from the test pit, if conditions of the excavation allow entry. Test pits are anticipated to be a depth of two to eight feet below ground surface (ft bgs). Personnel will not enter any test pit that is greater than 4 ft bgs. If the test pit is greater than 4 ft bgs, then samples will be collected from the desired interval using the backhoe bucket. The backhoe bucket will be decontaminated between test pit locations. An Excavation Standard Operating Procedure (SOP) is provided in Attachment A.

Soils will be placed adjacent to the test pit and will be returned to the excavation upon completion. Air monitoring in the test pit area breathing zone will be completed using a photoionization detector any time excavation or backfilling is taking place.

Surface Soil Sampling

Surface soil samples will be collected using either a stainless-steel spoon and bowl or a stainless-steel hand auger based on surface soil conditions. Equipment used in collection of the surface soil samples will be decontaminated between sampling locations.

Subsurface Soil Sampling

Subsurface soil samples will be collected using either a stainless-steel hand auger or a drill rig advancing split spoons. Prior to subsurface soil collection, the New York State 1-800 dig safe number will be called. An underground utility subcontractor will survey the proposed subsurface soil sampling areas to confirm that there are not any underground utilities near the proposed area of each subsurface soil sample location. Additionally, each location will be cleared a minimum of five feet below the ground surface to ensure that any utilities are not contacted during drilling. Equipment used in collection of the subsurface soil samples will be decontaminated between sampling locations.

Groundwater Monitoring Well Installation

Monitoring well locations will be advanced using a drilling rig. Prior to monitoring well installation, the drilling subcontractor will have called the New York State 1-800 dig safe number and provided Parsons with the confirmation number. An underground utility subcontractor will survey the proposed monitoring well locations to confirm that there are not any underground utilities near the proposed area of each monitoring well. Additionally, each location will be cleared a minimum of five feet below the ground surface to ensure that any utilities are not contacted during drilling. Monitoring wells will be installed by advancing 4.25-inch inside-diameter hollow stem

augers to the total depth of the monitoring well installation. Spilt spoon samples will be collected continuously. Total depth of the installation will depend on the depth to water at the location and the depth to the clay layer below the fill. The screen will be constructed to a depth to have the water level within the screened interval. A PID and a multi-gas meter will be used to monitor the breathing zone during drilling and well installation activities. Soil waste generated during the drilling process will be placed in 55-gallon drums, labelled, and staged at the site for future disposal.

Monitoring wells will be constructed of two-inch diameter PVC screen and riser. Screens will be filter packed to approximately two feet above the top of the screen. Approximately two feet of bentonite will be placed in the annulus above the filter pack. The annulus between the riser and borehole will be filled with grout to the ground surface. Completion at the surface will be either a stick-up of approximately three feet with a protective, lockable steel casing or a flush mounted well vault. A two-foot concrete collar will be installed around each well location sloped to drain away from the well. After monitoring well installation, the wells will be developed with development water being containerized and discharged to the Town of Tonawanda POTW under RITC's Industrial Sewer Connection Permit No. 331.

Groundwater Sampling

A minimum of one week after completion of the installation of the monitoring wells, groundwater sampling will be completed using low-flow methods as described in the Field Sampling Plan (FSP). Sampling will be completed once purging parameters have stabilized. Purge water will be containerized and discharged to the Town of Tonawanda POTW under RITC's Industrial Sewer Connection Permit No. 331.

Surveying

Once surface and subsurface soil sampling and monitoring well installation has been completed, their locations will be surveyed. Monitoring wells will have the elevation of the ground surface as well as the top of the monitoring well (at the top of the two-inch PVC) surveyed.

2.1 Potential Hazards

Electrical

Overhead power lines, downed electrical wires, and buried cables all pose a danger of shock or electrocution if contacted or severed during site operations. A minimum distance of 10 feet (ft.) will be present between overhead wires and equipment. **This distance will vary according to voltage, the greater the voltage, the greater the clearance between any part of the equipment and the power line.** A spotter will be utilized to maintain a safe distance between equipment and overhead wires. Overhead electrical power lines will be considered energized unless the person owning such line, or operating officials of the electrical utility supplying the line assures that it is not energized, and it has been visibly grounded. **Only the utility company is authorized to de-energize, insulate, or handle the lines. No one else may attempt these operations.**

Electrical equipment used on-site may also pose a hazard to workers. Whenever possible, contractors will use low-voltage equipment with ground-fault interrupters and watertight, corrosion-resistant connecting cables to help minimize this hazard. All electrical wiring and equipment will be intrinsically safe for use in potentially explosive environments and atmospheres. Ground-fault circuit interrupters are standard for use at the site.

In addition, lightning is a hazard during outdoor operations, particularly for workers handling metal containers. In the event of an electrical storm, all operations will cease for the duration of the storm.

Heavy Equipment/Vehicle Traffic

Some RI activities take place in close proximity to construction activities and heavy equipment. Workers should not take any action unless they have made eye contact with the operator and clearly communicated their intentions. In addition, all equipment and vehicles must be equipped with back-up alarms, which are checked daily and if not operating properly, removed from service and repaired immediately. Truck traffic will be controlled by a flagger/spotter, as required.

Material Handling

Various materials and equipment may be handled manually during project operations. Care should be taken when lifting and handling heavy or bulky items to avoid back injuries. The following fundamentals address the proper lifting techniques that are essential in preventing back injuries include but are not limited to:

- The size, shape, and weight of the object to be lifted must first be considered. Multiple employees or the use of mechanical lifting devices are required for heavy objects.
- The anticipated path to be taken by the lifter should be considered for the presence of slip, trip, and fall hazards prior to lifting any object.
- The feet will be placed far enough apart for good balance and stability (typically shoulder width).
- The worker will get as close to the load as possible. The legs will be bent at the knees.
- The back will be kept as straight as possible and abdominal muscles should be tightened.
- Twisting motions should be avoided.
- A worker will never carry a load that cannot be seen over or around.

When placing an object down, the stance and position are identical to that for lifting. The legs are bent at the knees and the object lowered. When two or more workers are required to handle the same object, workers will coordinate the effort so that the load is lifted uniformly and that the weight is equally divided between the individuals carrying the load. When carrying the object, each worker, if possible, will face the direction in which the object is being carried.

In handling bulky or heavy items, the following guidelines will be followed to avoid injury to the hands and fingers:

- A firm grip on the object is essential; leather gloves will be used if necessary.
- The hands and object will be free of oil, grease, and water which might prevent a firm grip and the fingers will be kept away from any points that could cause them to be pinched or crushed, especially when setting the object down.
- The item will be inspected for metal slivers, jagged edges, burrs, and rough or slippery surfaces prior to being lifted.

Hand and Power Tools

Hand and power tools are used for various site activities. Procedures for using hand and power tools are as follows:

- Persons using power tools will be trained in their use.
- Ground Fault Circuit Interrupters must be used for all electrical tools unless built in to the providing generator.
- Tools should be inspected prior to each use to ensure that they are in proper working condition. Only tools in good condition will be used.
- Tools will be kept clean.
- Guards and shields will be kept on all tools.
- Air couplings will be secured.
- Non-sparking tools will be used in hazardous areas.

- Proper eye protection is critical when using power tools. At a minimum, safety glasses will be required during site operations. Where appropriate, full-face shields will be utilized in addition to the glasses.

Chemical Hazards

Operational chemicals may be brought to the project site for use in activities supporting the RI activities. These chemicals are anticipated to be fuels for operating heavy equipment. The use of operational chemicals is regulated by Occupational Health and Safety Administration (OSHA) under the Hazard Communication Standard (29 CFR 1910.1200). Safety Data Sheets (SDS) for operational chemicals must be kept on-site. An inventory list of the anticipated operational chemicals (Hazardous Chemical Inventory List) for use at the site will be maintained at the site and updated as new material is received.

Site background indicates the site has been impacted with coal and coal tar wastes. Potential chemicals of concern (COCs) identified for the site are listed below. Exhibit 2-1 presents additional details on these COCs.

- Benzene
- Chlorobenzene
- Toluene
- Total Xylenes
- Methylene Chloride
- Cyanide
- Phenol
- Polycyclic aromatic hydrocarbons (PAHs)
- Iron
- Manganese
- Sodium
- Antimony

2.2 Project Safety, Health and Environment Plan Application

This PSHEP and referenced documents applies to all locations, facilities, operations, and projects associated with the scope of work to be performed by Parsons and its subcontractors. The provisions of this plan are mandatory for all Parsons personnel engaged in activities consistent with the scope of work. Subcontractors working for Parsons must prepare and administer a plan with equivalent requirements unless otherwise specified. All Parsons and Parsons' contract personnel who engage in project activities must be familiar with this plan and comply with its requirements.

EXHIBIT 2-1 CHEMICAL PROPERTIES OF CONCERN

Chemical of Concern	Monitoring Equipment	Action Levels	Routes of Exposure ⁽⁶⁾
Benzene	Solid Sorbent Tube or PID with 10.6 eV bulb	OSHA: PEL = 1 ppm ACGIH: TLV/TWA = 10 ppm NIOSH: IDLH = 500 ppm	Inhalation, skin absorption, ingestion, skin and/or eye contact
Chlorobenzene	Solid Sorbent Tube or PID with 10.6 eV bulb	OSHA: PEL = 75 ppm ACGIH: TLV/TWA = 10 ppm NIOSH: IDLH = 1000 ppm	Inhalation, ingestion, skin and/or eye contact
Toluene	Solid Sorbent Tube or PID with 10.6 eV bulb	OSHA: PEL = 200 ppm C=300 ACGIH: TLV/TWA = 50 ppm NIOSH: IDLH = 500 ppm	Inhalation, skin absorption, ingestion, skin and/or eye contact
Xylenes	Solid Sorbent Tube or PID with 10.6 eV bulb	OSHA: PEL = 100 ppm ACGIH: TLV/TWA = 100 ppm NIOSH: IDLH = 900 ppm	Inhalation, skin absorption, ingestion, skin and/or eye contact
Methylene Chloride	PID with 11.7eV bulb	OSHA: PEL = 25 ppm ACGIH: TLV/TWA = 50 ppm NIOSH: IDLH = 2,300 ppm TLV-STEL = 125 ppm	Inhalation, skin absorption, ingestion, skin and/or eye contact
Cyanide	NA	OSHA: PEL = 5 ppm ACGIH: TLV/TWA = 5 ppm NIOSH: IDLH = 25 ppm	Skin absorption, ingestion
Phenol	Solid Sorbent Tube or PID with 10.6 eV bulb	OSHA: PEL = 5 ppm ACGIH: TLV/TWA = 250 ppm NIOSH: IDLH = 250 ppm	Inhalation, skin absorption, ingestion, skin and/or eye contact.
Polyaromatic Hydrocarbons (PAHs/petroleum pitch) (covers PAH related analytes listed above)	Semi-volatile Sorbent tubes with pre-filter PID with 10.6 eV bulb	OSHA: PEL = 0.2 mg/M3 ACGIH: TLV/TWA = 0.2 Mg/M3 IDLH = 80 mg/M ³ (CA)	Inhalation, ingestion, skin and/or eye contact
Dibenzofuran	NA – solid	NA	May cause, eye, skin and lung irritation

Notes:

1. OSHA PELs as published in the NIOSH Pocket Guide
2. TWA = time weighted average
3. mg/m³ = milligrams of contaminant per cubic meter of air
4. ppm = parts of contaminant per million parts of air
5. ACGIH TLV = American Conference of Government Industrial Hygienist Threshold Limit Value
6. Source: NIOSH Pocket Guide to Chemical Hazards

3.0 PROJECT SH&E SAFETY MANAGEMENT RESPONSIBILITIES AND AUTHORITY

3.1 Safety, Health and Environment (SH&E) Responsibility Matrix

Exhibit 3-1 summarizes the responsibilities of selected roles related to the primary SH&E activities identified in the PSHEP.

EXHIBIT 3-1 ROLES AND RESPONSIBILITIES

Project Responsibility Matrix		Project												BU					Corporate							
		Project Manager	Safety & Health	Environmental	Construction/Site Management	Engineering	First Line Supervision	Facilities and Maintenance	Training	Contracts/Procurement	Security	Sustainability	Quality	President	Operations/Risk Management	Division Management	Sector Management	Safety, Health & Environment	Quality	Business Development	CEO	Operations/Risk Management	Safety, Health & Environment	Security	Workers' Compensation	Insurance
Phases	Work Elements	R	D	D	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P
Introduction to ESHARP for Project	1. ESHARP Project Management	R	P	P	P	P				P				P	P	A	P	P	P	D	P	P	P	P		P
Business Development	2. Business Development	R	P	P	P	P				P				P	P	A	P	P	P	D	P	P	P	P		P
Startup	3. Initial Hazard Analysis and Planning	A	R	D	P	P					D						P						P	P		
	4. Project Safety Health, and Environmental Plan (PSHEP)	A	D	D	P										P	P	P	R					P	P		
	5. Stakeholder PSHEP Alignment Meeting	A	D	D	P													R								
Construction and/or Field	6. Preconstruction Safety, Health & Environment Activities	A	D	D	P		P						P				P	R	P					P		
	7. Project/Site Orientation, Training, and Recurring Field SH&E Meetings	A	D	D	P		P	P	P									R						P		
	8. SH&E Committee	A	D	D	P		P	P			P							R						P		
	9. Meet Building Trades, Safety, Health, Environmental Regulatory Agencies, & Others	A	D	D	P													R						P	P	
	10. Review Contractor/Subcontractor SH&E Programs	A	D	D	P					P								R						P		
	11. Subcontractor Premobilization Meeting	A	D	D	P	P				P	P							R						P		
	12. Risk Mitigation Planning (2-week look ahead)	A	D	D	R													D						P		
	13. Activity Hazards Analysis	A	D	D	P	P	P	P										R						P		
	14. Project Management Site Safety, Health, & Environmental Inspections	A	D	D	P												P	P	R	P				P		
	15. Audits, Inspections, and Recordkeeping	A	D	D	P		P						P				P	P	R	P				P		
	16. Incident Management Process	A	D	D	P		P						P			P	P	P	R	P				P		P

EXHIBIT 3-1 ROLES AND RESPONSIBILITIES (CONTINUED)

Project Responsibility Matrix		Project												BU					Corporate						
		Project Manager	Safety & Health	Environmental	Construction/Site Management	Engineering	First Line Supervision	Facilities and Maintenance	Training	Contracts/Procurement	Security	Sustainability	Quality	President	Operations/Risk Management	Division Management	Sector Management	Safety, Health & Environment	Quality	Business Development	CEO	Operations/Risk Management	Safety, Health & Environment	Security	Workers' Compensation
Phases	Work Elements																								
Testing, Commissioning, Operations, and Decommissioning	17. Management Systems and Transition	A	R	R	D	P	P	P	P		P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
	18. Equipment and Systems Integrity	A	P	P	R	P	P	D	P				P					P	P				P		
	19. Operations Training and Education	A	D	D	P	P	P	P	P		P		P					R					P		
	20. Assessments and Corrective Action	A	D	D	P	P	P	P	P		P		P					R					P		
	21. Operations Emergency Management	A	P	P	P	P	P	P	P	P	D		P					R					P	P	
	22. Safe and Environmentally Compliant Work Practices	A	D	D	P	R	R	P	P									P					P		
Closeout	23. Lessons Learned and Final SH&E Report	A	D	D	P											P	P	R	P				P		
	24. Records Retention	A	P	P					P		D		P					R	P				P		

R – Responsible and accountable for ensuring the project develops and implements the work element.

D – Develops the plan, tool, training, document, or other item needed for the work element.

P – Participates by providing advice, assisting in the implementation or development, reviewing and providing comments, or otherwise supporting the development or implementation effort.

A – Approval at the management level with responsibility for the project; establishes requirements for the project or serves as sponsor for the item.

4.0 ADMINISTRATION PHASE

4.1 Project Safety, Health & Environment (SH&E) Committee

The project must have a SH&E Committee if more than five full-time Parsons employees or when 25 or more Parsons and subcontractor employees are assigned to the project. Based on the anticipated SOW for calendar year 2020, a project safety committee is not expected.

4.2 Project (Employee) Orientation

The project has a comprehensive employee orientation program. The SH&E personnel help to develop applicable SH&E sections of the orientation and meet with new employees to review site procedures and requirements (Exhibit 4-1). Topics covered in the PSHEP orientation include:

- PSHEP overview
- Project rules and disciplinary policies
- Reporting emergencies, incidents and unsafe conditions
- Near miss reporting
- Hazard communication
- Emergency/evacuation plans
- WorkCare
- Spill/release reporting and response actions
- Waste management
- Stormwater and wastewater management
- Scope of work
- Names of personnel responsible for site safety and health
- Communication protocol/suggestion box
- Safety, health, environment and other hazards at the site
- Review of all activities on-site and related Activity Hazard Analysis (AHAs)
- Proper use of 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
- Other applicable environmental issues and regulatory requirements
- Stop Work Authority
- Biological hazards training

All personnel, including subcontractors, new hires, transfers, union workers and visitors on a project must attend the site orientation program on their first day and sign an acknowledgement form indicating they attended, 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 acknowledgment when requested will not be granted access to the site. The Field Safety Manager will provide employees with Orientation.

4.3 Awareness Campaign

The project has an awareness program consistent with the Parsons SH&E awareness campaign in its various elements (e.g., signs, posters, banners, and focus briefings). This program promotes worker awareness of SH&E goals and daily risks, hazards, and exposures in the field. In addition to topics selected by Corporate Safety each month, the project will supplement the awareness program with information specifically applicable to the SOW. The Project Safety Representative may also provide training, presentations, or informational materials as part of the awareness campaign.

The SH&E bulletin board maintained by the Project Safety Manager (PrSM)/Site Safety Officer (SSO) is the primary information point for the project awareness campaign. Bulletin boards will be set up in field trailers as appropriate. The PrSM/SSOs may also provide training, presentations, or informational materials as part of the awareness campaign.

4.4 Stakeholder Project Safety Plan Alignment Meeting

A stakeholder PSHEP alignment meeting will be held before beginning any field work. The meeting allows Parsons to focus and coordinate efforts, obtain input for improvements and gain concurrence from all stakeholders for execution of the PSHEP. The following representatives should be in attendance for the PSHEP alignment meeting:

- Honeywell – Richard Galloway
- Parsons – Edward Glaza, PrM
- Parsons - Gregory Ertel, PrSM
- Drilling Subcontractor Manager – TBD

Parsons should present the PSHEP and obtain stakeholders concurrence with the approach outlined in the plan. The meeting should include a review of stakeholder roles and responsibilities and elements of control appropriate to the project risks.

4.5 Training

The project will develop an SH&E training program tailored to the SOW. All employees receive a general project orientation as outlined in Section 4.2 upon assignment to the project. All office-based employees, field employees and new hires who spend a significant portion of their time in an office or field trailer shall receive a specialized office training including the following topics as appropriate:

- Proper lifting techniques
- Biological hazards (ticks, bees, poison ivy, etc.)
- Ergonomics
- Housekeeping
- Common office hazards and environmental risks (if any)
- Asbestos license/certification
- Waste management
- Office procedures
- Evacuation/Drills/Emergencies
- Other relevant topics
- Field-based employees and office employees who spend a significant portion of their time in the field also receive field training as appropriate and as described in Section 7 of this PSHEP including the following topics:
 - HAZWOPER

- Asbestos
- PPE
- Defensive driving
- Lifting
- Back safety
- Cardiopulmonary resuscitation (CPR)/first aid/automated external defibrillator (AED) and blood borne pathogens
- Electrical safety
- Overhead hazards
- Emergency response
- Fire Prevention
- Housekeeping
- Hand tools/Power tools
- Hazard communication: Identifying the Danger
- Honeywell accident/incident reporting procedures
- Parsons accident/incident reporting procedures

They may also receive the following training as applicable to a specific task:

- Lockout/Tagout (LOTO)
- Stairs / ladders

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 SH&E manager has implemented an audit and inspection program in conjunction with the Corporate SH&E Departments. The Project Manager (PM), or their designee, in accordance with Section 6.5 conducts weekly site inspections. Additional inspections will also be completed when a significant task is being performed (e.g., soil/sediment sample collection, sample surface water collection, major restoration efforts by subcontractor, etc.). If the PM is not on-site, the most senior person on-site will conduct the inspection. Inspections and audits are intended to identify unsafe behaviors or conditions and implement corrective actions before an incident occurs. Completed inspections will be saved in the project files. Additional information on audits and inspections during construction is detailed in Section 6.5 of this PSHEP. All noted deficiencies and corrective actions will be tracked with the use of a tracking log. The PrSM will evaluate inspection and audit results and provide a summary to the Safety Steering Committee. When appropriate, Safety Bulletins will be issued to convey safety lessons from near misses or incidents that are applicable to our own circumstances for the purpose of continuous improvement. In accordance with the Parsons' safety protocol, safety inspections and audits are required to be performed in the manner and frequency described below.

4.6.1 Periodic Safety Audits

Projects will be selected at the discretion of the SH&E Manager for periodic project audits. These audits will generally be more comprehensive in nature and will include a documentation review as well as a site walk-through. Completed inspections will be sent to the safety Director and will be summarized in the next Monthly Safety Report. The Safety Director will forward inspection results to the Safety Manager so that corrective actions can be tracked to conclusion.

4.6.2 Corrective Actions

Deficiencies identified by audits and inspections will be logged in a deficiency tracking log. Any deficiencies that cannot be immediately corrected must be assigned to a specific individual with a reasonable completion date. The Safety Manager or the designated SSO will track corrective actions, verify their closure, and update the Corrective Action Tracking Log or equivalent. Findings of a severe nature or that indicate a declining site safety trend may warrant notification of subcontractor's senior management. Ongoing failure to implement safety requirements as by applicable regulations, the contract, and may be considered a breach of contract and result in the subcontractor's removal from the project.

The PrSM has implemented an audit and inspection program in conjunction with the corporate safety and quality assurance departments. The PM, together with the Field Team Leader or the SSO, will conduct a safety inspection each month. Office work areas (including trailers) are audited according to the corporate office audit standards.

4.6.3 Employee Based Inspections (EBS)(Observations)

This project will utilize the EBS system for field inspections and observations by conducting periodic Behavior Based Observation (BBOs). BBOs are about conducting worker observations, providing positive reinforcement for significantly important behaviors that are correct and consistent with company work standards, and constructively identifying and eliminating deviations from these work standards.

Observations shall be recorded electronically in the field typically by management personnel utilizing IndustrySafe® proprietary software located on the PWEB. Unsafe acts or situations shall be immediately corrected, if possible. Items which cannot be corrected shall be logged as incomplete within the system for corrective action tracking. Data shall be uploaded to a central database maintained by IndustrySafe®. IndustrySafe® has set up a database specifically for this project where inspections, trends and collected data can be reviewed by the entire project management team.

Personnel responsible to perform employee observations typically shall consist of project management staff. For this project, the personnel performing observations shall include the following:

- PM
- SSO
- Field Team Leader

A metric of 1 inspection or observation per week has been established by the Program Safety Director. Due to the effectiveness of an unscheduled random inspection model, as well as project management scheduling, these inspections may or may not be performed in any given week or performed above the quota during higher risk activities. The PSM shall be responsible for stewardship of this inspection program.

4.7 SH&E Meetings

All project meetings that include five or more people must begin with a SH&E moment. The meeting chairperson may present the SH&E topic or ask for a volunteer to open the discussion. In general, these "SH&E moments" are brief, perhaps a minute or two, and should be directly relevant to the work of the day or applicable to most employees (e.g., non-work-related injuries, waste management procedures, effects of stormwater discharges, home exposure to hazards materials, etc.). Monthly all hands SH&E meetings are held to review critical safety procedures, discuss safety incidents, and celebrate safety milestones. The PM announces the time and schedule of these meetings at least one week in advance.

Daily toolbox safety meetings are held with all personnel at the beginning of each shift 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](#).

4.8 Rewards and Recognition

4.8.1 Rewards and Recognition Program

At Parsons we expect every employee to work safe. We do offer incentives for those who proactively go the extra yard, or mile, to make Parsons an even safer place to work. Our incentive program is project-based but similar across all Parsons' projects.

Things that we want to incentivize (and why):

- 1) **Near-Miss Reporting** (The root cause of a near miss is generally identical to the root cause of a "hit". If we report near-misses, find their root causes and actually fix them we have lowered the potential for having an incident.) Employees who submit near-misses may be eligible to receive a Red Safety Token that can be exchanged for items. (Red Tokens are a Corporate way of giving thanks for safety efforts.)
- 2) **Good or Great Ideas that make the job safer or Significant Safety Observations** (Many employee ideas go unrecognized because we never hear about them.) Please let your PM/Superintendent or SSO know what your idea is to make Parsons a safer place to work. Employees who submit ideas that are implemented (as determined by the Project Safety Committee or, the PM/SSO) or make significant observations (saw a hazardous condition and reported it; made an adjustment to a task to make it safer, etc.) that the site leadership team can act upon, may receive Red Safety Tokens that can be exchanged for items as determined by the Rewards and Recognition Committee.
- 3) **Employees that go the extra yard to improve the safety program** (Our program only gets better if all members of the team understand and contribute to our zero injury goals.) Emergency Response Team (ERT) Members, Employee Based Safety (Industry Safe) volunteers, safety committee members, those who contribute to AHA development and others, may be eligible to receive a Safety Token.
- 4) **Sustained, high performance by a site team/project** (No one gets hurt!) Teams, projects or, even the entire portfolio who maintain a high level of safety consciousness as exhibited by a high level of near-miss reporting, overall safety culture, quality H&S observations, etc., can be recognized by virtue of a safety breakfast/lunch or, Honeywell/Parsons recognition token gift.

SSOs will work with their PMs to determine the rewards and recognition program appropriate for the project and will be responsible for local administration of this program. They are also responsible for inter-portfolio sharing of the near-misses reported as well as the great ideas that are surfaced. PMs will budget for this recognition program. Charges will go to project/program overhead. Employees who receive tokens will be tracked for audit purposes. SSOs will collect red tokens when awarding gifts.

4.9 Measurement and Reporting

Complete incident reporting guidelines are provided as Exhibit 4-2 of this section.

4.9.1 Emergencies

For emergencies, call 911!

4.9.1.1 WorkCare

Parsons and WorkCare have partnered together to promote Incident Intervention™, a resource designed to provide Parsons' employees with immediate access to qualified medical clinicians who are able to provide our employees with prompt medical assessment in the event of non-life threatening, non-medical emergency work related injury or illness. Each of Parsons' subcontractors is required by contract to participate in this program. Through this process, Parsons can leverage clinical expert resources to coordinate appropriate treatment care. WorkCare serves as a "medical advocate" for the employee, the WorkCare clinician provides responsive evaluation of the incident, assists the employee/employer in determining the most appropriate course of action, and consults with the treating physician.

4.9.1.2 Work-Related Injury Procedures

For Emergencies

If there is a life threatening or significant medical event (e.g., not breathing, no heartbeat, unconscious, open wound, amputation, obviously broken arm or leg, etc.), then the first employee on the scene should:

- 1) Call for help
- 2) Call 911
- 3) Begin first aid/CPR if trained

For Non-Emergency, Non-Life-Threatening Work-Related Injury or Illness

Upon notification of a non-life-threatening illness or injury event the **Field Team Leader** will:

- 1) Make sure that 1st Aid/CPR trained employees are on scene and assisting the injured.
- 2) Make sure that any ancillary work ceases to make scene safe for responders.
- 3) Contact the SSO; For anything beyond a minor band-aid case the SSO will confer with Greg Ertel (585-465-0557) to determine if WorkCare shall be called.
- 4) If determined, contact WorkCare and allow the injured employee to speak with a WorkCare doctor or nurse.
- 5) Follow WorkCare guidelines; Drive the employee to the clinic if directed and stay with him/her until the visit is concluded.
- 6) Provide the employee with "Questions to Consider Asking Your Doctor During a Clinic Visit."
- 7) Provide the employee with "Memo to Treating Medical Professional" prior to the employee going into the exam room.
- 8) Participate in the incident investigation process upon return to the site.

To coordinate the WorkCare triage process, it is imperative that Parsons' employees report all work-related injuries immediately to their supervisors.

For work-related injuries or illnesses that may require physician direction on appropriate treatment, Parsons' employees should then promptly contact WorkCare, ideally before seeking medical care, as this will provide the greatest opportunity for appropriate intervention.

If an injured employee requires medical care for a work-related injury/illness, the Order for Treatment of Work-Related Injury/Illness Form **MUST** be sent with the injured worker and/or faxed to the occupational medicine clinic at the time of the initial evaluation. See Exhibit 4-3.

WorkCare's Incident Intervention is available 24/7 and 365 days per year.

WorkCare contact number is 1-888-449-7787.

Be prepared to provide the following:

- Injured worker's name
- Injured worker's contact number
- Injured worker's location (at a minimum include the city and state)
- Employee ID number
- Employee's Market
- Employee's project or office location
- Functional manager's name

Near-Miss Reporting

In an effort to streamline near-miss reporting, especially for employees conducting fieldwork who do not have real-time web access, will contact the PM or the Safety Manager for assistance. All entries will be saved as initial and can be accessed by the caller when they return to their computers. Entry into the database does not relieve the caller from the responsibility of following through with the near-miss investigation or of notifying other employees in the office or project team of the occurrence.

Callers will be prompted to provide the following information:

- Name and phone number
- Date of near-miss
- Location
- Project number (if applicable)
- Brief description of what happened
- What you think happened if this situation resulted in injury or damage
- Any other information you think may be important

The intent of this service is to enable employees to phone in near-misses immediately and have events entered into the Parsons Industry Safe database. As we all know, the expectation is that immediately after having a near-miss, Stop Work Authority will be used to ensure the area is safe and determine what changes must be made before it is safe to proceed.

4.9.2 Measurement and Compliance

The PM and PrSM 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
- Date of last OSHA recordable injury (if applicable)
- Percent of safe observations from each monthly audit

Subcontractors must submit a monthly report of incidents, exposure hours (hours worked on the project, paid or unpaid) to the Parsons PM within three (3) days after the end of each month. The PM compiles the figures and submits them to the PrM (or via the online safety reporting system if instructed by the PrM) by the first Friday of each month; where 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 SH&E Director by the 3rd calendar day after the end of each month.

To accurately measure performance and comply with corporate and regulatory requirements, Parsons and its subcontractors have an emergency communications system to contact the following onsite offices for the events listed below:

<i>All incidents</i>	<i>(Program Manager) Tom Abrams (315-552-9670)</i>
<i>Worker injury or exposure</i>	<i>(Program Safety Manager) Greg Ertel (585-465-0557)</i>
<i>Hazardous material/contaminant releases</i>	<i>Site Emergency Response Lead (315-715-1800)</i>
<i>Fires/explosions</i>	<i>Fire (911)</i>
<i>Medical emergencies</i>	<i>First Aid/Medical (911)</i>

This notification information should be provided to site workers in either posters or individual wallet cards that can be distributed to site workers. In addition, this information should be prominently displayed in the PSHEP (e.g., on the back of the plan cover).

The SH&E Manager has established a measurement system to provide indicators of SH&E performance, including the following metrics:

- Consecutive days without a recordable incident
- Consecutive days without a days-away-from-work incident
- Recordable incident rate
- Days-away-from-work incident rate
- Contaminant exposures monitored and over exposures documented
- Environmental citations from regulatory agencies
- Total number of environmental spills and/or releases recorded
- Environmental spills and/or releases requiring reporting (e.g., Reportable Quantities)
- Number of monthly audit findings by type (i.e., safety, health and environmental)

4.9.3 Incident Reporting

Employees involved in or witnessing an injury, worker exposure, environmental incident, or near miss must immediately report it to the responsible Field Team Leader, who in turn immediately relays the report to Parsons Project SSO. No Field Team Leader may decline to accept or relay a report of SH&E incident or significant near miss from a subordinate.

The PM must ensure that all SH&E incidents are reported to the SH&E and other management personnel (as required) within four hours. The Project SSO (who has been trained on Parsons' reporting requirements and Online Safety Reporting System) prepares and submits SH&E reports. The PrSM sends reports to the required management personnel and validates that client reporting requirements are also met.

The PrSM must notify the local OSHA office and/or regional, municipal and/or local regulations office in writing within 8 hours if an accident involves any work-related fatalities within eight hours of the event and all work-related in-patient hospitalizations, as well as amputations and losses of an eye, to OSHA within 24 hours of the event. In addition, spills/releases of reportable quantities and other reporting required by environmental regulation are the responsibility of the PrSM.

The PM and Safety Director must be notified by the SHSO of any incident as soon as it is safe to do so but within the notification guidelines identified in the following table. After notification, written incident reports must be submitted by the SHSO to the Safety Director in accordance with the time frames shown in the Attachment B.

The Safety Director's delegate shall then enter incidents into the Honeywell Event Reporting System within the applicable time frames which can be found in Attachment B of this PSHEP. If the Safety Director is unavailable, then the Safety Manager shall assume or delegate Safety Director's responsibilities in an effort to support timely incident reporting and follow-up.

For a complete listing of Tier 1, 2, and 3 examples see Attachment B.

Monthly Statistics Summary Reports

Root causes must be identified, and corrective actions implemented. The Safety Manager can assist project SSOs in reviewing and tracking incident reports as well as following up on completion of corrective actions. The SSO shall update the Safety Manager as corrective actions are implemented and completed. The Safety Manager will track and verify completion of corrective actions on the Corrective Action Tracking Log or equivalent.

The Safety Director will summarize incidents on the next monthly Safety Report following the incident. The timeliness of incident reporting and any significant "Lessons Learned" will be included in the summary.

A Honeywell Notification/Activation Decision Table is also presented in Attachment B.

In addition to the Honeywell incident notification requirements, Parsons' employees involved in or witnessing an incident or near-miss incident must immediately report it to the responsible SSO, who in turn immediately relays the report to Parsons PM. 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 PM must ensure that all incidents are reported to the Safety Manager and other management personnel (as required) within four hours. The PM (who has been trained on Parsons' reporting requirements and Online Safety Reporting System) then prepares and submits the incident information.

The Program 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.

Subcontractors must submit a monthly report of exposure hours (hours worked on the project, paid or unpaid) to the Parsons PM within four days after the end of each month, or as specified by the contract. The PM compiles the figures and submits them via the online safety reporting system by the first Friday of each month. If necessary, estimated figures are acceptable, but the reports must be filed.

4.10 Incident Investigations

All accidents, worker over exposures, environmental incidents and significant near misses are investigated by an individual or team with training in incident investigation and root cause analysis. Subcontractors must investigate incidents involving their employees or activities and submit an investigation report to the Parsons PM within 48 hours of an incident.

In Parsons, the PrSM 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 Project SSO maintains the investigation file.

4.11 Responsibility/Identification of Key Line Personnel

For project responsibility and identification of key personnel.

Project Key Personnel

Project Office:	Syracuse, New York	
Address:	301 Plainfield Road, Suite 350 Syracuse, NY 13212	
Telephone 315-451-9560	Fax 315-451-9570	Email
Company Executive responsible for project		Contact No.
Pratima Poplai		Direct Line: 732-537-3552 Cell Phone: 732-853-4957 Email: Pratima.Poplai@parsons.com
Market SH&E Director		Contact No.
John Barker		Cell: 704-558-4209 John.Barker@parsons.com
Site Project Managers		Contact No.
Ed Glaza		Direct Line: 3150 552-9691 Cell: 315-730-4685 Edward.Glaza@parsons.com
Program Safety Manager (PrSM)		Contact No.
Gregory Ertel, CIH, CSP		Cell Phone: 585-465-0557 gregory.ertel@parsons.com
Site Safety Officer (SSO)		Contact No.
TBD		TBD
Client Project Management POC		Contact Information
Steve Coladonato		Direct Line: 302-791-6738 Cell Phone: 973-216-2438 Email: Steven.Coladonato@Honeywell.com

The personnel listed above have the authority and responsibility for implementing the provisions of this project.

4.12 Medical Requirements and Workers' Compensation

In accordance with corporate requirements, the SH&E Manager has established and implemented the following medical requirements for the project:

4.12.1 Substance Abuse Tests

Honeywell and Parsons are committed to maintaining a safe and healthy work environment for its employees, its subcontractors and the community. Honeywell and, Parsons recognize that on-the-job, as well as off-the-job, use of drugs and consumption of alcohol can have a negative impact on job performance, endanger individual safety, the safety of co-workers, and the community. Contractor crews are covered by the drug and alcohol policies of their employers.

NOTE: Parsons Employees and subcontractors are subject to additional post accident drug testing requirements that include (but are not limited to) company vehicles and high-risk power tools. Refer to Parsons Employment Standards Rev 3, Appendix 4 –Substance Abuse.

Policy

In an effort to establish a substance abuse-free workplace and with an understanding that *subcontractors* often perform *Safety-Sensitive Activities*, Honeywell and Parsons require *subcontractors* to have a Drug-Free Workplace Policy that meets or exceeds this policy when working on Honeywell projects and/or property. See Exhibit 4-4 for Parsons Corporate Substance Abuse Policy.

Pre-Access

The PM shall require project personnel to have pre-access drug and alcohol screening within **two weeks** prior to the commencement of field work.

- Pre-access testing is not necessary if subcontractors have been off-site **≤30 days**.
- Short-term subcontractors needed to provide emergency response support or unscheduled repairs to critical on-site equipment may be exempted from pre-access testing if approved by the Portfolio Safety Manager or Market SH&E Director.
- The PM will document approved exemptions in pre-work planning documents associated with unscheduled repairs of critical equipment.
- Exemptions may be extended for a maximum of **three days** after which time exempted subcontractors must be tested for drugs and alcohol.

Reasonable Suspicion

Reasonable suspicion testing may be triggered by direct observations of employee behavior or drug-related paraphernalia. Site personnel who have been observed using alcohol or controlled substances on site or during breaks at off-site locations after which they will return to work will be requested to take an alcohol or drug test. Reasonable suspicion includes possession (on person or in vehicles) of alcohol or controlled substances on site as well as paraphernalia that suggest drug use. Site personnel who exhibit signs, symptoms, or behaviors of drug or alcohol use as interpreted by a reasonable person will also be requested to take a drug and/or alcohol test. Reasonable suspicion drug testing must be conducted **as soon as feasible not to exceed four hours**.

Post-Accident

Honeywell reserves the right to drug and/or alcohol test Parsons or subcontractor personnel involved in an accident. Honeywell requires Parsons or subcontractor personnel to submit to an alcohol test within 2 hours and to a drug test within 32 hours after an accident. If the alcohol test is not collected within 8 hours and the drug test within 32 hours after an accident, then the Safety Director will cease efforts to have the tests collected and document the reason for failing to collect these tests. Failure to cooperate with drug and alcohol testing procedures may result in disciplinary action up to and including removal from site for a minimum of one year.

Project Drug & Alcohol Screen

The Safety Director may select specific projects for drug and/or alcohol testing at his discretion. Project personnel will either be randomly selected from the total project personnel, or on smaller projects, all project personnel will be tested. Parsons engineering and construction management personnel routinely working on-site shall not be excluded from testing.

Commercial Motor Vehicle Drivers

Project personnel who operate commercial motor vehicles will be required to participate in periodic and random drug and alcohol testing by their employers in accordance with the Federal Department of Transportation regulations. Evidence of such participation shall be provided upon request.

Drug & Alcohol Testing Procedures

When required by this program, Parsons' employees and subcontractors will report to Well Now Urgent Care drug collection facilities. Well Now drug collection facilities are located at 961 Sheridan Drive, Buffalo (716.844.7100). Drug test results from non-Well Now drug collection facilities may be acceptable if collection and analysis of samples is otherwise equal to those outlined in this document. The Safety Director/Manager shall make the final determination if drug test results collected at non-Well Now facilities are acceptable.

After-Hours Testing (Post-Accident & Reasonable Suspicion)

Well Now Urgent Care provides post-accident testing. All post-accident testing is conducted at their Tonawanda clinic location. Health & Safety and the appropriate People representatives (formerly called Talent Management) should be notified as soon as feasible following an employee being sent for testing. After hours testing of subcontractor personnel does not require notification of Parsons' People representative. Well Now Urgent Care's address in Tonawanda is as follows:

1751 Sheridan Drive
Tonawanda, NY 14223
716.541.0234

Normal Business Hours: 8:00am – 8:00pm. 7 days a week

- Notify the PM, Health & Safety and the appropriate Parsons' People representative as soon as feasible.
- For subcontractor personnel, notify Health & Safety as soon as feasible.

Confidentiality of Test Results

Test results will be maintained in accordance with applicable law in a confidential file of medical information. Subcontractors will be copied on drug and alcohol results for their personnel. The Safety Director/Manager will retain and secure subcontractor drug and alcohol test results as necessary to support a policy of prohibiting such individuals from being assigned to another project within the next year AND before a negative drug and alcohol test is provided.

Positive Test Results

A positive drug test result will be confirmed by a Medical Review Officer (MRO) responsible for reviewing test results and procedures. A positive alcohol test result will indicate blood-alcohol levels **greater than or equal to 0.04** and will also be confirmed with a second alcohol test and MRO review. Detectable alcohol **less than 0.04** will be considered a negative result and the individual will not be classified as intoxicated or otherwise under the influence. Individuals with blood-alcohol levels **less than 0.04** may be permitted to return to normal work duties including safety-sensitive activities. However, commercial drivers with blood alcohol between **0.04 and 0.02** must be removed from safety-sensitive activities that are specifically related to the operation of commercial vehicles for **24 hours** as required by Federal Department of Transportation (DOT) regulations. After 24 hours, normal driving duties may be resumed.

Any person who does not provide an acceptable urine sample after 3 hours or does not otherwise cooperate with testing procedures, will be classified as a refusal. Refusals will be treated as a positive result for purposes of follow-up and disciplinary action.

Testing positive or refusing a request for a drug and alcohol test may result in disciplinary action, up to being immediately removed from the project and not be permitted to work on another project for one year. A negative drug and alcohol test are also required prior to being reassigned to a project. The Safety Director will track drug and alcohol testing results.

4.12.2 On-Site Medical Services and Panel of Physicians

The Parsons Corporate Workers' Compensation Analyst establishes medical providers for the project and selects medical facilities to treat work-related injuries and illnesses, as follows:

Emergency Medical Services

- **Location:** Kenmore Mercy Hospital, 2950 Elmwood Avenue, Kenmore, NY 14217
- **Phone:** General Phone: 716.447.6100
- **Hours of Operation:** 24 hours
- **Directions:** See Exhibit 4-5

Non-Emergency Medical Services

- **Location:** Well Now Urgent Care, 1751 Sheridan Drive, Buffalo, NY 14223
- **Phone:** 716.844-7100
- **Directions:** See Exhibit 4-5.

WorkCare Information

- See Exhibit 4-6 for WorkCare forms

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

4.12.3 Emergency Response

The project displays posters with emergency telephone numbers and locations of emergency facilities in visible locations and at selected phone locations throughout the project area (including subcontractor facilities). The following information is provided:

<u>Emergency Contacts</u>	<u>Phone Number</u>
Ambulance	911
Fire Department	911
State Police (NYS)	911
Parsons Contract Physician (WorkCare)	888.449.7787
Poison Control Center	800.252.5655
Well Now Urgent Care	716.844.7100

4.12.4 Workers' Compensation Program

The Corporate Risk Management Department establishes the workers' compensation carrier. If a workers' compensation loss occurs, the Corporate Workers' Compensation Analyst handles all communication with the workers' compensation carrier.

This project does NOT participate in an Owner's Controlled Insurance Program or project-specific insurance program. The workers' compensation policy covering Parsons Employees on this project is as follows:

AIG
15 Cornell Drive, 2nd Floor
Latham, NY 12110
877.640.2450
Policy Number: 0007169963

4.12.5 Medical Monitoring

Potential health hazards and potential exposures associated with these projects are zero to minimal and will not require medical monitoring. If new tasks are identified, health hazards and potential exposure will be re-evaluated and medical monitoring may be implemented, if warranted.

EXHIBIT 4-1 SITE-SPECIFIC PROJECT SAFETY PLAN ORIENTATION

Project Name: Tonawanda Coke Sites

Project Location: 3875 River Road, Tonawanda, New York

Names of Personnel Responsible for Site Safety and Health:

- Project Manager (PrM)- Ed Glaza (315) 552-9691 (office)
- Program Safety Manager – Gregory Ertel (585) 465-0557 (cell)
- SSHO – TBD

Site specific safety plan orientation must be conducted with all new site workers prior to beginning any work. The orientation shall be conducted by any of the above-mentioned responsible personnel or their designees. Orientation shall consist of a review of the Parsons Safety Plan and site-specific AHAs.

Emergencies - Call 911 and/or your Supervisor for emergencies. In the event of an evacuation, the assembly points will be determined, located, and shown at the initial site task(s) Safety meeting, and again located and shown when the site tasks are to commence at other locations. Evacuation protocols and procedures will be discussed at these Safety meetings. The sound for an evacuation is three short fog horn blasts.

Incidents - Report all incidents that result in personal injury, property damage, or environmental release and near-miss incidents to your Supervisor and the SSO. Near-miss incidents COULD HAVE been an incident but did not because of a slight change in conditions or luck. However, they have the same causal factors as an incident, so it is just as important to investigate them for identifying solutions to prevent recurrence and share lessons learned. Both incidents and near misses will be reported according to both Honeywell and Parsons procedural protocol.

Workcare - Workcare will be utilized for Parsons Employees and provides 24-hour 7 day a week on-call medical professionals to answer any medical-related questions. These medical professionals also help provide injury assessment and guidance, treatment options, have access to advanced medical personnel, and will assist with suspected work-related injuries.

WORKCARE – 1 (888) 449-7787

Open Door - The management team is committed to an open-door policy and all will make themselves available to any team member at any time for any real or suspected Health, Safety or Environmental concern. Employees should attempt to utilize first line supervisors and the chain of command; however, employees are not prohibited from contacting any management team member should they believe concerns are not or will not be addressed and may do so without fear of retribution.

Communications - For Media Inquiries direct questions to Victoria Strietfeld (Honeywell) 973.455.5281.

Personal Protective Equipment (PPE)

Minimum PPE:

- * Safety glasses with side shields (tinted safety glasses are not permitted during overcast weather, after sundown or inside buildings)
- * Honeywell hard hat (hard hats do not have to be worn during routine site inspections on remediated sites with no construction activities taking place)
- * Steel or composite toe work boots
- * Long pants

- * Minimum of short sleeve shirt (no tank tops or sleeves cut off)
- * High visibility vest or T-shirt
- * Hand protection (task specific – refer to appropriate AHAs)

Additional PPE requirements may include:

- * Dust mask when the potential for elevated dust generation is a concern.
- * Hearing protection – When working in an area where decibel level exceeds 85 for an 8-hour period.
- * PFD (Personal Floatation Device) - To be implemented in areas with water greater than knee deep. When PFD is worn, all connections must be affixed.

Additional Site-Specific Health and Safety Hazards

Identify all activities on-site as being dangerous and having a possibility for an accident. Review with the worker the activities he/she is here to perform. Then, identify all possible hazards and safeguards for those activities. Next, have worker review all AHAs associated with those activities.

Physical Hazards

Slips trips and falls - Site conditions contain multiple walking hazards.

Manual Handling - Hazards presented by manual handling of material, tools or equipment. Individual lifting limits are capped at 50 lbs./person. For repetitive tasks, the NIOSH lifting equation is to be used. Employ the use of mechanical lifting devices or assistance when and wherever feasible.

BIOLOGICAL HAZARDS

Insects - Bees, ticks, mosquitoes, spiders and other insects may be encountered on-site. Notify your supervisor and any SHSO if you possess a known allergy and have been prescribed a personal emergency injection device. You will be required to carry with you any emergency allergic reaction mitigation devices while you will perform work on-site.

Plants - Poison ivy/sumac/oak may exist on-site in wooded areas.

Wildlife - Native wildlife may be encountered onsite such as raccoons, squirrels, opossums, snakes, rats, bats, frogs, mice, deer, coyote, fox, minx, rabbits, turkey, geese and birds, as well as other native species. Animal dens may present physical hazards.

COVID-19 – Coronavirus disease 2019 (COVID-19) is a respiratory illness that can spread from person to person. The virus is thought to spread mainly between people who are in close contact with one another (within 6 feet) through respiratory droplets produced when an infected person coughs or sneezes. It may also be transferred by touching a surface or object that has the virus on it and then touching their eyes, nose, or mouth. Attachment I contains COVID-19 Prevention Procedures.

Site Access Control –Personnel reporting to the site must park in the designated parking areas. Only vehicles approved by the SSO may enter the work zone. Site speed limits in any work zone will be set and discussed at the site(s) initial safety meetings.

Cell Phone Usage – Parsons' policy is no cell phone usage while operating a vehicle or equipment, this includes no hands-free devices.

Training – Site-specific training (PSHEP review and sign off). Copies of the PSHEP and SDS are available to all personnel. Daily safety meetings shall be documented and reviewed by all personnel working at the site. Prior to entering a work site, site workers must report to either the site PM/Field Team Leader/PrSM with valid documentation of the following:

- * Negative drug test and alcohol documentation required annually and random for all personnel active on Honeywell projects

HAZCOM - General Hazard Communication training is provided by your employer. Specific chemicals have been previously covered in this orientation. Site Specific HAZCOM elements are listed below:

SDS Sheets - The SDS Master book is kept in the Team site vehicle. Any chemical brought onsite should be accompanied by the appropriate SDS sheet, sheets should be provided to safety prior to use so an evaluation on any new material can be conducted.

Appropriate PPE - PPE identified on an SDS must be used. If you are unaware of what PPE to use or need any specialized equipment, please inform your supervisor.

Specific Hazards in your Work Area - The sediment material is dynamic and nature with regard to hazards. Hazards specific to your work area will be communicated through your supervision, task specific AHAs, job safety analysis (JSA), and Take 5 Cards.

Gases, Vapors and Fumes - Gases, vapors and fumes may be released from a variety of processes, including:

- Using internal combustion engines
- Fueling vehicles or equipment

Mobile equipment - Use horns to alert others. Mirrors and back-up/travel alarm must be functional on all equipment and vehicles driving on-site. Use a spotter when backing vehicles with blind spots and/or around equipment (i.e., pipe lines, electrical boxes, etc.).

Work permits - It is not anticipated that tasks will require any additional permits. Permit requirements will be evaluated for any new tasks that are identified.

Decontamination - The SSO will determine the proper procedures for personal and equipment decontamination based on the work activities.

Proper Hygiene - Wash hands and face before eating, drinking, and smoking.

General Safety Requirements, Site Safety rules

- 1) All site personnel must attend each shift's Daily Safety Meeting.
- 2) Report all incidents (any unplanned or unexpected event that results in personal injury, property damage or environmental release) and "near-miss reports" to your Supervisor or the SHSO. Near-miss incidents COULD HAVE been an incident but didn't because of a slight change in conditions or luck. However, they have the same causal factors as an incident, so it is just as important to investigate them for identifying solutions to prevent recurrence and share lessons learned.
- 3) Any individual taking prescribed or over the counter medication that may impair their ability work shall inform the site HSO. The HSO will review the matter with the appropriate personnel to determine if the employee can perform his/her work duties safely while taking the medication.
- 4) The personal protective equipment specified by the SHSO and in the HASP shall be worn by all site personnel. This includes Level D PPE which must be worn at all times in active work areas. Hardhats are not required for routine monitoring tasks in areas where not construction activities are taking place.
- 5) Respirators shall not be worn when conditions prevent a good face seal. Such conditions may be a growth of beard, sideburns, a skull cap that projects under the facepiece, or temple pieces on glasses. This regulation does not ban facial hair on respirator users, per se, from the workplace. However, when a

respirator must be worn to protect employees from airborne contaminants, it has to fit correctly, and this will require the wearer's face to be clean-shaven where the respirator seals against it.

- 6) All personnel must sign the site log when entering and leaving the site property.
- 7) Personnel must follow proper decontamination procedures during and at the end of the work shift.
- 8) Eating, drinking, chewing tobacco or gum, smoking and any other practice that may increase the possibility of hand-to-mouth contact is prohibited in the Exclusion Zone (EZ) or the hot portion of the Contamination Reduction Zone (CRZ).
- 9) All signs and delineation shall be followed. Such signs and delineations shall not be removed except as authorized by the SHSO.
- 10) No one shall enter a permit required confined space without a permit, and Confined Space Entry Permits shall be implemented as issued.
- 11) All personnel must follow Hot Work Permits as issued.
- 12) All personnel must use the Buddy System in the Exclusion Zone.
- 13) All personnel must follow the work-rest regimens and other practices as required by the Heat Stress Program.
- 14) All personnel must follow lockout / tag-out procedures when working on equipment involving moving parts or hazardous energy sources.
- 15) No person shall operate equipment unless properly trained and authorized.
- 16) No one may enter an excavation greater than 4ft. deep unless authorized by the Competent Person.
- 17) Excavations must be sloped or shored properly. Safe means of access and egress from excavations must be maintained.
- 18) Ladders and scaffolds shall be solidly constructed, in good working condition and inspected prior to use. No one may use defective ladders or scaffolds.
- 19) Fall protection or fall arrest systems must be in place when working at elevations greater than 6 ft. from temporary working surfaces and more than 4 ft. from fixed platforms.
- 20) Safety harnesses and lanyards must be approved by the responsible party. The user must inspect the equipment prior to use. No defective personal fall protection equipment shall be used. Preloaded personal fall protection which has been involved in an incident must be recertified prior to re-use.
- 21) Hand and portable power tools must be inspected prior to use. Defective tools and equipment shall not be used.
- 22) Ground fault circuit interrupters (GFCI)s shall be used for cord and plug equipment used outdoors or in damp locations. Electrical cords shall be kept out of walkways and puddles unless protected and rated for the service.
- 23) Improper use, mishandling or tampering with health and safety equipment and samples is prohibited.
- 24) Horseplay of any kind is prohibited.
- 25) Possession or use of alcoholic beverages, controlled substances or firearms on any site is forbidden.
- 26) Use of cell-phones or personal electronic devices is prohibited while performing any work onsite, including the operation of any mobile equipment or motor vehicle.
- 27) All personnel shall be familiar with the Site Emergency Evacuation Procedures.

Disciplinary procedures to enforce compliance

General - All project personnel covered by this document are subject to disciplinary action, up to and including termination, for failure to comply with its applicable requirements. Management reserves the right to discharge or remove an employee from the project immediately for offenses that are grossly

severe in nature. All project management personnel are responsible for enforcing safety requirements. Subcontractors must implement equivalent disciplinary action programs.

Non-compliance - For minor safety related infractions, as determined by project management personnel, such as failure to wear eye protection, personnel generally will be reminded of site policy verbally and given ample opportunity to comply or for retraining.

Documentation - More severe or repeat offenses may be reported immediately to an individual's supervisor, who will initiate disciplinary action in accordance with each company's policies. Subcontractors may receive notices of violation with additional requirements for compliance.

Continued Repeat Offense - Willful continued failure to comply will result in removal from the site permanently.

Right to ask questions, report information

Media and Local Questions asked of you - The proper response to all questions relating to the site or any work happening on-site is, "I'm not the right person to answer your question." Please refer any visitor to Parsons Site Management personnel.

Reporting and Questions from you - All site workers possess the right to ask questions of, and report information to Parsons.

Employee use of Medication

Prescription - Any individual taking prescription or over the counter medication which could cause adverse side effects while working, as indicated by their healthcare professional or medication warning label, shall inform the site SSO or Talent Management prior to using such medication. The SO will review the matter with the project Talent Management Lead to determine if the employee can perform his/her work duties safely while taking the medication. We reserve the right, if necessary, to have a 3rd party licensed healthcare professional determine if the use of the medication by the employee will affect the employee's work performance or the health & safety of others".*

- * Craft union represented employees should refer to the project Labor Harmony Agreement for additional specific details on these requirements.

Stop Work Authority

Right, Obligation and Responsibility - Stop Work Authority establishes the 'authority and obligation' of any individual to suspend a single work task or group operation when the control of HSE risk is not clearly established or understood. In general terms, the stop work authority process involves a stop, notify, correct and resume approach for the resolution of a perceived unsafe condition, act, error, omission, or lack of understanding that could result in an undesirable event.

EXHIBIT 4-2 INCIDENT REPORTING

Employees involved in or witnessing an incident or near-miss incident must immediately report it to the responsible SSO/Field Team Leader, who in turn immediately relays the report to the Parsons PM, and the appropriate subcontractor representatives, per Incident Reporting Requirements included in Attachment A. Near-miss incidents that could cause significant injury or loss of life must also be immediately reported in the same manner. No supervisor may decline to accept or relay a report of injury or significant near-miss incident from a subordinate. The PrSM will report near misses to Honeywell representatives, per Event Reporting Requirements in Appendix B.

Parsons requires that all incidents/accidents be reported within **four hours** to the Market SH&E Director (Jason Townsell Mobile (562) 565-3491] by the Parsons PrM, Ed Glaza (315) 552-9691; Mobile: (315) 730-4685 and PrSM Gregory Ertel (585) 465-0557. The Industrial Safety Manager is responsible for notifying the Corporate Workers' Compensation Analyst.

Parsons also requires that the PM and/or PrSM report an incident that results in a lost workday case or any fatality, injury of a private citizen, property loss, or damage in excess of \$50,000, or catastrophes require **immediate** notification of the Market SH&E Director (Jason Townsell Mobile (562) 565-3491] The Industrial Safety Manager or Corporate Safety Manager must report any work-related fatalities within eight hours of the event and all work-related in-patient hospitalizations, as well as amputations and losses of an eye, to OSHA within 24 hours of the event.

Gregory Ertel, PrSM (585) 465-0557 (cell) is available for assistance in addressing documentation and notification. The PM or SSO (who has been trained on Parsons' reporting requirements and Online Safety Reporting System) then prepares and submits the incident information.

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. Personal injuries involving medical treatment and incidents resulting in more than \$1,000 damage will be verbally reported and submitted on the PWeb using the On-Line Safety Reporting System at <https://pwebtools.parsons.com/safety/IncidentSelect.aspx> within **4 hours**. Additionally, an Incident Investigation Report will be completed to identify root causes and corrective actions to prevent recurrence. Subcontractors must investigate incidents involving their employees or activities and submit an investigation report to the Parsons PM within **48 hours** of an incident. The Parsons Industrial Safety Manager will investigate or assign an investigator to each significant incident. The investigator will submit a final investigation report using the Online Safety Reporting System within **72 hours** of the incident. The PrSM maintains the investigation file. Instructions for entering incidents into the On-Line Safety Reporting System, Parsons Incident/Accident Report Form, Parsons Near Miss Report Form, and Parsons Wallet Card-Incident Reporting Guidelines are located in Attachment A of this report.

EXHIBIT 4-3 ORDER FOR WORK RELATED INJURY/ILLNESS EVAL/TREATMENT

(Employee Name) _____ of Parsons
(Occupation)

is authorized to go to _____ for the following service(s):
(Name of Medical Provider)

Treatment for a Work-Related Injury/Illness for Date of Injury: _____.

In the event the above medical provider determines this injury or condition NOT TO BE WORK RELATED, the employee and Parsons understand that this employee may then be referred by the above medical provider to his/her personal medical doctor.

Employer Information:	Parsons 100 West Walnut Street Pasadena, CA 91124
Workers' compensation carrier:	AIG
Policy No.:	0007169963
Adjusting Office and Telephone No.:	15 Cornell Drive, 2 nd Floor Latham, NY 12110 (877) 640-2450

Comments to Provider: Parsons attempts to provide any modified, alternate, light duty recommended.

Authorized Employer Signature

Print Name

Date

Phone Number

Fax Number

Disability slips and return-to-work notifications: Immediately fax to Parsons and provide copy to employee at conclusion of every evaluation/treatment.

Attention Emergency Department: After acute care, please refer patient back to a
_____ for follow-up treatment.

(Medical provider—to be completed by Parsons—where permitted by law.)

EXHIBIT 4-4 PARSONS CORPORATION SUBSTANCE ABUSE POLICY

STATEMENT OF POLICY:

Parsons expects all employees to report to work in a fit condition in order to perform their duties at the utmost levels of safety and efficiency. To that end, Parsons expressly prohibits the unlawful manufacture, distribution, dispensing, possession, use, or sale of a controlled substance or alcohol on its premises at any time. Employees are prohibited from being at work under the influence of these substances. Parsons will reasonably accommodate the efforts of an employee to obtain medical treatment for substance abuse and to return to employment thereafter. However, no provisions of this policy will contravene the provision of the Employee Personal Conduct Policy or preclude the corporation from terminating an employee in accordance with this policy.

Parsons has an obligation to safeguard the privacy rights of all employees; however, it is also committed to provide a healthy and safe work environment for all employees and to take reasonable steps to safeguard the health and safety of others and protect the environment in conducting its business.

Safety and Environmental Provisions

In some instances employees may be required to undergo random toxicological tests to ensure their continuing fitness for duty to comply with contract mandated requirements or government regulations, or if performing work at locations where the nature of their duties is such that there is the potential for serious physical injury to themselves, to others, or the general public, or potential for significant damage to property or the environment.

Assignment of employees to such job sites will be done on a voluntary basis. Employees who refuse to participate in the random testing program and whose job duties would normally expose them to random testing will be considered for placement in other positions not requiring random testing. Every reasonable effort will be made to accommodate such transfers; however, if suitable work for which the employee is qualified is not available, the employee will be subject to termination. A positive test result will lead to immediate removal from the site, in addition to either corrective action in accordance with this policy or the employee's termination in accordance with the Employee Personal Conduct Policy.

Searches are another means of protecting the safety of individuals and property at those locations where the nature of the work has the potential for serious injury or damage. Reasonable searches may be conducted of individuals, their personal vehicles, effects, and other areas under the individual's control while at such work sites or engaged in Parsons business at such sites.

Employees will not be detained or searched without their consent. An employee's cooperation in a search at such work sites is a condition of employment. The employee will be required to sign an Acknowledgment and Consent for Random Toxicological Tests and Searches form. Such testing will be performed by the company using qualified contracted agents, or trained employees.

SUBSTANCE ABUSE TESTING - EMPLOYMENT OFFER

No candidate for employment will be subjected to substance abuse testing prior to the receipt of an offer of employment. Offers of employment, regardless of employment category, must contain a contingency regarding satisfactory completion of substance abuse testing. Failure to submit to or pass an examination will result in immediate disqualification from consideration for placement.

EMPLOYEE PERSONAL CONDUCT

All employees are expected to conduct themselves in a manner that ensures a positive, safe and efficient work environment while at Parsons. Improper conduct may be considered either a “General Offense” or a “Major Offense” and may result in disciplinary action, or in appropriate cases, termination. Termination is generally the result of the commission of a major offense, or where previous efforts to bring about correction have failed in terms of major or general offenses.

[Employee Personal Conduct Policy](#)

RESPONSIBILITIES:

The immediate supervisor monitors employee behavior and performance and is alert to problems arising from an employee’s behavior or performance.

Human Resources ensures consistent and uniform application of this policy and, when required, interfaces with supervisor and employee to evaluate performance and behavior.

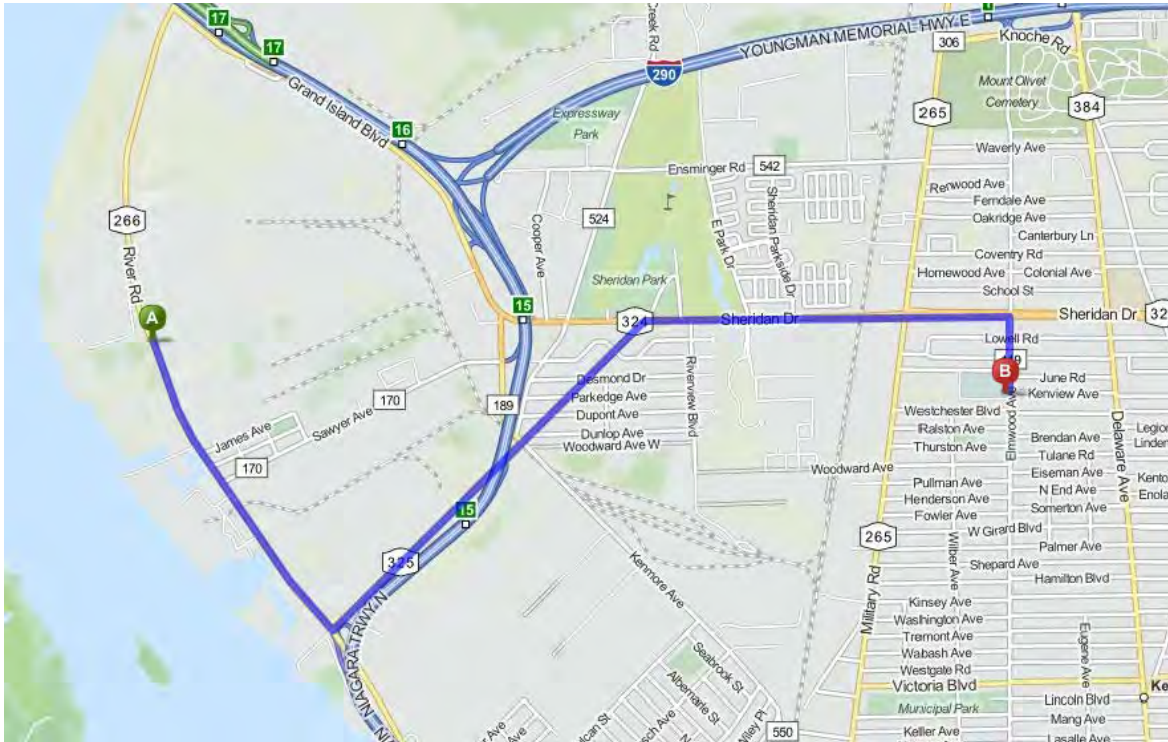
REFERENCES:

[Employee Personal Conduct Policy](#)

APPROVED:	<i>Debra Fiori</i>	DATE:	<i>8/14/19</i>
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EXHIBIT 4-5 ROUTE TO HOSPITAL

Kenmore Mercy Hospital
2950 Elmwood Ave
Kenmore, 14217
716-447-6100



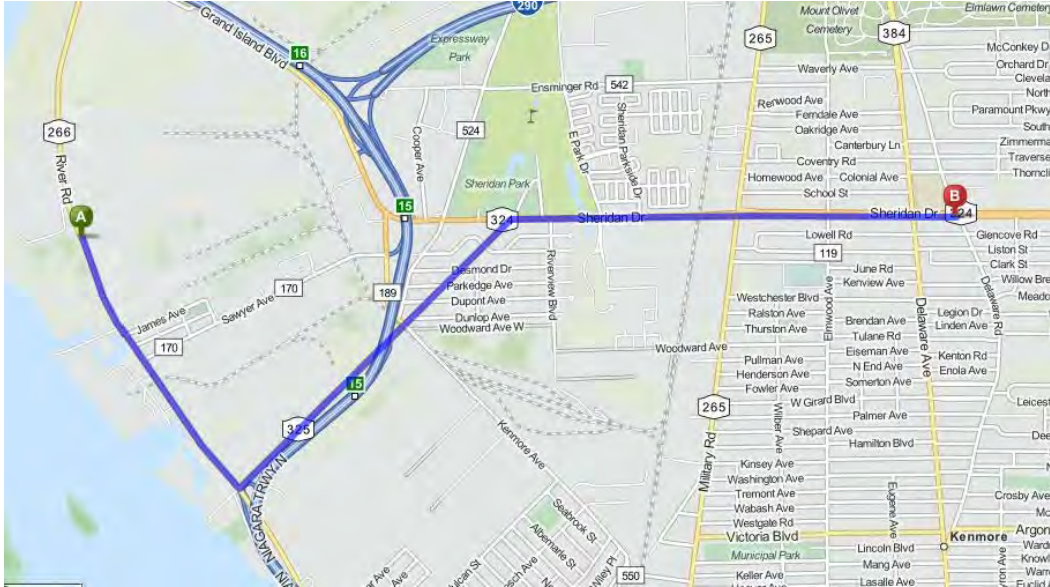
Directions to Kenmore Mercy Hospital

6 minutes/4 miles

1. Start out going south on RIVER ROAD/NY-266 toward James Ave.
2. Turn left onto Sheridan Drive/NY-325
3. Turn slight right onto Grand Island Blvd/NY-324
4. Turn right onto Elmwood Ave/County Highway-119
5. 2950 Elmwood is on the right

NOTE: Transportation of an injured worker to a medical facility for non-emergency treatment must be done by at least two (2) individuals (i.e., driver and observer). If a driver is not available, then a cab service is acceptable as long as an observer is present.

Well Now Urgent Care
1751 Sheridan Dr
Buffalo, NY 14223
716-844-7100



Directions to Urgent Care

10 minutes/5.7 miles

1. Start out going south on River Rd/NY-266 toward James Ave
2. Turn left onto Sheridan Dr/NY-325
3. Turn right onto Kenmore Ave/County Hwy-189
4. Turn slight right onto Dunston Ave
5. Enter next roundabout and take the 2nd exit onto Kenmore Ave/County Hwy-550.
6. Turn left onto Military Rd/NY-265
7. Turn right onto Sheridan Dr/NY-324
8. 1751 SHERIDAN DR is on the right

EXHIBIT 4-6 WORKCARE ASSESSMENT

Post-Injury Guidelines

If there is a **Life-Threatening or significant medical event e.g. (not breathing, no heartbeat, unconscious, open wound, amputation, obviously broken arm or leg, etc.)** then the first employee on the scene should:

- 1) Call for help
- 2) Call 911
- 3) Begin first aid/CPR if trained

Upon notification of a medical emergency the **Field Team Leader** will:

- 1) Make sure that 1st Aid/CPR trained employees are on scene and assisting the injured.
- 2) Make sure that any ancillary work ceases to make scene safe for responders.
- 3) Make sure that an employee is sent to the gate or entrance area to meet first responders and bring them to the injury scene.
- 4) Contact the Site Safety Officer.

Upon notification of a medical emergency the **Site Safety Officer** will:

- 1) Notify the Emergency Response Team if required.
- 2) Move to the injury scene with required first aid materials and direct the response.
- 3) Assist the first responders with any necessary decontamination or SDS' as needed.

If there is a **non-life-threatening illness or injury event e.g. (stain or sprain, stiff back, minor laceration, sore muscle, bruised toe/finger, etc.)** then the first employee on the scene should:

- 1) Call for help
- 2) Begin first aid if trained

Upon notification of a non-life-threatening illness or injury event the **Field Team Leader** will:

- 1) Make sure that 1st Aid/CPR trained employees are on scene and assisting the injured
- 2) Make sure that any ancillary work ceases to make scene safe for responders.
- 3) Contact the Site Safety Officer
- 4) Contact WorkCare and allow the injured employee to speak with a WorkCare doctor or nurse
- 5) Follow WorkCare guidelines; Drive the employee to the clinic if directed and stay with him/her until the visit is concluded
- 6) Provide the employee with "Questions to Consider Asking Your Doctor During a Clinic Visit"
- 7) Provide the employee with "Memo to Treating Medical Professional" prior to the employee going into the exam room.
- 8) Participate in the incident investigation process upon return to the site.

Upon notification of a medical emergency the **Site Safety Officer** will:

- 1) Notify the Shift Emergency Response Team Lead and the contractor CM/PM
- 2) Move to the injury scene with required first aid materials and direct the response
- 3) Assist the Field Team Leader in contacting WorkCare at (888) 449-7787

5.0 PRE-CONSTRUCTION PHASE

5.1 Risk Analysis and Safety Specification Development

Procurement procedures require that a site-specific SH&E risk analysis be conducted before issuance of construction Request for Proposals (RFPs). Using the pre-bid risk analysis checklist, the PM leads this analysis to document 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
- Traffic
- Security
- Fences
- Water hazards
- Existing geographical and environmental conditions
- Damage to ecological or cultural resources
- Risks due to buried items
- Other environmental regulatory requirements

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 to address these activities in their proposals. The RFP should note that the list is representative and that the selected contractor must identify and control all work-related hazards, worker exposures and potential environmental incidents. The standard safety specifications are given below.

- Preconstruction SH&E Meeting, Site Specific SH&E Review Checklist, and Project Technical and General Conditions Specification Review - Exhibit 5-1
- Pre-Field Work Safety Meeting Checklist - Exhibit 5-2
- Mobilization/Kick-Off Safety Meeting Checklist - Exhibit 5-3

5.2 Prebid Meeting

Pre-bid meetings are required to ensure that bidders understand the RFP. These meetings must include a discussion of safety, health and environmental performance expectations. During the pre-bid meeting, the PM can use the [Preconstruction SH&E Meeting, Site Specific SH&E Review Checklist, and Project Technical and General Conditions Specification Review \(3 Sheets\)](#) (Exhibit 5-1) to review the project SH&E philosophy, principles, and Parsons requirements with prospective bidders. Although this information is included in the RFP, the meeting reinforces the message.

5.3 Subcontractor Prequalification Review

Project procurement procedures require that all subcontractors submit prequalification documentation for evaluation. The PM or PrSM conducts the safety prequalification evaluation in accordance with the online CSE system. Subcontractors are required to provide safety information to complete their CSE on an annual basis. The provided information is reviewed by a safety manager and the subcontractor receives a safety grade. A “C” or “D” grade may require additional mitigation measures to allow the subcontractor to work on-site.

5.4 Pre-construction Meeting

The PM holds a pre-construction meeting before the subcontractor begins work. The meeting includes subcontractor representatives, the Parsons PM, the contract manager, and representatives from all construction disciplines, including safety. During the SH&E review, meeting participants review specific SH&E concerns, the pre-bid risk analysis, and competent person and site-specific SSHEP requirements. The PM provides the SH&E Point of Contact and emergency management information. The PM uses the [Preconstruction SH&E Meeting, Site Specific SH&E Review Checklist, and Project Technical and General Conditions Specification Review \(3 Sheets\)](#) (Exhibit 5-1) to document the meeting. *See ESHARP Guidebook, Volume 1 – Project, Section 6 for further detail.*

5.5 Competent Person Submission Review

Parsons and its subcontractors must identify the OSHA-regulated and certified competent persons for work or tasks that require this level of expertise. The supervisor of the competent person must certify the specific competencies of the named competent person in writing.

The supervisor and competent person sign and submit the [Competent Person Form](#) (Exhibit 9-1) to the Parsons PM. (Note click on this link for the [Subcontractor Competent Person Form](#).)

5.6 Subcontractor Safety Plan Submission Review

5.6.1 Site-Specific Subcontractor Safety, Health, and Environmental Plans (SSHEP)

At least 10 days before work begins, each subcontractor must submit two copies of its SH&E program to the Parsons PM for review. The PM and PrSM review the plan to ensure that it meets Parsons' requirements.

If a contractor needs assistance developing a SSHEP, the PrSM can provide an electronic copy of a Model SSHEP (Appendix A2).

The subcontractor safety plan must address the following elements:

- Responsibilities
- SH&E compliance
- Communication
- Hazard Assessment
- Hazard Correction
- Risk of environmental incident
- Environmental controls
- Engineering controls
- Control measures to prevent environmental incident
- Incident investigation
- Training and instruction
- Recordkeeping
- The plan must include all applicable requirements of Parsons PSHEP, OSHA CFR 1910/1926 and applicable federal, regional, state, municipal, and/or local environmental regulation scope of work evaluation describing sequence of work and associated hazardous or environmentally risky activities
- AHA including evaluation of environmental risks
- Site employee SH&E orientation program to address location-specific issues
- Site-specific Emergency Action Plan that includes a list of key management personnel and contact information (home, office, project site, and cellular telephone numbers).

- Site-specific Medical Emergency Plan that lists qualified First Aid personnel by name and includes copies of their current certificates
- List of key line management personnel, by name and position, who will enforce the plan
- List of key competent or qualified personnel by name and copy of current documentation identifying specific certified competency (e.g., scaffolding, excavations, fall protection)
- A written progressive disciplinary program for violations of SH&E procedures
- Trenching and Shoring Plan (if applicable)
- 100% Fall Protection Plan (if applicable)
- Waste and hazardous material management (if applicable)
- Control measures for storm water and other wastewater discharges (if applicable)
- Identification of risks and control measures for activities that could involve environmental spills/releases
- Measures to address any other environmental regulatory requirements
- Contractor task hazard and risk planning
- Subcontractor weekly SH&E planning submission
- Contractor daily task SH&E planning

5.7 Pre-mobilization SH&E Meeting

Project Managers, or their designee, conduct the Premobilization SH&E Meeting on or before the first day of subcontractor mobilization in the field at the work site. (See *ESHARP Guidebook, Volume 1 - Project, Section 11 for additional details.*) Exhibit 5-2, [Subcontractor Premobilization Safety Meeting](#), shows the checklist used for the SH&E portion of this meeting. The meeting includes a review of the pre-bid site/area risk analysis and a walk through of the work area to locate items on the Pre-Bid Risk Analysis Checklist.

EXHIBIT 5-1 PRECONSTRUCTION SH&E MEETING SITE-SPECIFIC SH&E REVIEW CHECKLIST PROJECT TECHNICAL AND GENERAL CONDITIONS SPECIFICATION REVIEW (SHEET 1 OF 3)

Date:
Subcontractor Representative:
Phone:
Project Location:
Parsons Project Manager:
Phone:
Subcontractor Safety & Health Representative:
Phone:
Parsons Safety & Health Manager:
Phone:
Subcontractor Environmental Representative:
Phone:
Parsons Environmental Representative:
Phone:
<p>This checklist supports the identification of work activities and programs in a preconstruction SH&E meeting. This list also includes items identified through the subcontractor review and high-risk activities identified through the project specification review.</p> <p>High-risk activities (denoted with an asterisk) checked with a checkmark must be followed up during the construction phase with training, written plans and/or a specific Activity Hazard Analysis (AHA).</p> <p>This list should be reviewed with prospective bidders during the pre-bid meeting.</p> <p>NOTE: Use check box and add specifics and details as applicable (next to the callouts)</p>
SAFETY & HEALTH\
<input type="checkbox"/> Site-Specific Safety, Health and Environmental Plans
<input type="checkbox"/> Competent/Qualified Person Documentation
<input type="checkbox"/> SH&E Audits/Inspections
<input type="checkbox"/> Subcontractor Responsibilities
<input type="checkbox"/> Site Orientation Requirements
<input type="checkbox"/> Preconstruction SH&E Meeting/Date
<input type="checkbox"/> Crane Inspection Certification
<input type="checkbox"/> Personal Protective Equipment (PPE) (Work activities or work site requires hearing protection/using respirators/special protective clothing/other)
<input type="checkbox"/> Public Exposure (Work activities or location requires special precautions to protect the public)
CONSTRUCTION SAFETY ISSUES

**EXHIBIT 5-1 PRECONSTRUCTION SH&E MEETING FORM SITE-SPECIFIC SH&E REVIEW
CHECKLIST PROJECT TECHNICAL AND GENERAL CONDITIONS SPECIFICATION REVIEW
(SHEET 2 OF 3)**

CONSTRUCTION SAFETY ISSUES (Contd.)	
<input type="checkbox"/>	Steel Erection (SENRAC Requirements)
<input type="checkbox"/>	Excavations/Trenching
<input type="checkbox"/>	Powered Industrial Trucks, Fork Lifts
<input type="checkbox"/>	Crane Work/Heavy Lifts, Rigging
<input type="checkbox"/>	Work involving Hazardous Materials
<input type="checkbox"/>	Electrical Tie-ins/Lockout – Tagout
<input type="checkbox"/>	Aerial Lift Work – Scissor Lifts, Extendable Boom, etc.
<input type="checkbox"/>	Underground, Caissons, Cofferdams
<input type="checkbox"/>	Scaffold Erection/Work
<input type="checkbox"/>	Demolition
<input type="checkbox"/>	Marine Work/Live Boating
<input type="checkbox"/>	Heavy Hauling
<input type="checkbox"/>	Concrete
<input type="checkbox"/>	Diving
<input type="checkbox"/>	Work Adjacent to Production Areas
<input type="checkbox"/>	Site Security/Visitor Control/Public Areas
<input type="checkbox"/>	Process Safety Management
<input type="checkbox"/>	Permits (Excavations, Scaffolding, Demolition, Traffic, Confined Space, Hot Work, Line Breaking, etc.)
<input type="checkbox"/>	Confined Space (Confined space entry is required)
<input type="checkbox"/>	Welding and cutting (Acetylene/gas cutting, arc welding, soldering and brazing)
<input type="checkbox"/>	Ladders (Portable ladder use is required)
<input type="checkbox"/>	Traffic Control (Work is on or near highways, roads, or mass transit)
MEDICAL	
<input type="checkbox"/>	Substance Abuse Screening
<input type="checkbox"/>	Emergency Procedures
<input type="checkbox"/>	Site Security
<input type="checkbox"/>	Smoking Policy
<input type="checkbox"/>	Medical Services Requirements
<input type="checkbox"/>	Treatment Locations, Addresses, and/or Phone List
ENVIRONMENTAL	
<input type="checkbox"/>	Environmental Hazards
<input type="checkbox"/>	Air Pollution/Emissions and required reporting
<input type="checkbox"/>	Wastewater Discharges
<input type="checkbox"/>	Drinking Water
<input type="checkbox"/>	Management of Hazardous Materials and Hazardous and Solid Wastes
<input type="checkbox"/>	Emergency Response to Spills and Releases Environmental Assessments
<input type="checkbox"/>	Protected Ecological and Cultural Resources
<input type="checkbox"/>	Specific Reports on Toxic or Hazardous Chemicals Usage and Storage (Required by Environmental Regulation)

[illegible]

EXHIBIT 5-2 STANDARD PRE-FIELD WORK SAFETY MEETING CHECKLIST

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 5-3 MOBILIZATION/KICK-OFF SAFETY MEETING

PROJECT INFORMATION			
Project Name:		Meeting Date:	
Project Location:		Project Number:	
Scope of Work Covered In This Meeting			
MEETING ATTENDANCE			
Name (print)	Signature	Title or Project Role	Company

1. Honeywell Safety Vision – Review and reaffirm vision and beliefs as outlined in Section 1.0 of the HSP² program.
2. Project Safety Goals and Objectives
 - Total Incident Rate (TIR) target of _____
 - Lost Workday Incident Rate (LWIR) target of 0.0
3. Scope Of Work and Highly Hazardous Activities - Review key safety issues associated with highly hazardous activities.

<ul style="list-style-type: none"> • Line breaking (process piping LOTO) • Work that may disrupt or damage existing piping, vents, drains (LOTO). • Any work on equipment that requires LOTO. • Major excavations (>5' deep or potential for damage to underground utilities) 	<ul style="list-style-type: none"> • Roof activities • Elevated work >6' that will not be done from manlifts or scaffolds • Hazardous painting or coating (epoxy paints, electro-static painting, cocooning, etc.) • Structural steel erection • Use of ladders above 24 feet. • Confined Space Entry (permit-required) 	<ul style="list-style-type: none"> • Any work within 20' of overhead power lines • Critical Crane Picks (>80% of rated capacity, multiple cranes on a single pick, near power lines, picks over occupied buildings, and picks of long-lead or specialized equipment.) • Other:
--	--	--
4. Honeywell Specification 01620 - Verify that copies were received by subcontractors and address any questions.
5. Incident Reporting Requirements
6. Drug & Alcohol Testing Requirements
7. Commitment to Light Duty work and the location of Industrial Medical Associates (IMA)
8. Safety Planning Requirements - Review the development and use of Project Safety, Health, and Environmental Plans (PSHEPs) and Job Safety Analyses (JSAs).
9. Safety Meetings - Review requirements related to daily safety meetings and Weekly Toolbox Safety Meetings. Review the use of daily Pre-Task Planners
10. Roles and Responsibilities
11. Other Site-Specific Safety Issues

6.0 FIELD OPERATIONS

6.1 SITE RISK ANALYSIS

Before work begins, PMs lead a team that performs a risk analysis at each work site to identify hazards and risks that require specific control measures. During the weekly action item meeting, the project team discusses upcoming work tasks and associated risks and control measures. The weekly action item list generated during this meeting identify upcoming mobilization or demobilizations tasks, audits and inspections, competent person changes, training and new activities requiring an AHA. The project team and subcontractors also submit a Two-Week Look Ahead each week to identify upcoming tasks and assess if the new activities require a new or revised AHA.

As a part of the site risk analysis process, a risk register was developed, identifying potential hazards and evaluating the associated risks. This centralized, continually updated document also contains a list of controls to be implemented to reduce the risk of planned activities to an acceptable level. The project-specific risk register is included as Attachment G.

6.1.1 Chemical Hazards

Activities are being completed on sites where remedial construction activities have been completed or where contaminant concentrations are below remedial criteria. Risk of exposure to site workers is variable based on the task. A hazard assessment and applicable controls will be conducted for various tasks and documented in the AHA. All employees with potential for exposure to hazardous materials will be trained in HAZWOPER. Employees involved in asbestos sampling, air monitoring or abatement will be trained and certified in accordance with NYCRR Code Rule 56. See section 2.1.1 for a list of known or expected chemical hazards at the site.

6.1.2 Physical Hazards

Physical hazards that may be encountered during the construction activities include, but are not limited to heat stress, cold-related illness, ultra-violet radiation, biological, and noise hazards.

Heat Induced Illness – Heat Stress:

The use of protective equipment may create heat stress. Monitoring of personnel wearing personal protective clothing should commence when the ambient temperature is 70 degrees Fahrenheit (°F) or above. Table 6.1 presents the suggested frequency for such monitoring. Table 6.2 presents the apparent temperature for given humidity and ambient temperature readings in shade. Monitoring frequency should increase as ambient temperature increases or as slow recovery rates are observed. Heat stress monitoring should be performed by a person with a current first aid certification who is trained to recognize heat stress symptoms. For monitoring the body's recuperative abilities to excess heat, one or more of the following techniques will be used. Other methods for determining heat stress monitoring, such as the wet bulb globe temperature Index from American Conference of Governmental Industrial Hygienist Threshold Limit Values Booklet can be used.

To monitor the worker, measure:

- Heart rate. Count the radial pulse during a 30-second period as early as possible in the rest period.
 - If the heart rate exceeds 100 beats per minute at the beginning of the rest period, shorten the next work cycle by one-third and keep the rest period the same.

- If the heart rate still exceeds 100 beats per minute at the next rest period, shorten the following work cycle by one-third.
- Oral temperature. Use a clinical thermometer (3 minutes under the tongue) or similar device to measure the oral temperature at the end of the work period (before drinking).
 - If oral temperature exceeds 99.6°F (37.6 degrees Celsius (°C)), shorten the next work cycle by one-third without changing the rest period.
 - If oral temperature still exceeds 99.6°F (37.6°C) at the beginning of the next rest period, shorten the following cycle by one-third.
 - Do not permit a worker to wear a semi-permeable or impermeable garment when oral temperature exceeds 100.6°F (38.1°C).

Prevention of Heat Stress - Proper training and preventative measures will aid in averting loss of worker productivity and serious illness. Heat stress prevention is particularly important because once a person suffers from heat stroke or heat exhaustion, that person may be predisposed to additional heat related illness. To avoid heat stress the following steps should be taken:

- Adjust work schedules.
 - Modify work/rest schedules according to monitoring requirements.
 - Mandate work slowdowns as needed.
- Perform work during cooler hours of the day, if possible, or at night if adequate lighting can be provided.
- Provide shelter (air-conditioned, if possible) or shaded areas to protect personnel during rest periods.
- Maintain worker's body fluids at normal levels. This is necessary to ensure that the cardiovascular system functions adequately. Daily fluid intake must approximately equal the amount of water lost in sweat, i.e., 8 fluid ounces (0.23 liters) of water must be ingested for approximately every 8 ounces (0.23 kilograms) of weight lost. The normal thirst mechanism is not sensitive enough to ensure that enough water will be ingested to replace lost sweat. When heavy sweating occurs, encourage the worker to drink more. The following strategies may be useful:
 - Maintain water temperature 50° to 60°F (10° to 16.6°C).
 - Provide small disposal cups that hold about four ounces (0.1 liter).
 - Have workers drink 16 ounces (0.5 liters) of fluid (preferably water) before beginning work.
 - Urge workers to drink a cup or two every 15 to 20 minutes, or at each monitoring break. A total of 1 to 1.6 gallons (4 to 6 liters) of fluid per day are recommended, but more may be necessary to maintain body weight.
- The best prevention method for heat induced illnesses is to train personnel to recognize the symptoms. Avoid extended site tours when temperature and relative humidity are high. Perform site tour during cooler hours of the day if possible. Go to air-conditioned building or shaded area during periods of rest (field support trailer).

Cold-Related Illness:

If work on this project is conducted during the winter months, thermal injury due to cold exposure can become a problem for field personnel. Systemic cold exposure is referred to as hypothermia. Local cold exposure is generally called frostbite.

Hypothermia - Hypothermia is defined as a decrease in the patient core temperature below 96°F. The body temperature is normally maintained by a combination of central (brain and spinal cord) and peripheral (skin and muscle) activity. Interference with any of these mechanisms can result in hypothermia, even in the absence of what normally is considered a "cold" ambient temperature. Symptoms of hypothermia include: shivering, apathy, listlessness, sleepiness, and unconsciousness.

Frostbite - Frostbite is both a general and medical term given to areas of local cold injury. Unlike systemic hypothermia, frostbite rarely occurs unless the ambient temperatures are less than freezing and usually less than 20°F. Symptoms of frostbite are: a sudden blanching or whitening of the skin; the skin has a waxy or white appearance and is firm to the touch; tissues are cold, pale, and solid.

Working on Water in Cold Weather - If air temperature is below 50 deg F and water temperature is below 50 deg F, either Mustang suits, exposure suit, wet suit, or other type of survival suit is required for small craft (16 ft. and below) or craft with no side rails in lieu of PFDs.

Prevention of Cold-Related Illness - To prevent cold-related illness:

- Educate workers to recognize the symptoms of frostbite and hypothermia
- Identify and limit known risk factors
- Implement the requirement for wear of the full-body marine exposure suits for all Parsons and subcontractor personnel for on the lake boating operations during cold weather months
- Assure the availability of enclosed, heated environment on or adjacent to the site
- Assure the availability of dry changes of clothing
- Assure the availability of warm drinks
- Allow employees to take a warming break if they are shivering

Any person developing moderate hypothermia (a core temperature of 92°F) cannot return to work for 48 hours.

Ultraviolet Radiation:

The sun emits ultraviolet radiation (UV) as heat and light. The skin's natural defense mechanisms attempt to reject the UV by distributing melanin pigmentation where needed. However, overexposure to direct sunlight can cause inflammation or blistering of the skin (sunburn). The use of sunscreen, long sleeve shirts, and wide brim hats can help prevent sunburn. Chronic exposure to UV radiation is known to cause skin cancer. In case of sunburn, do not apply burn ointment, cold cream, or butter to relieve pain. Use a dry dressing and get medical attention for severe, extensive sunburns. Also watch for dehydration. If a person is dehydrated, try and keep their fluid volume at their normal level.

Electrocution:

All heavy equipment will be kept a safe distance from live sources of electricity. All subsurface and overhead electrical sources and lines will be identified before ground disturbance activities commence. Where possible and/or practical, electric lines and sources will be deactivated or insulated before ground disturbance activities commence. Personnel should remain at a safe distance from equipment when not performing work to prevent the risk of injury from electrical arcing when high-voltage surges and spikes cause arcing in electronic circuits.

Ground fault circuit interrupters will be utilized on electrical equipment, where applicable, and extension cords will be inspected for splices, taps, and breaks in its outer cover insulation. If splices, taps, or breaks are noted on an extension cord, it shall not be used and it will either be removed from the site or cut up and rendered unusable.

Noise:

Noise is generated during construction activities in such operations as transportation of materials and operation of heavy construction equipment. Hearing protection will be worn by personnel to protection against the effects of hazardous noise exposure whenever sound-pressure levels exceed 85 dB(A) steady-state expressed as a time-weighted average. Personnel operating or working around heavy equipment should wear hearing protection.

Vehicle Traffic:

Vehicle traffic may include cars, trucks, and heavy equipment operated by contractors, subcontractors, or visitors to the site. Drivers should approach building corners with extreme caution as many of the buildings have blind corners making it extremely difficult to see intersection traffic. All heavy equipment should have a back-up alarm or drivers should honk to signal when they are backing up or when approaching blind corners. The speed limit at the site is 5 miles per hour on the causeway and 10 miles per hour everywhere else on-site.

Drivers are not permitted to use any communications device (e.g., cell phone) while driving. The driver and all passengers must use seatbelts in all moving vehicles at all times. A vehicle inspection of the tires, lights, horn, wipers, and backup alarm should be completed each day.

Project activities include installing road-side safety barriers along select public roadways. Road-side safety barrier work shall be completed by a New York Department of Transportation (NYSDOT) registered contractor. NYSDOT specified traffic control safety protocols will be implemented in association with all works performed within NYSDOT alignment property.

6.1.3 Biological Hazards

Biological hazards can result from encounters with mammals, insects, snakes, spiders, ticks, plants, parasites, and pathogens. Mammals can bite or scratch when cornered or surprised. The bite or scratch can result in local infection or infection with systemic pathogens or parasites. Insect and spider bites can result in severe allergic reactions in sensitive individuals. Exposure to poison ivy, poison oak, or poison sumac results in skin rash. Ticks carry a number of serious diseases. Dead animals, organic wastes, and contaminated soil and water can harbor parasites and pathogens. Spent needles and/or syringes could be infected with potential blood or other infectious materials that could carry serious diseases.

Poison Ivy:

Some of the most common and severe allergic reactions result from contact with poison ivy, poison oak, or poison sumac. Contact with the poisonous sap of these plants produces a severe rash characterized by redness, blisters, swelling, and intense burning, and itching. The victim also may develop a high fever and may be very ill. Ordinarily, the rash begins within a few hours after exposure, but it may be delayed for 24 to 48 hours.

Ticks:

Ticks are common during the spring and summer throughout the work area when off any paved area. Two types of ticks may be encountered: the dog tick and the deer tick. The dog tick is the larger, more common tick. After biting, the dog tick will remain attached to the victim until engorged with blood. Dog ticks may transmit Rocky Mountain spotted fever and other diseases. The deer tick is much smaller, ranging from poppy seed to grape seed size, and does not remain attached to the skin for very long after biting. Deer ticks can transmit Lyme disease, which can have serious, long-term health effects if left untreated. Lyme disease is often characterized by a bulls-eye type rash; light in the center with an outer red area. Flu-like symptoms may also occur. These signs may occur at different times and the rash may not appear. If you discover any bites on the skin, wash the affected area and seek medical attention if a rash or flu-like symptoms appear.

Bees, Wasps, Hornets, and Other Insects:

Symptoms of an insect bite are normally a sharp, immediate pain in the body part bitten. Report any significant bite immediately. Poisonous insects and insect-like creatures that may be encountered around the work areas include the following:

- Bees (honeybees, bumble bees, sweat bees, wasps, and hornets)
- Caterpillars

- Beetles/Bugs
- Mosquitoes

Spiders:

The two poisonous spiders that may be encountered during the construction project are the Brown Recluse and the Black Widow. The Brown Recluse is up to one inch long with a violin or “fiddle” shaped mark on the top of the head. The Black Widow is a smaller, bulbous black spider with a red hourglass-shaped mark on the underside.

Reactions to a Brown Recluse spider bite include mild to severe pain within two to eight hours and a star shaped area around the bite within three to four days. Significant tissue death and loss accompanies a Brown Recluse spider bite. Reactions to a Black Widow spider include intense pain at the site of the bite after approximately 15 to 60 minutes, followed by profuse sweating, rigid abdominal muscles, muscle spasms, breathing difficulty, slurred speech, poor coordination, dilated pupils, and generalized swelling of face and extremities.

Persons that have been bitten by a Brown Recluse or Black Widow spider should be immediately transported to a hospital. The spider should be collected (if possible) for confirmation of the species.

Personnel will be alert to the potential for spider bites. Spiders sometimes establish residence in stored clothing and PPE. It is advisable for personnel to inspect clothing and PPE for spiders prior to donning.

Blood Borne Pathogens:

Blood borne pathogens enter the human body and blood circulation system through punctures, cuts or abrasions of the skin or mucous membranes. They are not transmitted through ingestion (swallowing), through the lungs (breathing), or by contact with whole, healthy skin. However, under the principle of universal precautions, all blood should be considered infectious, and all skin and mucous membranes should be considered to have possible points of entry for pathogens.

COVID-19

COVID-19 is a respiratory illness that can spread from person to person. It spreads mainly between people who are in close contact with one another (within 6 feet) through respiratory droplets produced when an infected person coughs or sneezes. It may also be possible to contract by touching a surface or object that has the virus on it and then touching their nose, mouth, and eyes.

Symptoms include fever, cough, shortness of breath, and/or pneumonia in both lungs.

To avoid the spread of COVID-19, personal hygiene measures should be implemented including: frequently washing hands with soap and water for at least 20 seconds and always before and after eating and arriving or departing from a site; use an alcohol-based hand rub with at least 60% alcohol; avoid touching your eyes, nose, and mouth; minimize contact with other people and maintain 6-foot distance; utilize disinfectant to wipe down all surfaces, supplies, etc.; do not come into work if sick. Attachment I contains COVID-19 Prevention Procedures.

6.1.4 Environmental Hazards

Slip, Trip, and Fall Hazards:

The site may contain slip, trip, and fall hazards for site workers, such as:

- Wet and slippery surfaces
- Holes, pits, tree roots, or ditches
- Slippery surfaces
- Steep grades
- Uneven grades

- Sharp objects, such as nails, metal shards, needles and broken glass

Site inspections are required to be performed in the manner and frequency described in Section 4.6. The Exhibit 6-1 checklist can be used as site inspection form to document safe work areas and walkways and general housekeeping. This inspection can be used to identify hazards that can contribute to tripping hazards.

Thunderstorm Hazards:

During the course of field operations, severe weather may be encountered, including thunderstorms, lightning, rainstorms, and other unsafe weather conditions (i.e., high winds and tornadoes). Criteria indicating that severe weather conditions may exist include:

- High winds (greater than 40 miles per hour – depending on the tree cover and other site specific conditions)
- Tornado watch or warning in place for the area including the site
- Visible lightning
- Extreme temperatures (e.g., greater than 100 degrees F)
- Heavy rainfall that makes footing treacherous and visibility difficult

If severe weather is approaching, personnel will secure the location, secure the equipment, stop all work activities and go to a designated safe location. The SSO and CM will determine if weather conditions allow for restart of work activities. Monitor weather radio and if possible monitor weather radar via internet.

All water activities will cease during a thunder or lightning storm. All personnel must get off the water as quickly and safely as possible. All activities will cease for 30 minutes after the last thunder or lightning.

If weather conditions allow for restart of work activities, a visual inspection will be performed to check for damage or hazards caused by the storm. If damage is noted, activities will be evaluated and corrective actions to fix, repair or eliminate the hazard will be completed prior to start of any activities.

6.1.5 Fire Hazards

Although fires and explosions may arise spontaneously, they are more commonly the result of carelessness during the conduct of site activities, such as moving drums, mixing/bulking of site chemicals and during refueling of heavy or hand held equipment. Some potential causes of explosions and fires include:

- Mixing of incompatible chemicals, which cause reactions that spontaneously ignite due to the production of both flammable vapors and heat
- Ignition of explosive or flammable chemical gases or vapors by external ignition sources
- Ignition of materials due to oxygen enrichment
- Agitation of shock or friction-sensitive compounds
- Sudden release of materials under pressure

Working On or Near Water

During the course of the project a major amount of the work will be conducted on or around water. Any work conducted within 6 ft. of the water's edge will require workers to wear a Coast Guard approved PFD. Prior to commencement of any activities on the water, watercraft will be inspected, radio communication with shore personnel will be established, rescue procedures reviewed, and Coast Guard approved PFDs issued to workers. All equipment and operating personnel will meet or exceed U.S. Coast Guard requirements for safety. Prior to performing work on the water, a float plan and applicable AHAs will be completed and reviewed by boating personnel.

6.2 Five Hazard Control Measures – Order of Precedence

Site SH&E hazards and risks are controlled using one or more of the control measures listed below in order of precedence:

- Engineer/design to eliminate or minimize hazards. A major component of the design phase is to select appropriate features to eliminate a hazard/risk and render it fail-safe or provide redundancy using backup components.
- Guard the hazard. Hazards that cannot be eliminated by design must be reduced to an acceptable risk level by guards or isolation devices that render them inactive.
- Provide warnings. Hazards or risks that cannot be totally eliminated by design or guarding are controlled through using a warning or alarm device.
- Provide special procedures or training. When design, guarding, or warnings cannot eliminate hazards/risks, subcontractors must develop procedures, training, and audits to ensure safe and environmentally compliant completion of work. Training cannot be a substitute for hazard elimination when life-threatening hazards are present.
- Provide PPE. To protect workers from injury, the last method in the order of precedence is the use of PPE, such as hard hats, gloves, eye protection, life jackets, and other protective equipment with the understanding that bulky, cumbersome, and heavy PPE is often discarded or not used, rendering this method ineffective without proper controls.

6.3 Activity Hazards Analysis

Parsons and its subcontractors are required to conduct an AHA for all aspects of the work. An AHA includes the following steps:

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

PMs can use the following list to determine the construction/operations AHAs for various high-hazard operations and critical tasks.

- Premobilization inspection. 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. Environmental risks should be included in this inspection (e.g., potential for wastewater discharges, adequacy of planned storm water controls, planned hazardous materials/waste management, measures to prevent spills/releases).
- Water, wastewater, and marine work. Analyze work adjacent to, in, or over water (including lakes, canals, dams, treatment plants, water tanks, clarifiers, and reservoirs).
- Traffic controls. Internal traffic control plans should include ways to restrict the number of vehicles on-site, the flow of vehicles 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 vehicles and operator controls. Plan traffic controls for delivery of equipment or materials and equipment operations. Control measures include warning signs, flagmen, traffic stoppage and control, and unloading procedures.

- Material storage. Consider where materials and equipment will be stored on-site, and labeling and signage requirements. Implement measures to protect against vandalism and theft. Also consider the hazards that may exist for workers and the environment when storing or retrieving materials.
- Material handling. Consider the size and weight of loads, how equipment will be used, how equipment is set up and protected, and safety and maintenance inspections of material handling and rigging equipment. Consider to employee training in use of the equipment and ergonomic issues when engaged in manual material handling activities.
- Heavy equipment controls. Evaluate the use of heavy equipment in operations such as site clearing, grading, excavation, or lifting. Controls should include equipment alarms, use of qualified operators, pre-use inspections, and OSHA, regional, municipal, and local regulatory requirements.
- Fall protection. Use fall protection when employees are working above the normal work surface level. Consider how and where ladders, scaffolding, work platforms, or lifts (including scissors lifts or bucket lifts), roofing work, and leading edges are used. Evaluate protective measures such as Fall Protection Plans, use of personal fall arrest systems, and work surfaces for slip and fall hazards and protection.
- Consider operations where PPE is required and the type required, e.g., eye, head, foot, respiratory, hearing and hand protection, and types of special protective clothing.
- Portable hand and power tools. Evaluate tools to be used and the ways that workers can be protected from the hazards associated with their use. Consider tool maintenance requirements, electrical requirements, use of ground fault circuit interrupters, grounding, extension cords, tool inspection procedures, and employee training.
- Employee training. Review the safety training needs of employees. Training should include initial site SH&E orientations and hazard communication training. Some operations (e.g., excavation, blasting, scaffold erection, tunneling, confined space, heavy equipment operations, handling hazardous materials, storm water and waste water management, response to spills/releases, waste management, and hazardous plant process operations) may require special training that should be checked and evaluated.
- Mechanical, electrical, and piping. Evaluate all work associated with the installation, repair and maintenance of mechanical, piping and electrical work for interferences, lockout/tagout, line break procedures, and applicable customer requirements.

Exhibit 6-2 is an [AHA Example](#). Exhibit 6-3 contains the [AHA Template](#).

6.4 OM&M Site Inspection

As discussed in Section 4.6, the PM, or their designee conducts weekly site inspections. Additional inspections will also be completed when a significant task is being performed (e.g., soil/sediment sample collection, surface water sample collection, major restoration efforts by subcontractor, etc.). If the PM is not on-site, the most senior person on-site will conduct the inspection. An example site inspection checklist is provided as Exhibit 6-1. Site inspections are a protocol designed to identify and correct unsafe acts or conditions in the scope of work conducted by either Parsons or any subcontractor. The PrSM maintains the original audit documentation on file and forwards results of the audit to the SH&E Manager.

6.5 SH&E Enforcement

Parsons and its subcontractors enforce all applicable SH&E requirements of regional, federal, municipal, state, local and all other regulation; where applicable by OSHA 1910 and 1926 and Engineering Manual EM 381.1, 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 their Human Resources departments.

6.6 Notice of Violation of Safety and Health Regulations

The project has a formal notice of Subcontractor Violation of SH&E Regulations Program (Exhibit 6-4) to ensure that violations are issued as the result of an immediately dangerous to life and health situation, respiratory airborne hazards), and/or when the subcontractor repeatedly fails to comply with SH&E requirements. The [Notice of Subcontractors Noncompliance to SH&E Regulations](#) (Exhibit 6-5) 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.

6.7 Competent First Aid Person

At least one competent person must be available at the work site at all times to render first aid. This person must have a valid certificate in first aid training from the United States Bureau of Mines, the Red Cross/Crescent, or equivalent and verifiable regional, municipal, or local training programs. First aid supplies must be accessible for immediate use and in sufficient quantity to handle common first aid incidents.

The response time and distance to the nearest clinic, hospital, or physician identified in Section 4.11.3 has been determined to be 10 minutes. Based on the activities provided in the SOW (Section 2.1) and the list of AHA included in Section 6.3, the project has the potential to have an accident involving suffocation, severe bleeding, or other life threatening or permanently disabling injury or illness. Due to the aforementioned potential hazards and to meet this requirement, the project will require at least one individual on-site to be CPR/first aid trained. This person can be the SSO for the site provided that the field team informs the SSO where they will be working onsite and when they enter and leave the site. Copies of valid training certificates will be retained by the SSO prior to starting work. The employee(s) listed below are assigned to the project on a full-time basis and will have a valid certificate in first aid, CPR/AED, and blood-borne pathogens:

NAME	JOB TITLE	FIRST AID	CPR/AED	BLOOD-BORNE PATHOGENS
TBD	-	-	-	-
TBD	-	-	-	-
				-

6.8 Community Air Monitoring Plan

A community air monitoring program is included in the project work plan.

TABLE 6.1 SUGGESTED FREQUENCY OF PHYSIOLOGICAL MONITORING FOR FIT AND ACCLIMATED WORKERS

ADJUSTED TEMPERATURE ^b	NORMAL WORK ENSEMBLE ^c	IMPERMEABLE ENSEMBLE
90°F (32.2°C) or above	After each 45 minutes of work	After each 15 minutes of work
87.5°-90°F (30.8°-32.2°C)	After each 60 minutes of work	After each 30 minutes of work
82.5°-87.5°F (28.1°-28.1°C)	After each 90 minutes of work	After each 60 minutes of work
77.5°-82.5°F (25.3°-28.1°C)	After each 120 minutes of work	After each 90 minutes of work
72.5°-77.5°F (22.5°-25.3°C)	After each 150 minutes of work	After each 120 minutes of work

- ^a For work levels of 250 kilocalories/hour.
- ^b Calculate the adjusted air temperature (T adj) by using this equation: $T \text{ adj } ^\circ\text{F} = T ^\circ\text{F} + (13 \times \% \text{ sunshine})$. Measure air temperature (T) with a standard mercury-in-glass thermometer, with the bulb shielded from radiant heat. Estimate percent sunshine by judging what percent time the sun is not covered by clouds that are thick enough to produce a shadow. (100% sunshine = no cloud cover and a sharp, distinct shadow; 0% sunshine = no shadows.), or use Figure A-9.1 Heat Index, or Figure A-9.2 Heat Stress Calculator.
- ^c A normal work ensemble consists of cotton coveralls or other cotton clothing with long sleeves and pants.

TABLE 6.2 HEAT INDEX

RELATIVE HUMIDITY	ENVIRONMENTAL TEMPERATURE (Fahrenheit)										
	70	75	80	85	90	95	100	105	110	115	120
0%	64	69	73	78	83	87	91	95	99	103	107
10%	65	70	75	80	85	90	95	100	105	111	116
20%	66	72	77	82	87	93	99	105	112	120	130
30%	67	73	78	84	90	96	104	113	123	135	148
40%	68	74	79	86	93	101	110	123	137	151	
50%	69	75	81	88	96	107	120	135	150		
60%	70	76	82	90	100	114	132	149			
70%	70	77	85	93	106	124	144				
80%	71	78	86	97	113	136					
90%	71	79	88	102	122						
100%	72	80	91	108							

*Combined Index of Heat and Humidity...what it "feels like" to the body
Source: National Oceanic and Atmospheric Administration

How to use Heat Index:

1. Across top locate Environmental Temperature
2. Down left side locate Relative Humidity
3. Follow across and down to find Apparent Temperature
4. Determine Heat Stress Risk on chart at right

Apparent Temperature	Heat Stress Risk with Physical Activity and/or Prolonged Exposure
90-105	Heat Cramps or Heat Exhaustion Possible
105-130	Heat Cramps or Heat Exhaustion Likely, Heat Stroke Possible
>130	Heat Stroke Highly Likely

Note: Exposure to full sunshine can increase Heat Index values by up to 1 degrees

EXHIBIT 6-1 SH&E INSPECTION CHECKLIST (SHEET 1 OF 2)

Project Name:		Date/Time:	
Project Number:		Signature:	
Observation Details – Provide a description of the task observed including items such as: titles and company of observees, work activities, site/traffic conditions and weather as well as general positive comments observed during the observation.			
Check the appropriate box during your inspection or indicate N/A. Add observations in the comments section for Safe and At-Risk items. At-Risk items must have a comment to describe what was observed.			
1 - Observation - PPE	Safe	At Risk	Comments
1. Fall protection utilized per AHA requirements			
2. Hearing protection worn per AHA requirements			
3. Hand protection worn per AHA requirements			
4. Eye/Face protection worn per AHA requirements			
5. Foot protection worn per AHA requirements			
6. Respiratory protection worn per AHA requirements			
7. Head protection worn per AHA requirements			
8. Reflective vest, clothing etc. worn per AHA requirements			
9. PPE inspected and in good condition			
2 - Observation – Body Use and Positioning	Safe	At Risk	Comments
10. Uses proper Lifting/Carrying/Pushing Safety in Motion Techniques			
11. Faces machine or ladder and maintains 3 point contact when mounting and dismounting			
12. Keeping hand and body parts away from pinch points			
13. Body parts and body out of line of fire			
3 - Observation – Work Environment	Safe	At Risk	Comments
14. Work areas and pathways clear of slip and trip hazards; uneven surfaces addressed			
15. Site free from obstructions and housekeeping maintained			

EXHIBIT 6-1 SH&E INSPECTION CHECKLIST (SHEET 2 OF 2)

16. Work zone defined and/or secured					
17. Maintains adequate lighting and illumination					
18. Wastes properly stored, secured and disposed of					
19. Decontamination techniques performed per AHA and task requirements					
4 - Observation – Operating Procedures	Safe	At Risk	Comments		
20. Take 5/Job Plan/Pre Job Inspection Performed					
21. Held and documented toolbox safety meeting					
22. Reviewed, modified as needed and signed AHA					
23. Permits complete and present at job site					
24. Interfaces with other personnel effectively					
25. Identified and documented subsurface structures and utilities using Pre Drill/Subsurface Checklist					
Observation – Tools and Equipment	Safe	At Risk	Comments		
26. Inspects tools and equipment					
27. Chose the right tool for the job					
28. Uses tools only for their intended purpose					
29. Air monitoring equipment is in use and calibrated					
30. Vehicle and equipment parked to allow for first move forward/backed in when possible/chocks in use/GOAL performed/Parking Brake set					
Corrective Actions and Root Cause Analysis					
Root Cause	1.	Lack of skill or knowledge	5. Lack of or inadequate procedures		
	2.	Done it that way before and no incident occurred	6. Inadequate communication of expectations		
	3.	Supervisor allowed questionable behavior to occur	7. Inadequate tools or equipment		
	4.	Following JSA takes more time or effort			
At Risk Items (IndSafe Problem Description)	Root Cause Number (IndSafe Comments)	Solution (IndSafe Recommendation)	Responsible Party	Target Completion Date	Actual Completion Date

EXHIBIT 6-2 COMPLETED ACTIVITY HAZARDS ANALYSIS EXAMPLE PAGE 1 OF 3

Activity/Work Task: Entering Excavation		Overall Risk Assessment Code (RAC) (Use highest code)					M	
Project Location:		Risk Assessment Code (RAC) Matrix						
Contract Number:		Severity	Probability					
Date Prepared (MM/DD/YY):			Frequent	Likely	Occasional	Seldom	Unlikely	
Prepared by (Name/Title):		Catastrophic	E	E	H	H	M	
		Critical	E	H	H	M	L	
Reviewed by (Name/Title):		Marginal		M	M	L	L	
Employer / BU: Parsons		Negligible	M	L	L	L	L	
Notes: (Field Notes, Review Comments, etc.) References:		Step 1: Review each "Hazard" with identified safety "Controls" and determine RAC (See above). The RAC is developed after correctly identifying all of the hazards and fully implementing all controls.						
		"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.					RAC Chart	
		"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible					E = Extremely High Risk	
							H = High Risk	
		Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.					M = Moderate Risk	
							L = Low Risk	
Job Steps	Hazards	Controls				P	S	RAC
1. Arrival, passing near, and/or around the excavation	1.1 Absence of edge protection and warning signs.	1.1.1 Maintain a safe distance away from the edge of the excavation. 1.1.2 Ensure that the edge protection and warning will be immediately provided. 1.1.3 Ensure gangways are provided across trenches to eliminate jumping over the trench.				S	Cr	M
	1.2 Presence of tension cracks near the edge of the excavation and evidence of soil collapse.	1.2.1 Maintain a safe distance away from the edge on the excavation. 1.2.2 Ensure that no materials are placed on the excavation edge. 1.2.3 Follow warning signs onsite.				S	Cr	M

EXHIBIT 6-2 COMPLETED ACTIVITY HAZARDS ANALYSIS EXAMPLE PAGE 2 OF 3

Activity/Work Task: Entering Excavation		Overall Risk Assessment Code (RAC) (Use highest code)			M
Project Location:		Risk Assessment Code (RAC) Matrix			
Job Steps (Cont'd)	Hazards	Controls	P	S	RAC
2. Entering the excavation	2.1 Access and Egress – Unsafe Ramp.	2.1.1 Look ahead and be aware of moving plant and vehicles. 2.1.2 Keep the hands free (not in the pocket) while walking 2.1.3 Avoid slippery surfaces (oil, water mud, stones, etc.) 2.1.4 Ensure that ramp/walkway is adequately illuminated. 2.1.5 Keep scanning the floor; avoid obstacles, such as building material, cables, and tools.	S	M	L
	2.2 Access and egress – Unsafe Ladder.	2.2.1 Ensure that the top and bottom ends of the ladder are secure. 2.2.2 Make a visual inspection to ensure that the ladder is safe and sound. 2.2.3 Ensure that the ladder will extend one meter clearance on top. 2.2.4 Ensure that ladder is free from oil, grease, or mud. 2.2.5 Maintain three-point contact. 2.2.6 Check for proper angle of the ladder (4:1). 2.2.7 Do not use job made ladder unless certified. 2.2.8 Do not carry a load on a ladder. 2.2.9 Only one person at a time will use a ladder. 2.2.10 Ensure that adequately illumination is provided onsite.	S	Cr	M
	2.3 Access and egress – Unsafe Stairs.	2.3.1 Check for the proper angle of the stairs. 2.3.2 Check if the tread is anti-slip. 2.3.3 Ensure that railing is in good condition. 2.3.4 Maintain 3-point contact. 2.3.5 Ensure that stairs treads is free from oil, grease or mud. 2.3.6 Ensure that adequately illumination is provided on site. 2.3.7 Ensure all stairs of 4 or more risers have a hand rail.	S	Cr	M
	2.4 Access and egress - Unsafe man basket.	2.4.1 Ensure third party certification of the man basket and crane. 2.4.2 Perform a pre-use inspection on the man basket to ensure that it is in good condition 2.4.3 Check for the safe working load (SWL) of the man basket. 2.4.4 Check for the full body harness and adequate anchor point 2.4.5 Ensure that the crane operator and rigger are all certified.	S	Cr	M

EXHIBIT 6-2 COMPLETED ACTIVITY HAZARDS ANALYSIS EXAMPLE PAGE 3 OF 3

Activity/Work Task: Entering Excavation			Overall Risk Assessment Code (RAC) (Use highest code)			M
Project Location:			Risk Assessment Code (RAC) Matrix			
Job Steps (Cont'd)	Hazards	Controls	P	S	RAC	
3. Walking inside the excavation	3.1 Falling Materials	3.1.1 Ensure that materials are not placed on the edge. 3.1.2 Follow all mandatory signs and out of bound areas 3.1.3 Ensure that basic PPE is worn (hard hat, safety glass, safety shoes). 3.1.4 Ensure no overhanging or undermined sides.	S	M	L	
	3.2 Falls on same level	3.2.1 Use designated route and walkway. 3.2.2 Look ahead and be aware. 3.2.3 Keep hands free (not in pocket) while walking onsite. 3.2.4 Follow mandatory signs onsite.	S	M	L	
	3.3 Signs of cracks or collapse on the sides of the excavation	3.3.1 Work should be stopped and adequate support system shall be installed to prevent cave-ins.	S	Cr	M	
4. Walking on elevated areas of the excavation	4.1 Falls from Height	4.1.1 Ensure that edge protection is in place. 4.1.2 Follow mandatory warning signs onsite. 4.1.3 Do not approach near unprotected edges. 4.1.4 Use designated routes and walkways. 4.1.5 Do not stop on and/or over covered voids, where possible.	S	Cr	M	
5. Passing a noisy area in the excavation	5.1 Noise	5.1.1 Check if the contractor has conducted noise survey. 5.1.2 Follow mandatory use of PPE.	S	M	L	
6. Passing near Moving Equipment and Vehicles on or near the excavation	6.1 Moving Equipment and Vehicles	6.1.1 Wear high-visibility vest. 6.1.2 Use designated walkways. 6.1.3 Do not pass behind moving equipment and vehicles.	S	Cr	M	
7. Passing live utilities	7.1 Live Utilities	7.1.1 Coordinate with the contractor regarding presence of any live utilities. If so, ensure that control measures are provided. 7.1.2 Follow mandatory signs and out of bound areas.	S	Cr	M	
8. Passing flooded areas	8.1 Flooding and presence of water in the excavation/trench	8.1.1 Check for the weather condition before entering the excavation. Exit if heavy rain starts. 8.1.2 Ensure water intrusion is controlled by dewatering	S	M	L	

EXHIBIT 6-3 ACTIVITY HAZARDS ANALYSIS TEMPLATE PAGE 1 OF 2

Activity/Work Task:		Overall Risk Assessment Code (RAC) (Use highest code)							
Project Location:		Risk Assessment Code (RAC) Matrix							
Contract Number:		Severity	Probability						
Date Prepared (MM/DD/YY):			Frequent	Likely	Occasional	Seldom	Unlikely		
Prepared by (Name/Title):		Catastrophic	E	E	H	H	M		
		Critical	E	H	H	M	L		
Reviewed by (Name/Title):		Marginal		M	M	L	L		
Employer / BU: Parsons		Negligible	M	L	L	L	L		
Notes: (Field Notes, Review Comments, etc.) References:		Step 1: Review each "Hazard" with identified safety "Controls" and determine RAC (See above). The RAC is developed after correctly identifying all of the hazards and fully implementing all controls.							
		"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.					RAC Chart		
		"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible					E = Extremely High Risk		
							H = High Risk		
		Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.					M = Moderate Risk		
							L = Low Risk		
Job Steps	Hazards	Controls					P	S	R A C

EXHIBIT 6-3 ACTIVITY HAZARDS ANALYSIS TEMPLATE PAGE 2 OF 2

Activity/Work Task: Entering Excavation			Overall Risk Assessment Code (RAC) (Use highest code)		
Project Location:			Risk Assessment Code (RAC) Matrix		
Job Steps (Cont'd)	Hazards	Controls	P	S	R A C
Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements			

EXHIBIT 6-4 NOTICE OF SUBCONTRACTOR VIOLATION OF SH&E REGULATIONS

DATE:					
CONTRACTOR NAME:					
ADDRESS:					
ATTENTION:					
<p>This letter officially notifies you that you have been found to be in violation of the following Safety, Health, and Environmental Regulations:</p> <p>_____</p> <p>on (date) _____, by _____</p>					
Confined Space Entry	<input type="checkbox"/>	Lockout/Tagout	<input type="checkbox"/>	Hot Work	<input type="checkbox"/> Personal protective equipment
Knowledge of environmental requirements	<input type="checkbox"/>	Awareness of warning alarms	<input type="checkbox"/>	Evacuation routes	<input type="checkbox"/> Backup alarms
Assembly locations	<input type="checkbox"/>	Fall Protection	<input type="checkbox"/>	Scaffolding	<input type="checkbox"/> Environmental/hazardous material storage
Trenching	<input type="checkbox"/>	Safe Work Practices	<input type="checkbox"/>	Security Practices	<input type="checkbox"/> Spill to the environment
Waste storage or disposal	<input type="checkbox"/>	Wastewater discharge	<input type="checkbox"/>	Buried items	<input type="checkbox"/> Violation of environmental regulation
<p>Other:</p> <p>_____</p> <p>_____</p>					
Environmental:					
This/These violations occurred at the following locations:					

At the following times _____ and dates:					
The name of the employee(s) was (were):					

Pweb link: [Notice of Subcontractor Violation](#)

EXHIBIT 6-5 NOTICE OF NONCOMPLIANCE WITH SH&E REGULATIONS

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

<input type="checkbox"/>	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.
<input type="checkbox"/>	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.
<input type="checkbox"/>	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.
<input type="checkbox"/>	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.
<input type="checkbox"/>	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.
<p style="text-align: center;">Sincerely,</p> <p style="text-align: center;">Parsons Representative</p> <p>cc: Issuing Construction Manager Representative Job File BU Safety Director PM</p>		

Pweb link: [Notice of Subcontractor Noncompliance](#)

7.0 SAFETY TRAINING

7.1 Project Safety Orientation

The Parsons PM, Project Engineer, or SSO conducts the site-specific orientation for all new Parsons' staff and subcontractor management personnel.

The Orientation takes approximately two hours to complete and includes applicable owner, Parsons, and regulatory reference material, including:

- Owner – SH&E requirements
 - Applicable regional, municipal, and local regulations and if applicable and in the United States or its territories OSHA 1910 General Industry and 1926 Construction Regulations and
- 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 PM, Project Engineer, SSO, 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 [Subcontractor Employee Training Acknowledgement Form](#) (Exhibit 7-1) and Subcontractor Competent Persons Form (Exhibit 7-2). The project Talent Manager maintains orientation documents and acknowledgement forms.

7.2 Zero Incident Techniques / Start Training

Consistent with Parsons corporate initiatives in safety, all managers and supervisors, including subcontractor personnel, must complete START training. Records of training completion are maintained by the SSO and forwarded to the Market SH&E Director.

7.3 Daily Toolbox SH&E Meetings

Parsons and its subcontractors conduct toolbox safety meetings at the beginning of day when field work is occurring. These meetings include topics relevant to upcoming work, review of applicable AHAs, remind employees of SH&E work procedures established for the tasks, and may include reviews of recent incidents. The toolbox training content and attendance is documented and retained (Exhibit 7.3). Supervisors should always ask whether any workers have questions before they are released for work

7.4 Activity Hazard Analysis Training

When the activity hazards analysis is complete, the Parsons 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.

7.5 Regulatory Training Programs

Regional, municipal, local, and OSHA regulations require specific training in certain circumstances. Based on the SOW and meetings with regulatory officials, the following training topics are provided on the project:

- Hazard Communication – as per 29 CFR 1910.1200
- 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.
- Emergency response – only applicable to workers engaged in emergency response as per 29 CFR 1910.120(q).
- Fire Protection

If needed, the following training topics may be provided on the project as applicable:

- General – all workers engaged in activities which are potentially exposed to hazardous substances and health hazards must be trained to meet 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).
- Asbestos – licensed asbestos firm and employees trained and certified in accordance with NYCRR Code Rule 56
- 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.
- Excavation/trenching – as per 29 CFR 1926.651.
- Respiratory protection
- Lockout/Tagout (LOTO)
- Power operated hand tools

The PM determines the necessary training and coordinates the training with the Parsons' SH&E experts certified in the topics they instruct.

7.6 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 budget includes funding for the following training:

Description	Attendees	Schedule
General rules and safety requirements	All workers assigned to the site	Half-hour training session, provided to new employee on the first day of work at the site.
Honeywell Contractor Safety Handbook (Attachment E)	All workers assigned to the site	Handbook should be provided for review during site orientation training.
Additional To Be Determined		

EXHIBIT 7-1 INITIAL SUBCONTRACTOR EMPLOYEE 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 SUBCONTRACTOR COMPETENT PERSON FORM

Definition

A competent person is a person having the ability to recognize existing and predictable hazards and having the authority to correct them.

Responsibility

The designated subcontractor competent person is responsible for recognizing and correcting safety risks/hazards. This person has the authority to stop work in a potential safety concern on the jobsite. This Subcontractor Manager and competent person are considered the contacts for Parsons projects.

This form must be completed by each subcontractor's manager and the subcontractor's designated competent persons. *Where a subcontractor is responsible for multiple crafts, it will be necessary to maintain additional designated competent persons and forms.* Each subcontractor on a Parsons project must submit this completed form to the Parsons Project Manager before beginning work on the project and must update it any time the designated representative(s) changes.

Acknowledgment

I, _____ representing, _____

Subcontractor Manager

Subcontractor Company Name

have assigned _____ to be the competent person in the areas indicated and I _____ acknowledge that this individual has been thoroughly trained and is experienced in hazard recognition and has the authority to stop work and correct hazards in the event of a potential hazardous or imminent danger situation.

Subcontractor Manager (Signature)

Date

I, _____ acknowledge that I have been thoroughly trained and have the experience

Competent Person (Signature)

to perform the duties as the _____ competent person in the areas marked below and **Subcontractor Company Name**

I understand that I have the responsibility and authority to correct hazards and to stop work in the event of a potential hazardous or imminent danger situation.

_____ Asbestos	_____ Hearing Protection	_____ Welding/Cutting
_____ Respiratory Protection	_____ Scaffolding	_____ Rigging
_____ Cranes/Derricks	_____ Electrical	_____ Lead
_____ Fall Protection	_____ Ladders	_____ Excavations/Trenches
_____ Demolition	_____ Tunnels/Shafts	_____ First Aid/CPR
_____ Underground Const.	_____ Material/Personnel Hoists	_____ Concrete/Forms/Shoring
_____ Marine Work/Diving	_____ Bolting/Riveting/Fitting	_____ Mechanical Demolition

EXHIBIT 7-3 SAFETY MEETING SIGN-IN SHEET

Safety Meeting Presenter: _____

Date: _____

Current Weather Conditions:

Temperature (°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: _____

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8.0 RECORD KEEPING AND POSTING

Parsons and its subcontractors must comply with the recordkeeping requirements of the regional, municipal, local, and/or OSHA regulations, Owner, Parsons Corporation, and this PSHEP, including:

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

Parsons Talent Management and the SH&E Manager are the official recordkeepers for files relating to Parsons' employees. Each subcontractor maintains its own files.

The project displays regional, municipal, local, and/or OSHA regulations posters in conspicuous places, as required by regional, municipal and local regulations, including one poster on the main bulletin board located outside in the H&S/State bulletin board outside of the craft labor trailer.

The OSHA 300 log for the project or the Market shall be posted from February 1 – April 30 of each calendar year.

9.0 SAFETY AND HEALTH REQUIREMENTS

Exhibit 9-1 represents regional, municipal, local, and/or OSHA regulations, owner, and Parsons corporate regulations and requirements applicable to the project. Based on the most recent risk assessments, the Parsons PM and SSO update the listed topics periodically. Training and other requirements are updated in this PSHEP as required by changes to Exhibit 9-1, [Competent Person and Activity Hazards Analysis Requirements](#).

The SH&E Legal Compliance Register is included as Attachment H. This document identifies the SH&E legislation, standards, codes, and regulations relevant to Parson's activities during this project.

Parsons and its subcontractors are individually responsible for training their respective employees and for complying with all project requirements. Failure to comply could lead to disciplinary actions against Parsons' employees and subcontractors or their employees. Further guidance is available in the Parsons Corporate Safety and Health Manual; Pweb link is as follows: [Corporate Safety and Health Manual](#).

EXHIBIT 9-1 COMPETENT PERSON AND ACTIVITY HAZARDS ANALYSIS REQUIREMENTS

Safety and Health Requirement	OSHA Regulation	Competent Qualified Person-Supv	Training Required	AHA Required
1. General Safety & Health	1926.20	Yes	Yes	Yes
2. Safety Training	1926.21	Yes	Yes	Yes
3. First Aid and Medical	1926.23, 50	Yes	Yes	Yes
4. Fire Protection and Prevention	1926.24, 150-155, 352	Yes	Yes	Yes
5. Housekeeping	1926.25	N/A	N/A	N/A
6. Sanitation	1926.27, 51	N/A	N/A	N/A
7. Personal Protective Equipment	1926.28, 95-98, 100-107	Yes	Yes	Yes
8. Emergency Employee Action Plans	1926.35	Recommended	Yes	Yes
9. Noise Exposure	1910.95; 1926.52	Yes	Yes	Yes
10. Gases, Vapors, Dusts and Mists	1926.1926.55	Yes	Yes	Yes
11. Hazard Communication	1926.59	Yes	Yes	Yes
12. Hazardous Waste Operations and Emergency Response	1910.120; 1926.65	Yes Supv – 8 hr	Yes	Yes
13. Accident prevention signs and tags	1926.200	N/A	N/A	N/A
14. Signaling	1926.201	Recommended	N/A	Yes
15. Barricades	1926.202	N/A	N/A	N/A
16. Material Storage	1926.250	N/A	Yes	Yes
17. Waste Disposal	1926.252	Yes	Yes	Yes
18. Tools	1926.300-307	N/A	N/A	Yes
19. Motor Vehicles, Mechanized Equipment	1926.600-603	Yes	Yes	Yes
20. Site Clearing	1926.604	N/A	Yes	Yes
21. Excavations	1926.650-652	Yes	Yes	Yes
22. Excavation Permit	N/A	Yes	Yes	Yes
23. Internal Traffic Control	N/A	N/A	Yes	Yes
24. Traffic Movement Restriction Times	N/A	N/A	Yes	Yes
25. Asbestos	1910.1001 and NYCRR Code Rule 56	Yes	Yes	Yes

ATTACHMENT A PARSONS REQUIREMENTS

ATTACHMENT A

PARSONS REQUIREMENTS

On-Line Safety Reporting System

Policy Requirements

- Initial incident reports for all incidents, including near misses, shall be reported within 2 hours.
- Detail incident reports are required within 24 hours.
- Reporting is done via on-line (PWeb) incident report form.
- Injuries with Days Away from Work - immediate supervisor and PM must teleconference with GBU President within 4 hours.
- Projects enter hours via on-line form by FIRST Friday of new period.

Reporting Incidents

Corporate policy requires that all employees report safety incidents to their supervisor immediately. Supervisors must report all incidents to the appropriate Project Manager (Department Manager if the incident is not related to a project), who must officially report the incident to the GBU within four hours. This official reporting is done via the PWeb, unless PWeb is unavailable, in which case the incident can be reported by email, fax or telephone.

“Incidents” include work related injuries, work related illness, accidents with property damage only and near misses. “Near misses” are any unplanned event that had the potential to (but did not) result in injury or property damage.

Incident reports should reflect the best available information at the time. Where exact information is not known (recordability, days away from work, etc.) the PM’s best judgment should be used when completing the initial incident report. This information can be subsequently revised when the detail incident report is submitted.

When in doubt, submit an initial report or contact the GBU Safety Manager.

On-line Reporting System

The on-line reporting system can be found on the PARCOMM Safety Page on PWeb. To locate the system, follow these steps:

1. From the Corporate PWeb Homepage, select PARCOMM from the Org Units menu
2. Locate and select “Safety” from the header
3. Select the “Online Safety Reporting” link

To create and submit a new incident report, select the orange “Add” button from the main page of the reporting system. To update an existing incident report or complete the Detail Incident page, locate and select the appropriate incident from the list.

Creating or Updating Incidents

The Initial Incident page of the report must be completed within four hours of the incident occurring. This page includes basic information needed for the first notification to our insurance carriers. If possible, all of the fields should be completed in the initial report. A list is provided at the end of this document describing all fields contained on the initial incident page.

Incident Detail Reports

Within 24 hours of the incident occurring, the Incident Detail page of the on-line report must be completed. This page includes detailed information about the injured party, the nature and extent of injuries, medical treatment provided, corrective actions taken, and witness statements. In the event of property damage, this page also includes descriptive information on the property owner. Finally, the page includes a section to include electronic attachments. These might include photographs, signed witness statements, etc.

Monthly Reporting of Hours

Hours must be entered into the on-line reporting system no later than the first Friday of the new period. If an accurate accounting of hours is not available, estimated hours are submitted into the system. The estimated hours can be revised later in the month, or the following month, when accurate data is available.

From the “Hours” page, select “PAR” from the GBU drop down menu and the period (month and year) that is being reported. The system only allows hours to be entered for the period selected. MTD and PTD figures are calculated totals based on the sum of all monthly entries. To enter or correct a prior period entry, simply select that month from the drop-down box and correct the figures for that month. If the name of your “Project” is not alphabetically listed on any of the multiple pages, then select “Field Administration/Other – Industrial”.

<p><i>Be sure to select the correct month and year when entering hours.</i></p>

Hours must be entered for each (as applicable) of six different labor categories. The categories are as follows:

- Contractor (Field/Craft)
- Contractor (Office/Admin)
- JV Partner (Field/Craft)
- JV Partner (Office/Admin)
- Parsons Employee (Field/Craft)
- Parsons Employee (Office/Admin)

Monthly Statistics Summary Reports

The on-line reporting system automatically calculates incident rates based on incidents and hours entered into the system. To view the statistics, select the “Reports” page from the on-line system. Select “Parsons Safety Statistics Summary”, the appropriate GBU, and the appropriate period. (NOTE: The system does not yet provide reports at the Division and Sector level. That enhancement is pending.) Use the checkboxes to select the labor categories desired.

<p>Contact Brad Barber or Greg Beck for Assistance</p>

Initial Incident Report Fields

1. GBU – Select the GBU from the drop down box. Incidents are reported primarily by project, and the GBU should reflect the unit responsible for the project. This may be different from the GBU that employees the person injured.
2. Field Project Name, Office Location or Other – if the injury occurred in the field, then select the appropriate name from the alphabetical listing in the “Field Project” drop down box. If an appropriate name does not exist, select “Field Administration/Other-Industrial”. If the incident occurred in a Parsons office, select the office name from the “Office Location” drop down box. ONLY select Field Project or Office Location, not both (or Other). If the appropriate Office Location is not provided, manually enter it into the “Other” box.
3. Job and WBS Numbers – These fields should reflect the charge number responsible for the incident. In general, that will be the number that the employee was charging at the time of the incident. Projects are responsible for visitors, regardless of what charge number they use while visiting the job. For example, if the Division Manager is injured while visiting Project X, the project number is entered, not the division overhead account.
4. Near Miss – Check this box if the report is for a near miss only (no injury or property damage occurred).
5. Emergency Response Notified – Check this box if fire, police or ambulance was called as a result of the incident.
6. Three or More Employees Hospitalized – Check this box if three or more employees were injured as the result of a single incident. In this case, the GBU or Corporate Safety Manager must also be immediately notified by telephone.
7. Extent of Injury – Select the appropriate radio button. First aid cases are as defined by OSHA 1904 criteria. All other injuries are considered recordable.
8. Restricted Duty (# of days) – If the injured person was limited (by a physician) to less than normal work duration or duties, enter the number of days. Estimate the days if unknown, and correct the number later. NOTE: this is the number of CALENDAR days (not scheduled work days), and it does NOT include the day of the injury.
9. Days Away From Work (# of days) – If the injured person was ordered by a physician not to return to work, enter the number of days missed. Estimate the days if unknown, and correct the number later. NOTE: this is the number of CALENDAR days (not scheduled work days), and it does NOT include the day of the injury. Injuries with Days Away From Work require a phone call to the GBU President within 4 hours.
10. Fatality (Date of Death) – In the event of a work related fatality, enter the date of death here. NOTE: Fatalities require immediate phone notification of the Division Manager, GBU President, GBU Safety Manager, and Corporate Safety Manager.
11. Property Damage – Check the appropriate boxes if applicable.
12. Place – Describe the exact location that incident occurred. For example, “in the north stairwell of building 21, between the second and third floor.”
13. Date – This field reflects the date the incident occurred, not necessarily the date it was reported. If the exact date is not known, an estimate should be used.
14. Time – This field reflects the time of day that the incident occurred. If the exact time is not known, an estimate should be used.
15. Incident Description – Provide a detailed description of the incident. This is a memo field and text will scroll down the window as it is entered. Use as much space as needed to accurately describe the incident and the resulting injuries.
16. Reported by – This field defaults to the employee login ID that was used to access PWeb. However, the field can be over-written if needed.

17. Name – First and last name of the injured party.
18. Status – Select the most appropriate category from the drop box (Employee - Field, Subcontractor - Field, Partner - Field, Employee - Office, Subcontractor - Office, Partner - Office or 3rd Party).
19. Trade/Function – Select the most appropriate category from the drop box.

Sensitive/Proprietary

To: Report Date:

Cc: Incident Date:

From: Phone:

Subject: Incident Analysis Report for *(Insert Incident Type e.g. life changing event during bridge inspection)*

I. Report Summary

Provide a narrative of the incident covering how the event occurred, details of the location and actual/potential consequences. Include objective and fact-based information only. Include pictures, as appropriate.

II. Investigation Team Members

NAME	TITLE	Email

III. Methodology

Describe the methodology of the investigation. e.g. The investigating team collected evidence in the form of interviews, documented statements, photographs and relevant SH&E records. The investigating team also visited the incident scene to determine any factors that may have contributed to the incident. Summarize the Root Cause Analysis process (e.g. 5 Whys, Taproot, etc.) used to analyze the incident. Please include the RCA in this report for sharing and retention.

IV. Project Background

Provide the background details of the project to include size, scope of work, and Parsons contractual SH&E obligations, etc.

V. Personnel Interviewed

Insert bullet list of employees that were interviewed during the analysis, their companies, and title.

VI. Timeline

Add the date and the events that occurred, including those involved, where it occurred and what evidence supports this. (e.g. interviewees, recordings, witness statements, etc).

DATE	EVENTS

VII. Immediate Cause

- Describe the immediate cause of the incident.

VIII. Root Causes and Contributing Factors

- *Insert bullet list of contributing factors. Contributing factors are the personal or job-related factors that contributed to the incident occurring but was not the actual cause.*
- *Insert bullet list of root causes, connected to why each of the contributing factors occurred. There are usually two or more root causes associated with each contributing factor identified. Root causes are the management system deficiencies that allowed the contributing factors to occur.*

IX. Corrective /Preventative Actions (CAPAs)

Add details of the corrective actions (CA) to prevent reoccurrence. Identify at least one elimination, substitution or engineering control as shown in Figure 1 for each root cause. Corrective Actions must be assigned in IndustrySafe and tracked to close out.

Root Cause(s)	Corrective Actions	Responsible Person	Due Date

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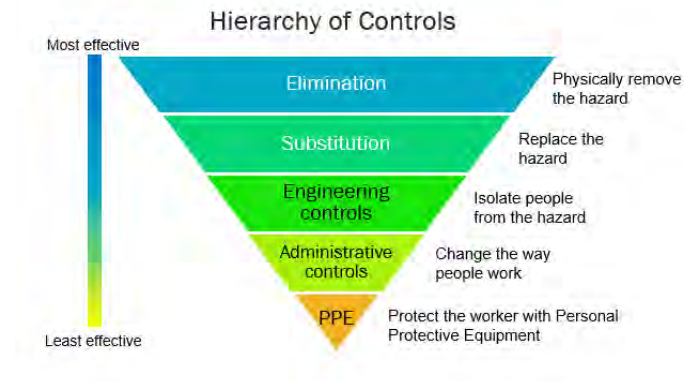


Figure 1

X. Planned Follow-Up

Summarize plan to monitor corrective action(s) completion and validate effectiveness

XI. Exhibits

List the exhibits in the order they are mentioned in the report.

Exhibit 01 - Enter Exhibit

Exhibit 02 - Enter Exhibit

Exhibit 03 - Enter Exhibit

EMPLOYER

1. Name: _____
2. Mail Address: _____
(No. and Street) (City or Town) (State and Zip)
3. Location : _____
(if different from mail address)

NEAR MISS DESCRIPTION

4. Location of near miss: _____
(No. and Street) (City or Town) (State and Zip)
5. Project: _____
6. Was place of near miss on employer's premises? Yes () No ()
7. Time of near miss: _____
8. Date of near miss: _____
9. How did the near miss occur? _____
(Describe fully the events that resulted in the near miss.)

Tell what happened and how. Name objects and substances involved. Give details on all factors that led to

near miss. Use separate sheet for additional space).

10. What was employee doing when near miss occurred? _____
(be specific-was employee using tools or equipment
- _____
or handling material?)
- _____

WITNESS TO MISS

_____	_____	_____
(Name)	(Affiliation)	(Phone No.)
_____	_____	_____
(Name)	(Affiliation)	(Phone No.)

RECOMMENDATIONS TO PREVENT NEAR MISS FROM RECURRING

Field/Project Monthly Report Form

Instructions: Enter the total number of labor hours spent in the field by all Parsons employees and subcontractors during the reporting period. Cost Type (CT) "04" used for WebTime labor entries should represent these hours for Parsons employees. Labor hours spent in the office are classified as CT "01" in WebTime. Incidents/near-miss incidents, air monitoring completed and the type of PPE worn by personnel (i.e. Parsons employees and contractors) must also be reported. Submit by the 3rd working day of the following month (an estimation of the monthly field hours based on number of people working on the project each day is acceptable).

Definitions and Reporting Criteria

Field Hours - time spent by the employee working at a job site or field project, even if performing office/administrative work (i.e. in a modular trailer). Working in another Parsons office or at a client's corporate/main office is not considered field hours for the purposes of this reporting.

Incident - any unplanned or unexpected event, including near-misses, first aid cases, personal injuries requiring medical treatment, vehicle or equipment damage or an environmental release.

Near-miss Incident (NI) - an unplanned or unexpected event that has the potential to result in a personal injury, vehicle or equipment damage, or environmental release, but does not occur (i.e. almost happened).

PPE - Personal Protective Equipment above Level D (work clothes) or Modified Level D (Tyvek or fire retardant coveralls). This includes Level C (chemical resistant suit and/or air-purifying respirator), Level B (chemical resistant suit and/or supplied air) or Level A (full encapsulation suit with SCBA).

Subcontractor - contractors hired by Parsons or a Parsons contractor, to perform activities in the field. Contractor company names should be listed and tracked separately in the Table below, followed by the hiring company in parentheses (i.e. Parsons or subcontractor).

Project Name:		Client:			
Project Location:		Client Contact:			
Parsons Contact:		Project #:		Month:	

Parsons and/or Contractor	Hours	Type of Activities	Incident or NI	
Parsons			Yes	No
			Yes	No
			Yes	No
			Yes	No

Air Monitoring

Was there any air monitoring that took place during the month? No Yes - If "Yes", indicate below the potential hazards/chemicals monitored (i.e. O₂, LEL, dust, VOCs), the monitoring equipment used (i.e. PID, FID, Draeger tubes, 4-gas, DataRAM, cassettes), whether the air monitoring results exceeded an Action Level (AL) or Permissible Exposure Limit (PEL), the level of PPE worn above Level D (C, B or A) and the number of days working in the specific PPE.

Chemical Monitored	Equipment Used	Exceed AL	Exceed PEL	PPE	Days in PPE
		Yes	No	- Yes	
		Yes	No	- Yes	
		Yes	No	- Yes	
		Yes	No	- Yes	

NOTE: If an AL/PEL is exceeded or PPE above Level D is worn, a Supplemental Information Form (available in the Industrial Division Safety Folder on ParShare) must be completed. All incidents must be reported on the PWeb (PARCOMM Online Safety Reporting System).

1. Purpose

This procedure describes the process, tools, roles, and responsibilities for planning, permitting, preparing and performing excavations.

2. Scope

- 2.1. This procedure applies to Parsons Corporation and all Parsons' businesses and subsidiaries worldwide, including joint ventures and similar partnerships managed by Parsons.
- 2.2. This procedure applies to all Parsons personnel and subcontractors working on Parsons projects at any location worldwide, regardless of country of operation and/or GBU.

3. References

- 3.1. 29 CFR 1926, Subpart P
- 3.2. 29 CFR 1910.146, 1910.120(a), 1910.23(e)(7)(i)
- 3.3. EM 385-1-1 Safety—Safety and Health Requirements, Section 25, Excavations; Section 32.A.06, Airfield Operations: General
- 3.4. Utility Location and Coordination Committee, One-Call System International Directory, 2002, and Excavator's Damage Prevention Guide
- 3.5. *Parsons ESHARP Guidebooks, Volumes I & II*
- 3.6. Motor Vehicles and Equipment Procedure
- 3.7. Support Systems Specifications Standard
- 3.8. Project Document/Records Management Procedures

4. Procedures

4.1. Excavation Planning

- 4.1.1. During the preconstruction phase, the Project Safety, Health, and Environment Manager (PSHEM) conducts a search for drawings of all areas requiring excavation for identification of underground installations, development of Activity hazards analysis (AHA), and.
- 4.1.2. The project manager designates a competent person to oversee excavations, complete permits or notification forms, and perform necessary inspections of the excavation.
- 4.1.3. Excavation planning must consist of developing, reviewing, and/or addressing the following:
 - All pertinent drawings
 - Excavation permits for each excavation
 - Identification of Competent Person(s)
 - Design requirements for protective systems
 - Identification of underground installations
 - Warning system for mobile equipment

The most current and effective version of this document is available and maintained on Parsons Corporate Policy Center. The Company may revise, rescind or add to any policies, benefits or business practices from time to time in its sole and absolute discretion with or without prior notice.

- Activity hazards analysis (AHA)

4.1.4. The Project Safety, Health, and Environmental Manager (PSHEM) audits the activities of Parsons' employees and subcontractors to ensure compliance with the plan and applicable safety and health procedures and requirements.

4.2. Excavation Permits

4.2.1. The Competent Person identifies and marks the boundaries of the excavation at least two working days, or more (where applicable) so the underground installations can be properly located by the utility operators. See section 4.5 Underground Installations for further details.

4.2.2. Before excavations begin, the PSHEM shall ensure the proper permits (Parsons', see Exhibit 8.1, and applicable state and local permits as applicable) and geophysical investigation (scanning) reports must be obtained and maintained at the excavation site.

4.2.3. Before digging and excavating, the Competent Person classifies the soil using a minimum of one visual analysis and one manual analysis testing to classify soil and rock deposits.

4.2.4. The Competent Person must submit a completed excavation permit and state permit, if required, to the PSHEM and PM.

4.2.5. Designs for protective systems by the Project Engineer must be submitted to the PM as an attachment to the excavation permit.

4.2.6. Before starting the excavation, the PM or designee conducts a pre-job walkthrough.

4.2.7. The PM or designee verifies the information, signs the excavation permit, returns a copy to the Supervisor, and informs the PSHEM. When the Supervisor receives the signed permit, work may begin.

4.2.8. The PSHEM, PM, and Project Engineer (if applicable) must sign the permit.

4.3. Surface Encumbrances

4.3.1. Remove all surface encumbrances that might create a hazard to employees or support them as necessary, to safeguard employees.

4.3.2. Do not store excavated spoils or other material closer than 2 feet from the edge of any excavation; if possible, do not store such material closer than 4 feet from the edge of any excavation.

4.3.3. Ensure that remaining surface items are visible to the equipment operator and are tagged with high-visibility tape or a reflectorized flag mounted above the object(s). Inform equipment operators of the location of these surface items before operating their equipment and provide a flag person when necessary.

4.4. Barricade Tape Identification

4.4.1. Barrier tape is required so that any employee working on the site, regardless of employer, can recognize and avoid the open excavation hazard. The Designated Person ensures that open excavations are identified with barrier tape as long as the hazard is present.

4.4.2. Barriers must be erected far enough back from the hazard to allow for adequate warning and protection.

- 4.4.3. Barriers must be constructed to withstand adverse weather conditions and construction traffic.
- 4.4.4. If the hazard is of a magnitude that requires additional protection, the superintendent must provide additional protection, as well as the barrier tape.

4.5. Underground Installations

- 4.5.1. To control hazards associated with coming in contact with such installations, the Competent Person identifies and marks underground installations.
- 4.5.2. The Competent Person must be present when excavating around a known marked utility.

4.5.3. Underground Installations Identification

- 4.5.3.1. Before an excavation is opened, the Competent Person must locate utility installations such as sewer, telephone, gas, electric, water lines, or any other underground installations that may be expected to be encountered during the excavation work.
- 4.5.3.2. The precise location of underground facilities that have been marked will be maintained by regular update and refreshing. Never make assumptions regarding the locations of utilities.
- 4.5.3.3. As a guideline for the uniform identification of underground installations, Parsons utilizes the Common Ground Alliance's call 811, the local utility companies, and/or owners prior to digging. The following website explains the Call 811 program and how it works:

<http://www.call811.com/default.aspx>

- 4.5.3.4. Before the start of actual excavation, management contacts the 811 number or utility companies or owners within the established or customary local response times, advises them of the proposed work, and requests they locate the underground utility installations.
- 4.5.3.5. Before approving an excavation permit, the PSHEM has the following responsibilities:
- Ensure that underground installations have been identified and/or the subsurface thoroughly inspected for underground obstructions has been completed prior to the start of work.
 - Ensure that ground markings identifying underground obstructions are present.
 - Evaluate the work area for potential hazards that have not been addressed by the scanning ground markings.
- 4.5.3.6. Use the preferred method of locating a marked utility and continue until the entire utility is located within the limits of the excavation. Do not take chances.
- 4.5.3.7. When the excavation approaches the estimated location of an identified underground installation, determine the exact location by a safer means, e.g. hand excavation or potholing.

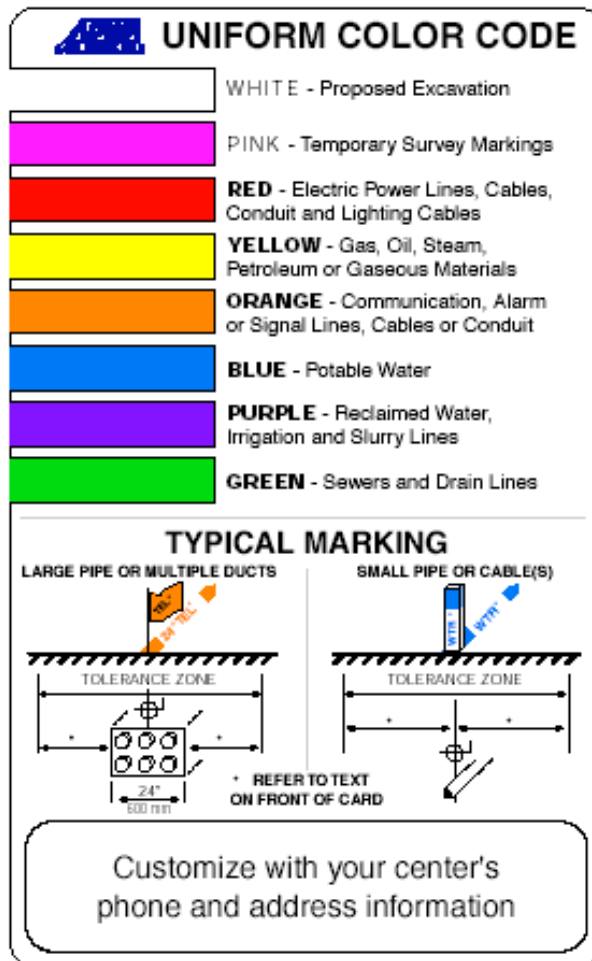
4.5.4. Marking Utilities

- 4.5.4.1. Use color-coded surface marks (paints or similar coatings) to indicate the type, location, owner, and route of buried installations.
- 4.5.4.2. Parsons has adopted the APWA Utility Location and Coordination Council (ULCC) Uniform Color Code (see exhibit 8.2), which can be found on the CPC or online at:

The most current and effective version of this document is available and maintained on Parsons Corporate Policy Center. The Company may revise, rescind or add to any policies, benefits or business practices from time to time in its sole and absolute discretion with or without prior notice.

http://www.apwa.net/Documents/About/TechSvcs/One-Call/Recommended_Marking_Guidelines.pdf

- 4.5.4.3. As illustrated on the Uniform Color Code Card, the colors and corresponding installation type are as follows:



- 4.5.4.4. To increase visibility, use color-coded vertical markers (temporary stakes or flags) to supplement surface marks.
- 4.5.4.5. All marks and markers must indicate the name, initials, or logo of the company that owns or operates the installation and the width of the installation if it is greater than 2 inches.
- 4.5.4.6. If the surface over the buried installation is to be removed, use supplemental offset marking. Offset markings must be on a uniform alignment and must clearly indicate that the actual installation is a specific distance away.
- 4.5.4.7. Before re-energizing, mark the energized direct-buried cable uncovered by excavation with red tape or red paint. Resume excavation using caution and a spotter.

4.6. Probing and Exploratory Trenching

- 4.6.1. In virgin soil, a probing and exploratory trenching procedure normally is not necessary. However, many Parsons projects involve chemical and refining construction in existing facilities. Extreme caution must be taken to ensure the safety of employees and the client's property. Underground utilities and other obstructions present a very real danger and every effort must be taken to determine that excavation operations are performed safely.
- 4.6.2. If subcontractors are used, the subcontractor supervisor and the PSHEM review in detail any pertinent drawings and as-built drawings that are available to determine the location of the piping or other underground obstacles.
- 4.6.3. If any underground obstructions are encountered, the PSHEM must immediately notify the designated client representative, who in turn, notifies the proper personnel to assist in identification of the obstruction and its possible removal or re-routing.
- 4.6.4. The Competent Person may elect to use either a dry probing or a water probing system. When using water jetting, the PSHEM must require all employees to wear safety glasses and face shields. The person who actually performs the probe must wear both a face shield and goggles.
- 4.6.5. Before and during excavations, the following requirements must also be met:
- 4.6.5.1. The area to be excavated must be swept with a metal detector (if required by client or regulatory requirement).
 - 4.6.5.2. When excavating with mechanical equipment or other means, probing is required every 4-inches on center over the total area to be excavated (if required by client or regulatory requirement).
 - 4.6.5.3. Use exploratory trenching at the perimeter of an area to be excavated by probing and trenching on 4-inch centers (if required by client or regulatory requirement).
 - 4.6.5.4. Determine the depth of the trench according to the depth needed to accommodate the footings, supports, pipe, etc., to be placed inside the perimeter area.
 - 4.6.5.5. While the excavation is open, protect, support, or remove underground installations as necessary to safeguard employees. However, do not support from the shoring without approval from a qualified engineer.
 - 4.6.5.6. De-energize underground electrical cables if the exact locations are not known or the service is direct-buried cable not protected by a rigid-steel raceway, concrete encasement, or polyvinyl chloride (PVC) pipe. Refer to Parsons' Electrical Policies and Standards for procedures for handling red concrete/live circuits.
 - 4.6.5.7. If pipe or other obstacles are encountered, or when excavations occur within 2 feet, (vertically or horizontally) of a direct-buried electrical or communication cable, perform exploratory hand trenching to authenticate the actual location of the cable
 - 4.6.5.8. Use only a nonconductive hand shovel to remove soil or an air lance to loosen soil within 18 inches of energized electrical utilities that are not protected by a rigid steel raceway or concrete encasement.

4.6.5.9. The depth of probing must always exceed the depth of excavating by at least 1 foot. The selected depth of probing must be consistent; that is, if one hole is probed at 3 feet, all holes must be probed at 3 feet.

4.6.5.10. Air-operated clay spades may be used during hand excavations, provided extreme care is taken and required PPE is used. During hand excavations, if a person's head is below the top of the excavation or if the trench is deeper than 4 feet, shoring is required.

4.7. Access and Egress

4.7.1. If employees are working in trenches 4 feet deep or more, each trench must have ladders, stairways, ramps, or other means to provide safe exits. Lateral travel distance to the nearest ladder, stairway, ramp, or other safe means must be no more than 25 feet.

4.7.2. If employees or equipment must cross over an excavation greater than 4 feet deep, provide a walkway or bridge with standard guardrails.

4.7.3. A Competent Person must design and conduct daily inspections on structural ramps that are used solely by employees as a means of access or egress from excavations.

4.7.4. Structural ramps used for access or egress of equipment must be designed by a Competent Person qualified in structural design, and will be constructed in accordance with the design:

4.7.4.1. Ramps and runways constructed of two or more structural members must have the structural members connected together to prevent displacement.

4.7.4.2. Structural members used for ramps and runways must be of uniform thickness.

4.7.4.3. Cleats or other appropriate means used to connect runway structural members must be attached to the bottom of the runway or must be attached in a manner to prevent tripping.

4.7.4.4. Structural ramps used in lieu of steps must be equipped with cleats or other surface treatments on the top surface to prevent slipping.

4.8. Exposure to Vehicular Traffic

4.8.1. Employees exposed to public and/or project vehicular traffic must be provided with, and must wear, warning vests or other suitable garments marked with or made of reflective and/or high-visibility material. Temporary traffic control may be necessary where normal traffic routes are disrupted.

4.9. Exposure to Falling Loads

4.9.1. No employee is permitted underneath loads handled by lifting or digging equipment. Employees are required to stand away from any vehicle being loaded or unloaded to avoid being struck by any spillage or falling materials.

4.9.2. Operators may remain in the cabs of vehicles being loaded or unloaded when the vehicles are equipped with overhead cab protection.

4.10. Warning System for Mobile Equipment

4.10.1. Operations of mobile equipment near excavations are conducted in accordance with Motor Vehicles and Equipment Procedure, and the following guidelines:

The most current and effective version of this document is available and maintained on Parsons Corporate Policy Center. The Company may revise, rescind or add to any policies, benefits or business practices from time to time in its sole and absolute discretion with or without prior notice.

- 4.10.1.1. When mobile equipment is operated adjacent to an excavation, or when such equipment is required to approach the edge of an excavation, and the operator does not have a clear and direct view of the edge of the excavation, use a warning system such as barricades, hand or mechanical signals, or stop logs.
- 4.10.1.2. If possible, the grade will slope away from the excavation.
- 4.10.1.3. During excavations with a backhoe, observer must be present at all times to watch the backhoe bucket. This observer is stationed adjacent to the excavation to avoid the operations of the hoe. The observer is responsible for visually identifying any obstruction while the bucket is excavating and for alerting the operator immediately if any obstructions are observed. If the observer leaves the excavation area, excavation efforts must be stopped immediately until the observer returns.

4.11. Hazardous Atmospheres

- 4.11.1. If an oxygen-deficient atmosphere (less than 19.5% oxygen) or a hazardous atmosphere exists or could reasonably be expected to exist, (e.g., such as in excavations in landfill areas or excavations in areas where hazardous substances are stored nearby), the excavation is presumed to be a permit-required confined space, unless determined otherwise by the PSHEM, in accordance with the Confined Space Procedure. Take adequate precautions to prevent employee exposure to Hazardous Materials; the use of Personal Protective Equipment (PPE); and the use of Respiratory Protection. The following minimum requirements apply:
- 4.11.1.1. Before employees enter potentially hazardous excavations greater than 4 feet deep, test the atmosphere for oxygen, sulfur dioxide, carbon monoxide, and flammable gas.
- 4.11.1.2. Take adequate precautions to prevent employee exposure to atmospheres containing:
- Less than 19.5% oxygen
 - Concentrations of a flammable gas is greater than 10% of the LFL of the gas
 - Concentrations of hazardous air pollutants exceeding OSHA PELs.
- 4.11.1.3. Precautions may include providing proper respiratory protection or ventilation for each excavation before employees enter the excavation.
- 4.11.1.4. When using controls that are intended to reduce the level of atmospheric contaminants to acceptable levels, conduct atmospheric monitoring as often as necessary to ensure that the atmosphere remains safe.

4.12. Rescue Equipment

- 4.12.1. Emergency rescue equipment, such as breathing apparatus, a safety harness and line, or a basket stretcher, must readily available where hazardous atmospheric conditions exist or may reasonably be expected to develop during work in an excavation. This equipment must be attended by the Competent Person when in use.
- 4.12.2. Employees entering bell-bottom pier holes or other similar deep and confined footing excavations must wear a harness with a lifeline securely attached to it. The lifeline must be separate from any line used to

handle materials, and must be individually attended at all times while the employee wearing the lifeline is in the excavation.

4.13. Protection from Hazards Associated with Water Accumulation

- 4.13.1. Employees cannot work in excavations in which water has accumulated, or in excavations in which water is accumulating, unless adequate precautions have been taken to protect employees against the hazards posed by water accumulation.
- 4.13.2. The precautions necessary to protect employees adequately vary with each situation, but they could include special support or shield systems to protect from cave-ins, water removal to control the level of accumulating water, or use of a safety harness and lifeline.
- 4.13.3. If water removal equipment is used the equipment and operations will be monitored by a Competent Person to ensure proper operation.
- 4.13.4. If excavation work interrupts the natural drainage of surface water (such as streams), diversion ditches, dikes, or other suitable means must be used to prevent surface water from entering the excavation and to provide adequate drainage of the area adjacent to the excavation.
- 4.13.5. Excavations subject to runoff from heavy rains require inspection by the Competent Person.

4.14. Stability of Adjacent Structures

- 4.14.1. Support systems such as shoring or underpinning must be provided for sidewalks, pavements, and adjacent structures that may be undermined by excavation operations. Excavations below the level of the base or footing are normally not permitted unless:
 - A support system (e.g., underpinning) is used.
 - The excavation is in stable rock.
 - A registered professional engineer has determined that the structure is sufficiently removed from the excavation to avoid cave-ins.
 - A registered professional engineer has determined that no other hazard exists.

4.15. Protection of Employees from Falling Debris

- 4.15.1. Provide adequate protection to protect employees from loose rock or soil that could pose a hazard by falling or rolling from an excavation face. Such protection consists of:
 - Scaling to remove loose material
 - Installing protective barricades at intervals as necessary on the face to stop and contain falling material
 - Other means that provide equivalent protection.
- 4.15.2. Employees must be protected from excavated or other materials or equipment that could pose a hazard by falling or rolling into excavations. Such protection is provided by:
 - Placing and keeping such materials or equipment at least 2-feet from the edge of excavations.
 - Using retaining devices that are sufficient to prevent materials or equipment from falling or rolling into excavations.

- A combination of the above, if necessary.

4.16. Protective Systems

4.16.1. Employees working in excavations must be protected by shoring, shielding, sloping, or benching. The Competent Person must determine the exceptions to this requirement as follows:

- Excavations made entirely in stable rock.
- Excavations less than 4 feet deep and where examination of the ground by a Competent Person provides no indication of potential cave-in.

4.16.2. Protective systems must have the capacity to resist, without failure, all loads that are intended or could reasonably be expected to be applied or transmitted to the system. The Competent Person determines the degree of slope reduction below the maximum allowable level when equipment, material, or personnel loads are imposed.

4.16.3. The Competent Person selects and constructs the design of protective systems in accordance with the requirements of the Support Systems Specifications Standard, manufacturer's specifications, other tabulated data, or a design approved by the registered professional engineer.

4.16.4. When it is not feasible to attain required slope configurations in accordance with Option 1, Option 2, or Option 3 of the Support Systems Specifications Standard, the registered professional engineer must design all protective systems for excavation sites.

4.16.5. A Competent Person must monitor the construction and maintenance of the recommended protective systems and their use in excavations.

4.16.6. Ensure that support materials used are in good condition and free from damage or defect. When material or equipment used for protective systems is damaged, the Competent Person must ensure that these systems are examined by the registered professional engineer to evaluate its suitability for continued use. If the registered professional engineer cannot assure that the material or equipment can support the intended loads or is otherwise suitable for safe use, then such material or equipment must be removed from service. The registered professional engineer must evaluate and approve the materials before returning them to service.

4.16.7. Sloping and Benching

4.16.7.1. The registered professional engineer must approve sloping or benching for excavations greater than 20 feet in depth. The OSHA Technical Manual (http://www.osha.gov/dts/osta/otm/otm_toc.html) contains the requirements for soil classifications and sloping and benching to be used by registered engineers in determining sloping and benching for a particular excavation site.

4.16.7.2. The Competent Person selects and constructs slope and configuration of sloping and benching systems in accordance with applicable federal and state regulations.

4.16.7.3. Employees are not permitted to work above other employees on the faces of sloped or benched systems except when employees at the lower levels are protected from the hazard of falling, rolling, or sliding material or equipment.

4.16.8. Shoring and Shielding

4.16.8.1. Install and remove support systems so that employees are protected from cave-ins, structural collapses, and from being struck by members of the support system.

- Employees are not allowed in shields when shields are being installed, removed, or moved vertically.
- Material may be excavated to a maximum of 2 feet below the bottom of the members of a support system if the system is designed to resist the forces for the full depth of the excavation and there is no indication of soil loss from behind or below the bottom of the support system.
- Construct the support system to support the vertical portion of a trench and extend above the bottom of the sloped portion at least 18 inches, to prevent material from sliding into the trench. Clear the surface of the slope of boulders, stumps, and hard masses of earth, tools, equipment, and other surface encumbrances.
- Place timber cross braces or trench jacks in a true horizontal position, spaced vertically, and secured to prevent sliding, falling, or kick outs. Place wales with the greater dimension horizontal.
- When engineering-approved portable trench boxes or sliding trench shields are selected as the protective system, use them in accordance with the manufacturer's recommendations.

4.17. Fall Protection

4.17.1. Fall protection is required for employees working at the edge of excavations greater than 6 feet deep if excavations are not readily seen because of plant growth or other visual barrier, or if they require employees to enter and be on the vertical wall of the excavation, on the protective system, or on any other structure in the excavation.

4.17.2. Walkways and bridges over excavations must be equipped with standard guardrails in accordance with Parsons Walking/Working Surfaces Standard. Adequate barriers must be provided at all excavations. All wells, pits, shafts, etc., must be barricaded or covered.

4.17.3. Upon completion of exploration and similar operations, all wells, pits, shafts, etc., must be backfilled.

4.18. Inspections

4.18.1. A Competent Person must conduct daily inspections of excavations, access ramps, adjacent areas, and protective systems in accordance with the Daily Excavation Inspection (Exhibit 8.3) for evidence of:

- Situations that could result in possible cave-ins
- Failure of protective systems
- Hazardous atmospheres or conditions

4.18.2. The Competent Person conducts inspections when employee exposure can be reasonably anticipated:

- Prior to the start of work

- As needed throughout the shift
- After every rainstorm or other hazard-increasing condition

4.18.3. If the Competent Person finds evidence of a situation that could result in a possible cave-in, failure of protective systems, or any hazardous atmosphere or condition, he immediately notifies the exposed employees to evacuate the excavation until precautions can be taken to ensure their safety and notifies the PM of such conditions.

4.18.4. The Competent Person is responsible for taking whatever measures are appropriate to correct or eliminate potentially hazardous conditions associated with the excavation before any additional work in that section of the excavation continues.

4.18.5. The Competent Person submits the completed inspection forms to the PSHEM each month. The PSHEM reviews the inspection forms and monitors excavations on projects.

4.19. Training

4.19.1. Parsons trains affected employees and the Competent Person at the time of their initial assignment. Subcontractors must train their own employees. However, the PSHEM must ensure that all workers involved in the task receive all known information.

4.19.2. The PSHEM arranges employee awareness training for affected employees who conduct work within or near excavations. Employees are trained on the following topics:

- Requirements of the standards
- Requirements of the project excavation plan
- Hazards relating to excavation work
- Methods of protection for excavation hazards
- Use of PPE
- Procedures regarding hazardous atmospheres
- Emergency and non-entry rescue procedures

4.19.3. The PSHEM arranges training for the Competent Person. The PSHEM evaluates the Competent Person annually in accordance with the Competent Person Assessment Checklist (Exhibit 8.4). Training includes the following topics:

- Methods of evaluating the site and conducting inspections in accordance with this CSHM element
- Evaluation and selection of protection methods
- Ensuring compliance with this CSHM element
- Requirements under additional applicable elements such as Confined Space and Fall Protection Policies/Procedures

4.19.4. During daily huddles, Supervisors review the relevant AHAs with excavation workers and brief them on details of the following:

- Type of excavation to be performed
- Location, depth, and overall size of the excavation

- Shoring/shielding/sloping requirements
- Means of entry and egress
- Special conditions and permits anticipated (such as confined space)
- Existing buried utilities and hazards
- Remaining surface items located near the excavation
- Equipment to be used
- Provisions for disposal of spoilage
- Work to be performed in the excavation

4.19.5. Employees are retrained every 3 years or when there are inadequacies in the employee's knowledge or use of excavations. The retraining re-establishes the employee's proficiency.

4.19.6. Using an acceptable training form, the records custodian maintains a record of all training or instruction given to employees.

4.20. Documentation

4.20.1. The records custodian documents all excavation instruction, training, and retraining records. Records and verifies completion of training is kept in the employee's individual training files.

4.20.2. All information regarding the identification of underground installations is transferred to the appropriate drawings and/or prints and must be available on site. Drawings and/or prints are maintained for the life of the project.

4.20.3. The Project Engineer's recommended protective systems must be documented in sufficient detail to establish compliance with applicable regulatory excavation requirements. The recommendations must be signed by the Project Engineer, and the report must be maintained at the jobsite.

4.20.4. When manufactured support systems are used, the manufacturer's written specifications, recommendations, and limitations must be maintained at the jobsite.

4.20.5. The PSHEM maintains the project records (including designs, permits, notices, and completed inspections) at the site for the duration of the project and archives them at project closeout.

5. Definitions

Term	Definition
Activity Hazards Analysis	A procedure, described in Parsons SHARP Manual, used to identify the hazards or potential hazards associated with each step of a job or work plan to uncover hazards and then eliminate, control, or remove them before the work is started.
Adjacent Structure Stability	The stability of the foundation of adjacent structures whose location may create surcharges, changes in soil conditions, or other disruptions that could extend into the failure zone of the excavation.
Aluminum Hydraulic Shoring	A manufactured shoring system consisting of aluminum hydraulic cylinders (cross braces) used with vertical rails (uprights) or horizontal rails (wales). Such a system is designed to support the sidewalls of an excavation and prevent cave-ins.

Term	Definition
Bell-bottom Pier Hole	A type of shaft or footing excavation, the bottom of which is made larger than the cross section above to form a belled shape.
Benching or Benching System	A method of protecting employees from cave-ins by excavating the sides of an excavation to form one or more horizontal steps, usually with vertical or near-vertical surfaces between levels.
CFR	Code of Federal Regulations
Competent Person	A person trained to identify unsafe hazards or working conditions in the workplace or working conditions with authority to have the hazards eliminated or controlled.
Cross Braces	The horizontal members of a shoring system installed from side to side of the excavation. The cross braces bear against either uprights or wales.
Excavation	Any man-made cut, cavity, trench, or depression in an earth surface formed by earth removal.
Faces or Sides	The vertical or inclined earth surfaces formed as a result of excavation work.
Hazardous Atmosphere	An atmosphere that is explosive, flammable, poisonous, corrosive, oxidizing, irritating, oxygen deficient, toxic, or otherwise harmful, and that may cause death, illness, or injury.
Kickout	The accidental movement or failure of a cross brace.
Protective System	A method of protecting employees from cave-ins, from material that could fall or roll from an excavation face into an excavation, or from the collapse of adjacent structures. Protective systems include support systems, sloping and benching systems, shield systems, and other systems that provide the necessary protection.
Ramp	An inclined walking or working surface that is used to gain access to one point from another. A ramp may be constructed from earth or from structural materials such as steel or wood.
Sheeting	The members of a shoring system that retain the earth in position and in turn are supported by other members of the shoring system.
Shield or Shield System	A structure used in an excavation to withstand cave-ins and that protects employees working within the shield system. Shields can be permanent structures or portable units moved along as work progresses.
Shoring or Shoring System	A structure that is built or put in place to support the sides of an excavation to prevent cave-ins.
Sloping or Sloping System	Sloping the sides of the excavation away from the excavation to protect employees from cave-ins. The required slope varies with soil type, weather, and surface or near surface loads that could affect the soil in the area of the trench (e.g., adjacent buildings, or vehicles near the edge of the trench).
Stable Rock	Natural solid mineral material that can be excavated with vertical sides that will remain intact while exposed.
Structural Ramp	A ramp built of steel or wood, usually used for vehicle access. Ramps made of soil or rock are not considered structural ramps.
Support System	A structure such as underpinning, bracing, or shoring that provides support to an adjacent structure, underground installation, or the sides of an excavation.

Term	Definition
Surface Encumbrances	Underground utilities, foundations, streams, water tables, transformer vaults, and geologic anomalies.
Surcharge	An excessive vertical load or weight caused by spoil, overburden, vehicles, equipment, or activities that could affect stability.
Trench	A narrow excavation (in relation to its length) made below ground surface.
Unconfined Compressive Strength	The load per unit area at which soil will fail in compression.
Underground Installations	Utilities, tunnels, shafts, vaults, foundations, and other underground fixtures or equipment that might be encountered during excavation work.
Uprights	The vertical members of a trench shoring system placed in contact with the earth and usually positioned so that individual members do not contact each other. Uprights that are placed so that individual members are closely spaced, in contact with or interconnected to each other, are often called sheeting.
Wales	Horizontal members of a shoring system placed in the direction of the excavation face whose sides bear against the vertical members of the shoring system or earth (uprights or sheeting).

6. Responsibilities

- 6.1. Safety Director, Corporate SH&E:** Responsible for developing and maintaining this procedure and conducting periodic reviews and updates to ensure alignment and integration with related or referenced policies and procedure; coordinating reviews by individuals and organizations responsible for and supported by implementation, including resolution of comments received; develops training materials, forms, and templates necessary to implement the procedure; and providing safety subject matter expertise and guidance to help ensure the success of this procedure.
- 6.2. GBU Safety Director:** Responsible for providing support to ensure the success of this procedure and auditing its effectiveness.
- 6.3. Project Manager (PM):** Ultimately responsible for delivering the project and assigning roles and responsibilities to discipline managers and the Project Management Team; developing, approving, implementing, and enforcing the project excavation plan; conducting a pre-excavation walkthrough; reviewing and approving excavation permits; designating Competent Person(s) to conduct activities within the excavation plan; designating observer(s), as appropriate; responding to possible cave-ins; and conducting unscheduled field checks on the implementation of the excavation plan
- 6.4. Project Engineer:** Responsible for approving and/or designing necessary protective measures, including sloping or benching greater than 20 feet deep; examining damaged protective structures; evaluating hazards to adjacent structures; and reviewing and approving excavation permits, if necessary.
- 6.5. Records Custodian:** Responsible for documenting employee training and serves as records custodian, maintaining and archiving related documentation.
- 6.6. Superintendent:** Responsible for facilitating compliance with and enforcement of this procedure; reviewing subcontractor's excavation plan; scheduling excavations; facilitating compliance with and enforce the project excavation plan; and maintaining excavation equipment and support.

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- 6.7. Project Safety, Health, and Environmental Manager (PSHEM):** Responsible for developing, monitoring and assisting in the implementation of this procedure on the jobsite; conducting orientations for subcontractors and new employees; and determining training needs and coordinating training for affected employees; providing the regulatory expertise to ensure that activities are conducted in compliance with the applicable codes, standards, and regulations; and ensuring that AHAs are performed, participate in Parsons Site Management Team, and maintain and archive project SH&E records; and collecting subcontractor documentation and provide comments to subcontractor.
- 6.8. Foreman/Supervisor:** Responsible for supervising work and enforcing this procedure; and conducting daily safety huddles emphasizing safety during excavations and reviewing excavation-related AHAs, as applicable.
- 6.9. Competent Person:** Responsible for determining probing methods; determining the degree of slope reduction; selecting, conducting design of, and monitoring protective systems; conducting daily inspections of the excavation; correcting or eliminate potentially hazardous conditions; monitoring water control and removal equipment; attending use of rescue equipment; and completing and submit excavation permit
- 6.10. Designated Person(s):** Responsible for classifying the soil before digging and excavation; and marking open excavations and underground obstructions.
- 6.11. Observer:** Responsible for watching for obstructions during excavation
- 6.12. Employees:** Responsible for complying with the requirements of this procedure and maintaining awareness of hazards in work area.
- 6.13. Subcontractors:** Responsible for complying with all Parsons' requirements; training their own employees in applicable Parsons' procedures; developing, submitting, implementing, and enforcing subcontractor excavation plans; and maintain and inspecting subcontractor excavations.

7. Exceptions

- 7.1.** The PM may request or require a more stringent process if required by the contract or is beneficial to the project.
- 7.2.** This standard does not detail the specific engineering requirements for shoring systems.

8. Exhibits

- 8.1.** Excavation Permit
- 8.2.** Support Systems
- 8.3.** Daily Excavation Inspection Form
- 8.4.** Competent Person Assessment Checklist

9. Revision History

Revision	Changes	Approver	Approval Date
0	Original Issue	Brad Barber	12/24/2014

Exhibit 8.1: Excavation Permit

The most current version of this form is available for download and use on the Parsons Corporate Policy Center.

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Supervisor(s):	Date/Time Issued:
	Date/Time Expires:
Location of Excavation:	
Excavation Dimensions:	
Soil Type:	
Nature of Work*:	

**If the nature of work is subject to change, a new permit must be issued.*

Safety Requirements/Precautions

	Yes	No	NA
1. Surface Encumbrances Identified/Secured	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Underground Utilities Identified/Located	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Utilities Protected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. System Lockout/Tagout (Tag ID No.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Access and Egress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Protection From Vehicular Traffic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Equipment/Tool Grounding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Manual Digging	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Protection From Water Accumulation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Warning System For Mobile Equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Stability of Adjacent Structures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Site Inspections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Confined Space Permit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Atmospheric Testing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

15. Additional Safety Requirements/Precautions:

Excavation Permit

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Atmospheric Testing Results

1. Oxygen Test

Initial Testing Required

Test Time: _____

Note: Safe Range of 20.5% to 22% required

Periodic Testing Required

% Oxygen: _____

2. Combustible Test

Initial Testing Required

Test Time: _____

Note: Safe Range < 10% LEL

Periodic Testing Required

% LEL: _____

3. Toxicity Test

Time Tested: _____

PEL/TLV: _____

Person Taking Sample: _____

Substance Tested For: _____

Exposure Level: _____

*** IN CASE OF EMERGENCY, CALL EXTENSION ***

Protective System

1. Sloping and benching: _____

2. Support System (Shoring): _____

3. Shield System: _____

OPTION: 1 ☐ 2 ☐ 3 ☐ 4 ☐

OPTION: 1 ☐ 2 ☐ 3 ☐ 4 ☐

OPTION: 1 ☐ 2 ☐ 3 ☐ 4 ☐

Date/Time Work Start: _____

Date/Time Completed: _____ / _____

Approval: _____

Date/Time: _____ / _____

Approval: _____

Date/Time: _____ / _____

Owner Representative

Approval: _____

Date/Time: _____ / _____

Parsons Supervisor

Approval: _____

Date/Time: _____ / _____

Parsons Engineer

Approval: _____

Date/Time: _____ / _____

Parsons Safety Representative

Exhibit 8.2: Support Systems

The most current version of this form is available for download and use on the Parsons Corporate Policy Center and online at:

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PARSONS

Support Systems

The competent person selects the design of support systems, shield systems, and other protective systems to be constructed in accordance with one of the following options.

Option 1: Designs Using Regulatory Compliance Criteria

- 1.1 Use timber shoring and aluminum hydraulic shoring in accordance with federal, state, or local regulatory compliance criteria. If this option is selected, contact PSHEM to coordinate design and implementation of these systems.

Option 2: Designs Using Manufacturer's Tabulated Data

- 2.1 Construct support systems, shield systems, or other protective systems (e.g., trench boxes) drawn from manufacturer's tabulated data and use them in accordance with all specifications, recommendations, and limitations issued or made by the manufacturer.
- 2.2 Deviation from the specifications, recommendations, and limitations issued or made by the manufacturer are allowed only after the manufacturer issues specific written approval.
- 2.3 Manufacturer's specifications, recommendations, and limitations—and manufacturer's approval to deviate from the specifications, recommendations, and limitations—must be kept in written form at the jobsite during construction of the protective system. After that time, this data may be stored off the jobsite, but a copy must be available to EHSS upon request.

Option 3: Designs Using Other Tabulated Data

- 3.1 Select the designs of support systems, shield systems, or other protective systems in accordance with tabulated data, (e.g., tables and charts) and construct them accordingly. The tabulated data must be in written form and must include all of the following information:
- Factors that affect the selection of a protective system drawn from such data
 - Limits of use of the data
 - Information needed by the user to select the correct protective system from the data
- 3.2 At least one copy of the tabulated data, identifying the registered professional engineer who approved the data, must be maintained at the jobsite during construction of the system. After that time the data may be stored off the jobsite, but a copy of the data must be made available to EHSS upon request.

Option 4: Design by a Registered Professional Engineer

- 4.1 Support systems, shield systems, and other protective systems not using the options detailed in options 1, 2, or 3 above must be approved by a registered professional engineer.
- 4.2 Designs must be in written form and must include the following:
- A plan indicating the sizes, types, and configurations of the materials to be used in the protective system
 - The identity of the registered professional engineer approving the design
- 4.3 At least one copy of the design must be maintained at the jobsite during construction of the protective system. After that time, the design may be stored off the jobsite, but a copy of the design must be available to EHSS upon request.

Support Systems*Page 2 of 3***PARSONS**

Support Systems

Materials and Equipment

- Materials and equipment used for protective systems must be free from damage or defects that might affect their proper function.
- Manufactured materials and equipment used for protective systems must be used and maintained in accordance with the recommendations of the manufacturer, and in a manner that prevents employee exposure to hazards.
- If material or equipment used for protective systems is damaged, the competent person must ensure that these systems are examined by a qualified person to evaluate its suitability for continued use. If the competent person cannot assure the material or equipment can support the intended loads or is otherwise suitable for safe use, then such material or equipment must be removed from service. These materials or equipment must be evaluated and approved by a registered professional engineer before they are returned to service.

Installation and Removal of Support

- Members of support systems must be securely connected together to prevent sliding, falling, kickouts, or other potential hazards.
- Support systems must be installed and removed in a manner that protects employees from cave-ins, structural collapses, or from being struck by members of the support system.
- Individual members of support systems cannot be subjected to loads that are greater than those they were designed to withstand.
- Before temporary removal of individual support members begins, additional precautions must be taken as directed by the competent person to ensure the safety of employees. These precautions could include the installation of other structural members to carry the loads imposed on the support system.
- Removal of support systems must begin at, and progress from, the bottom of the excavation. Members must be released slowly. If there is any indication of possible failure of the remaining members of the structure or possible cave-in of the sides of the excavation, the work must be halted until it can be examined by the project manager.
- Backfilling must progress together with the removal of support systems from excavations.
- Additional requirements for support systems for trench excavations are as follows:
- Excavation of material to a level no greater than 2 feet below the bottom of the members of a support system is allowed, but only if the system is designed to resist the forces calculated for the full depth of the trench. While the trench is open, there must be no indication of a possible loss of soil from behind or below the bottom of the support system.
- Installation of a support system must be closely coordinated with the excavation of trenches.

Shield Systems

- Shield systems cannot be subjected to loads that are greater than those they were designed to withstand.
- Shields must be installed in a manner that restricts lateral or other hazardous movement of the shield that could occur during cave-in or unexpected soil movement.

Support Systems*Page 3 of 3***PARSONS**

Support Systems

- Employees must be protected from the hazard of cave-ins when entering or exiting the areas protected by shields.
- Employees are not allowed in shields when shields are being installed, removed, or moved vertically.
- In trench excavations, excavation of material to a level no greater than 2 feet below the bottom of the shield system is allowed, but only if the system is designed to resist the forces calculated for the full depth of the trench. While the trench is open, there must be no indication of a possible loss of soil from behind or below the bottom of the shield system.

Exhibit 8.3: Excavation - Daily Inspection Form

The most current version of this form is available for download and use on the Parsons Corporate Policy Center.

Date: _____		Job No: _____		Location: _____	
Competent Person: _____		Gas Monitor Ser. No.: _____			
Inspect excavations throughout the work period. If conditions change, complete a new inspection form.					
Time: _____	<input type="checkbox"/> a.m. <input type="checkbox"/> p.m.	Weather: _____			
Time: _____	<input type="checkbox"/> a.m. <input type="checkbox"/> p.m.	Weather: _____			
Time: _____	<input type="checkbox"/> a.m. <input type="checkbox"/> p.m.	Weather: _____			
Time: _____	<input type="checkbox"/> a.m. <input type="checkbox"/> p.m.	Weather: _____			
Time: _____	<input type="checkbox"/> a.m. <input type="checkbox"/> p.m.	Weather: _____			
Locates		Date: _____	Confirmation No.: _____	Locates Visible: <input type="checkbox"/> Yes <input type="checkbox"/> No	
Jobsite Hazards		Work Practices			
Vehicular Traffic	Mobile Equipment	Traffic Control:	Signs	Cones	Barricades
Overhead Obstruction	Underground Installations	Ladders:	Within 25 ft.	Extends 3 ft.	Accumulation
Falling Loads	Hazardous Atmosphere	Dewatering:	CP Monitors	Proper Operations	Supplied Air
Adjacent Structures	Surface Encumbrances	Atmosphere:	Ventilation	Monitoring	Other
		Equipment:	>2 ft. from edge	Warning Devices	
Soil Stability					
Previously disturbed by underground structures or utilities? <input type="checkbox"/> Yes <input type="checkbox"/> No		Soil subject to thawing conditions? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Soil subject to vibration from adjacent area or from equipment used in the excavation? <input type="checkbox"/> Yes <input type="checkbox"/> No		Soil subject to surcharge from spoils, materials, or equipment? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Visual Test					
<input type="checkbox"/> Yes <input type="checkbox"/> No Soil spill from excavator bucket in cohesive clumps or granular stream?		<input type="checkbox"/> Yes <input type="checkbox"/> No Particle sizes of predominate soils are fine grained, coarse grained, or gravel?			
<input type="checkbox"/> Yes <input type="checkbox"/> No Soil exist in layered system Layers slope: _____ % Slope: _____		<input type="checkbox"/> Yes <input type="checkbox"/> No Soil is fissured?			
<input type="checkbox"/> Yes <input type="checkbox"/> No Presence of rock?		<input type="checkbox"/> Yes <input type="checkbox"/> No Rock is stable?			
<input type="checkbox"/> Yes <input type="checkbox"/> No Accumulating runoff?		<input type="checkbox"/> Yes <input type="checkbox"/> No High groundwater table?			
<input type="checkbox"/> Yes <input type="checkbox"/> No Seeping from sides?		<input type="checkbox"/> Yes <input type="checkbox"/> No Submerged in surface water (creeks, etc.)?			
Manual Test					
Penetrometer Readings (Minimum of five test must be completed)					
1. _____	2. _____	3. _____	4. _____	5. _____	6. _____
Average tsf: _____		<0.5 tsf = Type C		0.5 – 1.5 tsf = Type B	
				>1.5 tsf = Type A	
Plasticity Test:					
Length of 1/8" thread that can be held horizontally _____ inches <2" = Granular >2" = Cohesive					
Thumb Penetration Test:					
All tests should be run on:					
• Large clump of spoil material		TYPE A <input type="checkbox"/> Great effort/not at all Can only indent		TYPE B <input type="checkbox"/> Moderate Effort	
• As soon as excavated				TYPE C <input type="checkbox"/> Easy: Molded by light finger pressure	
• Later after wetting					
• Reclassified					
Soil Test Classification			Personnel Protective System Chosen		
Results of Testing: Soil Type <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D			Protection Chosen: <input type="checkbox"/> Sloping <input type="checkbox"/> Shielding <input type="checkbox"/> Shoring		
Trench Box Information					
<input type="checkbox"/> Yes <input type="checkbox"/> No Trench box drawings available?		<input type="checkbox"/> Yes <input type="checkbox"/> No PE Stamped drawings available for special shoring?			
<input type="checkbox"/> Yes <input type="checkbox"/> No Stack locking Pins available and used?		<input type="checkbox"/> Yes <input type="checkbox"/> No Spreader bar pin installed and safety pinned?			
Comments:					
NOTE	All unsafe conditions must be corrected before trench entry. If any hazardous conditions are observed, the trench must be immediately evacuated and no one allowed to re-enter until corrective action has been taken.		(To be completed by the designated competent person) Excavation Entry Authorized By:		
			Print Name:		
			Competent Person		
			Signature:		

The most current and effective version of this document is available and maintained on Parsons Corporate Policy Center. The Company may revise, rescind or add to any policies, benefits or business practices from time to time in its sole and absolute discretion with or without prior notice.

Exhibit 8.5: Competent Person Assessment Checklist

The most current version of this form is available for download and use on the Parsons Corporate Policy Center.

Employee Name: _____

Interviewed by: _____

	QUESTIONS	RESPONSES	P	NP
1.	Prior to excavating, how are underground utilities located?	Call AWWA One Call	<input type="checkbox"/>	<input type="checkbox"/>
2.	Who can design structural ramps use for access or egress from excavations?	The competent person.	<input type="checkbox"/>	<input type="checkbox"/>
3.	How far apart must ladders, stairways, or ramps be spaced when used as a means of egress from trench excavations?	No more than 25 feet of lateral travel for employees.	<input type="checkbox"/>	<input type="checkbox"/>
4.	When is atmosphere testing required prior to entry into an excavation? Give two examples.	Where oxygen deficiency or a hazardous atmosphere exist or could reasonable be expected to exist in excavations greater than 4 feet. Operating gas-powered equipment in an excavation. Striking a utility such as a gas line. Natural decay products.	<input type="checkbox"/>	<input type="checkbox"/>
5.	What precautions can be taken to prevent employee exposure to oxygen-deficient atmosphere?	Continuous ventilation.	<input type="checkbox"/>	<input type="checkbox"/>
6.	Can an employee work in an excavation where there is an accumulation of water?	Only when adequate precaution has been taken to protect employees against the hazards posed by water accumulation. (i.e., trench-box, water removal, or use of safety harness and life-line.	<input type="checkbox"/>	<input type="checkbox"/>
7.	Who monitors the water removal operations?	The competent person.	<input type="checkbox"/>	<input type="checkbox"/>
8.	What are some methods used to prevent materials (loose rock or soil) from falling into an excavation?	Scaling Protective barricades	<input type="checkbox"/>	<input type="checkbox"/>
9.	How far from the edge of an excavation should materials and equipment be placed?	Material and equipment must be stored at least 2 feet from the edge of an excavation if no protective barricade is in place.	<input type="checkbox"/>	<input type="checkbox"/>
10.	How frequently does an excavation must be inspected?	Every day at the beginning of the work shift, throughout the day, and after every rainstorm or other hazard causing event.	<input type="checkbox"/>	<input type="checkbox"/>
11.	How does the competent person document these inspections?	On the daily excavation inspection form.	<input type="checkbox"/>	<input type="checkbox"/>
12.	What is the competent person evaluating when he/she conducts the daily inspections?	Adjacent areas, protective systems, evidence of a situation that could result in possible cave-ins, indications of failure in protective systems, hazardous atmospheres, or other hazardous conditions.	<input type="checkbox"/>	<input type="checkbox"/>
13.	When is fall protection required when working in or around excavations?	Where walkways extend over an excavation >4 feet deep.	<input type="checkbox"/>	<input type="checkbox"/>
14.	What are some means of adequate barrier physical protection for excavations?	Warning lines, physical barriers, manhole covers, guard rails, plywood with the word HOLE painted on it.	<input type="checkbox"/>	<input type="checkbox"/>
15.	How does the competent person verify capacity of protective systems?	Tabulated data stamped by registered engineer readily available onsite. Competent person should demonstrate ability to read and understand specifications.	<input type="checkbox"/>	<input type="checkbox"/>
16.	How far can material be excavated below the bottom members of a support system?	2 feet maximum.	<input type="checkbox"/>	<input type="checkbox"/>

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ATTACHMENT B HONEYWELL REQUIREMENTS

HONEYWELL EVENT REPORTING REQUIREMENTS

1. INTRODUCTION

To assure Honeywell Health, Safety and Environmental Remediation (HSER) leadership has sufficient knowledge of significant adverse events to enhance decision-making and drive improved performance, the following event reporting procedure will be followed to report Safety & Environmental Incidents and Near Misses (referred to as events in this procedure) for all Honeywell projects.

These requirements will be reviewed with project staff when they start working on the projects and on a regular basis thereafter.

2. CONTRACTOR REPORTING TO HONEYWELL SYRACUSE PERSONNEL

Event reporting to Honeywell senior management is the responsibility of Honeywell personnel. Contractor personnel should report the incident to the Syracuse Honeywell personnel per Section 2.2 as soon as it is safe to do so. When that call is made, provide the information listed below to assist in classifying the event.

2.1 INCIDENT REPORTING

The Alliance Partner PM and Safety Manager must be **notified** by the SHSO of any incident immediately.

After notification, **written incident reports** must be submitted by the SHSO in accordance with time frames shown on the following table. Honeywell representatives will be notified within prescribed time frames. Specific contact names and numbers are attached.

	Tier 1 Incident	Tier 2 Incident	Tier 3 Incident
Notification to the Alliance Partner PM and Safety Manager	Immediate Notification		
Notify Honeywell RES Management Parsons PM	1 hr	4 Hours	12 Hours
Incident Report (written)	Written report within 24 hrs – (All known facts and updated as necessary)		
Entry into Honeywell Event Tracking System	1 Day	1 Day	1 Week

Tier 1 Examples

- One or more on-site or off-site fatalities involving an employee, contractor employee or visitor that are or may be work-related.
- A single work-related on-site or off-site incident resulting in three or more employees, contractors or visitors being admitted to a hospital.
- Any off-site fatalities to the general public that allegedly are or may be related to Honeywell.
- Any security incident that may be immediately dangerous to life or property, including, bomb threats, intentional explosions, chemical releases, radiation releases, or releases of biological/chemical agents.
- Fires that: (a) resulted in significant property damage, or, regardless of the level of damage, (b) were extinguished by a fire department using other than handheld fire extinguishers, or (c) were extinguished by a fire suppression system (other than an integrated fire suppression system within a piece of equipment) or (d) significantly halted operations.
- Suspicious materials, package or letter for which outside authorities were called in to investigate.
- Serious injuries or illnesses in the general public allegedly associated with a company-related incident, event or release to air, water or soil.
- A release to air, water or soil that has an Adverse Environmental Impact which includes a release that triggers a regulatory inquiry.
- Events generating community activism or adverse media coverage not associated with an episodic event at the national/international level.
- Government representatives alleging or suggesting criminal non-compliance of any kind.
- A regulatory agency inspection with notice of fine, penalty or corrective action that has a directive or other type of injunctive device designed or likely to halt, curtail, or restrict operations.

Tier 2 Examples

- Employee or contract employee lost workday injuries/illnesses.
- Any on-site or off-site injuries/illnesses involving an employee, contractor employee or visitor that are or may be work-related and are significant enough to be recordable (e.g., vaccination or doctor prescription).
- Minor injuries or illnesses in the general public that allegedly are associated with a company-related incident, event or release to air, water or soil.
- Suspicious activities in or around Honeywell facilities or processes that may present a potential security risk.
- Fires extinguished using handheld fire extinguisher(s) or an integrated fire suppression system internal to a piece of equipment that did minimal property damage, and did not halt operations.

- Allegations of previously unknown health or environmental effects caused by products, processes, emissions or discharges [Allegations of Adverse Health Effects](#), Hlth-19.
- An environmental excursion that does not also trigger Tier 1 reporting.
- Discovery of potential or actual evidence of contaminated soil or groundwater from current or former operations that does not otherwise meet the definition of an adverse environmental impact.
- Written notification from a governmental agency alleging non-compliance of any kind.
- Proposal or imposition of an HSER fine, penalty or corrective action.
- Receipt of a non-routine request for information from a governmental agency.
- A regulatory agency inspection (excluding those that are Tier 1 Events) with notice of fine, penalty or corrective action.
- An excursion from a permit condition which requires a notification to be sent to an agency that results in any notice of fine, penalty or agency corrective action.
- All HSE audits, including Corporate audits, Peer review, the annual SAT (Self-assessment tool), audits for external HSE certification processes, and SBU audits or special initiatives.
- Any evaluations made by third parties such as HSE consultants or contracted HSE services. Recommendations from such evaluations must be entered as recommendations in the Event Tracking System.
- Significant community activism or adverse media coverage not associated with an episodic event at the local/state level.
- Notice of an allegation from a third party or regulatory agency of environmental impacts from operations on current or formerly operated Honeywell facilities.
- Demands, including voluntary agreements, to conduct a site investigation or remedial measures to respond to environmental impacts from operations on current or formerly operated Honeywell facilities.
- Receipt of an information request or special notice letter associated with the disposal, transportation or storage of hazardous substances by Honeywell or its predecessors.
- Identification of any condition or circumstance which falls under the criteria of “Issues requiring TRAC approval” for which TRAC approval was NOT obtained. [The Risk Assessment Committee \(TRAC\)](#) - HSEMS 605.

Tier 3 Examples

- On-site or off-site employee, contractor employee or visitor injuries/illnesses where first-aid treatment or evaluation is provided by a Medical or Para-Medical Professional (e.g., with no vaccination, prescription, or lost time).

- A regulatory agency inspection (which is not a Tier 1 or Tier 2 Event, and may still be underway) with no notice of fine, penalty or corrective action.
- A notification required to be sent to an agency based on an excursion from a permit condition that does not result in any notice of fine, penalty or agency corrective action as directed by the SBG for reporting:
- Employee, contractor or visitor injuries/illnesses injury/illness where first-aid treatment or evaluation is provided by someone other than a Medical or Para-Medical professional.
- Significant near misses.
- Stewardship outreach events with customers, suppliers and/or communities, Operations successes at facilities (i.e., ISO Certification, VPP, OHSAS, local or state recognition, etc.).
- An environmental excursion that does not also trigger Tier 2 reporting.

Event Type	Project Team Responsibility	Honeywell Responsibility
Tier 1	<ul style="list-style-type: none">Initiate local emergency response as appropriateNotify Honeywell as soon as possible but no later than within 1 hour of the event. Do not wait for internal management clearance before notifying Honeywell.Honeywell Notification Hierarchy (work down list until positive contact is made in person):<ul style="list-style-type: none">Remediation ManagerRemediation Portfolio DirectorDesign and Construction ManagerDirector of Design and ConstructionSee site-specific contact list for Names and contract information	<ul style="list-style-type: none">Coordinate Honeywell responseEnter event or have designated person enter even into the Honeywell Management System Tool within one business day.
Tier 2	<ul style="list-style-type: none">Initiate local first aid, medical, or security response as appropriateNotify Honeywell within four hours of the event.Honeywell Notification may be by telephone or email to:<ul style="list-style-type: none">Remediation ManagerDesign and Construction ManagerGet positive confirmation of receipt from Remediation Manager and Design and Construction Manager within six hours of the event. If not achieved notify:<ul style="list-style-type: none">Remediation Portfolio DirectorDirector of Design and ConstructionContinue to follow up until receipt of notification is confirmed.See site-specific contact list for Names and contract information	<ul style="list-style-type: none">Coordinate Honeywell responseEnter event or have designated person enter event into the Honeywell Management System Tool within one business day.
Tier 3	<ul style="list-style-type: none">Initiate local first aid, medical, or security response as appropriateNotify Honeywell within one day of the event.Honeywell Notification may be by telephone or email to:<ul style="list-style-type: none">Remediation ManagerDesign and Construction ManagerGet positive confirmation of receipt from Remediation Manager and Design and Construction Manager.Continue to follow up until receipt of notification is confirmed.See site-specific contact list for Names and contract information	<ul style="list-style-type: none">Coordinate Honeywell responseEnter event or have designated person enter event into the Honeywell Management System Tool within seven business days.

Event Call List - Contact Information

Name	Title/Role	Office	Cell
<u>Honeywell Management</u>			
John McAuliffe	Director of Design and Construction	315.552.9782	315.440.0859
Steve Coladonato	Remediation Manager	302.791.6738	973.216.2438
Rich Galloway	Design and Construction Manager	973.455.4640	973.610.2316
Eric Christodoulatos	Alternate	973.455.2877	973.216.5272
Merry Abbott	Lead Event Report Data Entry	973.455.5821	
Michelle McDonald	Alternate Event Report Data Entry	315.552.9783	315.415.2420
<u>Honeywell Communications</u>			
Victoria Streitfield	Communications		609.218.9460
<u>Parsons</u>			
George Moreau	Project Manager	315.552.9715	315.491.6249
Greg Ertel	Safety Manager		585.465.0557
Tom Abrams	Program Manager	315.552.9670	315.263.5109
<u>NYSDEC</u>			
Ben McPerson	DEC Site Manager	716.851.7220	
24-Hour Spill Hotline		800.457.7362	

ATTACHMENT C ACTIVITY HAZARD ANALYSES

Activity Hazard Analysis Master List

(to be updated as new task/activities are required)

AHA's to be developed prior to start of work:

- General Site Walk
- Vehicle Operations
- Test Pitting and Soil Sampling
- Soil Boring with Conventional Drill Methods
- Monitoring Well Installation with Conventional Drill Methods
- Monitoring Well Development
- Groundwater Sampling
- Surface Soil Sampling
- Equipment and Personal Decontamination
- Survey and Subsurface Utility Locator Subcontractor Oversight
- IDW Sampling, Handling, and Disposal

Activity Hazard Analysis 001

Activity/Work Task: Site Visit or Site Walk		Overall Risk Assessment Code (RAC) (Use highest code)				M		
Project Location: 3875 River Road, Tonawanda, NY		Risk Assessment Code (RAC) Matrix						
		Severity	Probability					
Date Prepared: 03/19/2020			Frequent	Likely	Occasional	Seldom	Unlikely	
Prepared by: Megan Clark		Catastrophic	E	E	H	H	M	
		Critical	E	H	H	M	L	
Reviewed by (Name/Title): Greg Ertel		Marginal	H	M	M	L	L	
Employer / GBU: Parsons		Negligible	M	L	L	L	L	
Notes: (Field Notes, Review Comments, etc.) References: ESHARP Manual		Step 1: Review each "Hazard" with identified safety "Controls" and determine RAC (See above). The RAC is developed after correctly identifying all of the hazards and fully implementing all controls.						
		"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.					RAC Chart	
		"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible					E = Extremely High Risk	
							H = High Risk	
		Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.					M = Moderate Risk	
							L = Low Risk	
Job Steps	Hazards	Controls				P	S	R A C
Site visit/walk	Slips, Trips, Falls	<ul style="list-style-type: none"> ▪ Workers will be aware of potentially slippery surfaces and tripping hazards. Do not talk on cell phone or look at documents while walking, focus on task. ▪ Walk slowly during transit. Jumping, running, and horseplay are prohibited. ▪ Workers will keep all areas clean and free of debris to deter any unnecessary trips and falls. ▪ Wear ankle high safety shoes fully laced with good tread, keep hands out of pocket in case of fall. Do not carry more than 50 lbs by yourself and plan your route. ▪ Clean up all spills immediately. ▪ Personnel will notify the Project Manager of any unsafe conditions 				O	M	M
	Rain	<ul style="list-style-type: none"> ▪ Have proper PPE (i.e. rain gear, footwear, etc.) available. Be aware of slip hazards, puddles, etc. 						

Activity Hazard Analysis AHA 001 (Cont'd)

Activity/Work Task: Site Visit or Site Walk		Overall Risk Assessment Code (RAC) (Use highest code)			M
Project Location: Greece, New York		Risk Assessment Code (RAC) Matrix			
Job Steps (Contd)	Hazards	Controls	P	S	R A C
Site visit/walk (cont'd)	Sunshine	<ul style="list-style-type: none"> Have sunscreen and safety sunglasses available for ultraviolet protection. Have water for dehydration. 	O	M	M
	Biological Hazards	<ul style="list-style-type: none"> Know how to recognize biological hazards (see photos below) Avoid contact with poison ivy Use caution when opening wells to avoid being bit by insects Personnel will be aware of potential exposure to biological hazards. Wear appropriate clothing (hard hat, minimum short -sleeve shirt, long pants, gloves, boots etc.) and insect repellent. COVID-19: Maintain 6-ft apart from other people and wash hands with soap and water frequently. See "Biological Hazards" in PSHEP and Appendix I of PSHEP for more information. 	O	M	M
	Lightning	<ul style="list-style-type: none"> Do not begin or continue work until lightning subsides for 30 minutes. Check weather forecast, reschedule if there is a severe weather warning. 	O	M	M
	High winds, dust storm	<ul style="list-style-type: none"> Wear goggles if dust/debris is visible. Stop work if vision is significantly impaired or creates unsafe conditions. 	O	M	M
	Cold and Heat Stress	<ul style="list-style-type: none"> Visitors will dress accordingly to prevent injuries from extreme heat, or cold. SSHO will monitor for cold/heat stress symptoms. 	O	M	M
	Site Hazards Material Exposure	<ul style="list-style-type: none"> Training and safety awareness of potential exposure to contaminants at the site. Training of all personnel decontamination procedures (if appropriate to visit). Provide adequate hygiene and decontamination supplies. Practice contamination avoidance, work upwind if feasible, limit contact to the extent possible, and do not eat in areas with COC's, keep drink containers covered. Appropriate PPE will be worn dependent on site conditions and actions levels. Must sign off on health and safety plan. 	O	M	M

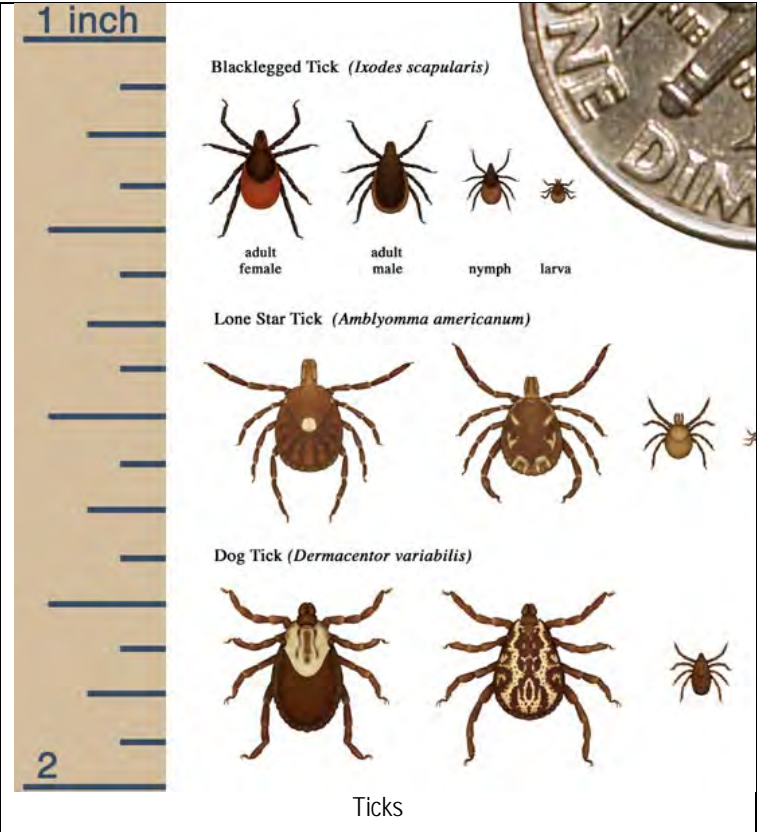
Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements
<p>Level D- Long pants, safety glasses, hard hat (in presence of heavy equipment), steel-toed boots. The following safety equipment is task dependent: gloves, goggles.</p>	<p><u>Training Requirements:</u></p> <p>All personnel engaged in hazardous substance removal or other activities that expose or potentially expose them to hazardous substances or health hazards shall receive appropriate training as required by 29 CFR 1910.120(e), including, but not limited to, initial 40-hour, 8-hour Supervisor and annual 8-hour refresher.</p> <p>Medical qualification, training and fit-testing must be received on an annual basis for individuals that wear a respirator. If an individual wears a respirator more than 30 days per year, or they are exposed at or above the Permissible Exposure Limit (PEL) of a chemical for more than 30 days in a year, then they must participate in a Medical Surveillance Program as required by 29 CFR 1910.120(f).</p> <p>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. All personnel performing work onsite must have received the site specific orientation. Competent FA / CPR / AED responder will be onsite while all work is occurring at all times.</p> <p><u>STOP WORK AUTHORITY</u></p> <p><i>Right, Obligation and Responsibility</i></p> <p>Every single employee has the responsibility and the authority to STOP WORK at any time necessary to protect the safety or health of themselves, others, and the environment. Anyone can execute this responsibility without repercussions. We believe that the GOAL OF ZERO is possible with everyone's support and commitment.</p>	<ul style="list-style-type: none"> ▪ Inspect job site and staging area and identify any concerns. ▪ Inspect job site daily.



Poison Ivy



Hogweed



ACTIVITY HAZARDS ANALYSIS TRAINING ACKNOWLEDGEMENT AND SIGN OFF

Read Carefully Before Signing Below

This is to acknowledge that I have had a chance to review a copy AHA 001 Site Visit or Site Walk and have been trained on its contents. I understand a copy will be provided to me upon request. I will read and abide by all requirements of the aforementioned AHA and any additional rules and regulations of my job. I understand that working safely, complying with and obeying any and all Company safety rules, regulations or standards is a condition of my employment. Should I not comply with Company safety rules, regulations or standards, I am subject to disciplinary action including removal from the site and possible termination of employment.

NAME	SIGNATURE	COMPANY	DATE	CRAFT	TRAINER	TRAINER SIGNATURE
1.						
2.						
3.						
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18.						
19.						
20.						

Activity Hazard Analysis (AHA) 002

Activity/Work Task: Drilling		Overall Risk Assessment Code (RAC) (Use highest code)				M		
Project Location: 3875 River Road, Tonawanda, NY		Risk Assessment Code (RAC) Matrix						
		Severity	Probability					
Date Prepared (MM/DD/YY): 03/19/2020			Frequent	Likely	Occasional	Seldom	Unlikely	
Prepared by (Name/Title): Megan Clark		Catastrophic	E	E	H	H	M	
		Critical	E	H	H	M	L	
Reviewed by (Name/Title): Greg Ertel		Marginal	H	M	M	L	L	
Employer / GBU: Parsons/PE&I		Negligible	M	L	L	L	L	
Notes: (Field Notes, Review Comments, etc.) References:		Step 1: Review each "Hazard" with identified safety "Controls" and determine RAC (See above). The RAC is developed after correctly identifying all of the hazards and fully implementing all controls.						
		"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.					RAC Chart	
		"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible					E = Extremely High Risk	
							H = High Risk	
		Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.					M = Moderate Risk	
L = Low Risk								
Job Steps	Hazards	Controls				P	S	R A C
Drilling and Sampling	Injury from Failure of Equipment	<ul style="list-style-type: none"> Proper site-specific safety training for operator and crew Know the location of the drill rig kill switches. Daily inspection to include: <ul style="list-style-type: none"> Vehicle/equipment condition Properly block and level machine Daily walk around inspections and pre-operation inspections Proper equipment storage Condition of all fittings, drive rods, and hydraulic lines Presence and check first aid kit and fire extinguisher 				S	Cr	M

Job Steps	Hazards	Controls	P	S	R A C
	Inhalation and Contact with Hazardous Substances or Vehicle Exhaust	<ul style="list-style-type: none"> • Provide workers proper skin, eye, and respiratory protection based on the exposure hazards and vehicle exhaust present • Review hazardous properties of site contaminants and vehicle exhaust with workers before sampling operations begin • Orient operator cross-wind • Keep all sampling supplies and bottles upwind or cross-wind 	S	M	L
	Contact with Utilities	<ul style="list-style-type: none"> • Use Underground Utility Avoidance procedures: <ul style="list-style-type: none"> ▪ Check site blueprints ▪ Use locator to mark utilities (One Call, etc.) ▪ Have emergency telephone number available ▪ Mark known utilities • Maintain safe distance from overhead electrical lines (See Table below) 	S	Cr	M
	Struck by/Against Flying Particles, Protruding Objects, Liquid Splash	<ul style="list-style-type: none"> • Wear hard hats, safety glasses with side shields and steel-toed safety boot at all times. • Keep hands clear of rod prior to it being driven • Wear splash shields and safety goggles when cleaning, decontaminating drilling equipment 	S	Cr	M
	Back injuries; musculoskeletal disorders (MSD)	<ul style="list-style-type: none"> • Observe proper lifting/carrying techniques – hold load close to body, turn entire body rather than twisting, and use leg muscles instead of back muscles. • Obey sensible lifting limits (50 lb. maximum per person for one-time manual lifting, 35 lb. limit for repetitive tasks). Know your limits. • Use mechanical lifting equipment (handcarts, trucks) or more than one person to move large, awkward loads. • Avoid performing the same strenuous activity for extended periods. 	S	Cr	M
	Injuries from improper use of hand tools and equipment	<ul style="list-style-type: none"> • Maintain all tools in safe, good working condition. • Use appropriate cutting tools. • When using cutting tool, always cutting away from body and hands. • Wear adequate gloves – follow FMC glove standard. • Choose the proper tool for the job. • 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. • Tag and take damaged or worn tools out of service. 	S	Cr	M

Job Steps	Hazards	Controls	P	S	R A C
	Caught In/Between Moving Parts	<ul style="list-style-type: none"> Identify and understand parts of equipment which may cause crushing, pinching, rotating, or similar injuries Assure 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/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 Know location of drilling rig kill switches. 	U	Cr	L
	Flammable, Explosive Atmospheres, Exposure to volatile contaminants	<ul style="list-style-type: none"> Monitor for explosives using a multi-gas meter Monitor breathing zone for volatile organic compounds Turn engine off before refueling. Eliminate sources of ignition from the work area. Prohibit smoking in well drilling area. Provide ABC (or equivalent) fire extinguishers and keep nearby work area. 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. 	U	Cr	L

<i>Minimum Clearance from Energized Overhead Electrical Line</i>	
Nominal System Voltage	Minimum Required Clearance
0 - 50 kV	10 feet
51 - 200 kV	15 feet
201 - 300 kV	20 feet
301 - 500 kV	25 feet
501 - 750 kV	35 feet
751 - 1000 kV	45 feet

Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements
Direct push drill rig (Geoprobe), Hollow Stem Augers, hand tools, power tools	All personnel engaged in hazardous substance removal or other activities that expose or potentially expose them to hazardous substances or health hazards shall receive appropriate training as required by 29 CFR 1910.120(e), including, but not limited to, initial 40-hour, 8-hour Supervisor and annual 8-hour refresher training.	<ol style="list-style-type: none"> 1. Daily equipment inspection (i.e. hydraulic and compressed air lines, fire extinguishers, shut-off switches, back up sirens, tools) 2. Check PPE for abnormal wear and tear, rips, etc. 3. Look for objects that could pose potential trip hazards 4. Survey work area for overhead hazards, flying debris/particulates or splashes, vehicle traffic or heavy equipment operation, loud noises, etc.

ACTIVITY HAZARDS ANALYSIS TRAINING ACKNOWLEDGEMENT AND SIGN OFF

Read Carefully Before Signing Below

This is to acknowledge that I have had a chance to review a copy AHA 002 Drilling and have been trained on its contents. I understand a copy will be provided to me upon request. I will read and abide by all requirements of the aforementioned AHA and any additional rules and regulations of my job. I understand that working safely, complying with and obeying any and all Company safety rules, regulations or standards is a condition of my employment. Should I not comply with Company safety rules, regulations or standards, I am subject to disciplinary action including removal from the site and possible termination of employment.

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Activity Hazard Analysis (AHA) 003

Activity/Work Task: Monitoring Well Gauging and Sampling		Overall Risk Assessment Code (RAC) (Use highest code)				M		
Project Location: 3875 River Road, Tonawanda, NY		Risk Assessment Code (RAC) Matrix						
Project Number: 451586.02100	Severity	Probability						
Date Prepared: 03/19/2020		Frequent	Likely	Occasional	Seldom	Unlikely		
Prepared by (Name): Megan Clark	Catastrophic	E	E	H	H	M		
	Critical	E	H	H	M	L		
Reviewed by (Name/Title): Greg Ertel	Marginal	H	M	M	L	L		
Employer / GBU: Parsons	Negligible	M	L	L	L	L		
Notes: (Field Notes, Review Comments, etc.) References: PSHEP		Step 1: Review each "Hazard" with identified safety "Controls" and determine RAC (See above). The RAC is developed after correctly identifying all of the hazards and fully implementing all controls.						
		"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.				RAC Chart		
		"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible				E = Extremely High Risk		
						H = High Risk		
		Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.				M = Moderate Risk		
		L = Low Risk						
Job Steps	Hazards	Controls				P	S	R A C
General/Work Area	Slips, Trips, Falls	<ul style="list-style-type: none"> ▪ Use designated walkways whenever possible ▪ Avoid or remove all trip hazards by keeping materials/objects organized and out of walkways. ▪ Keep work surfaces dry ▪ Practice good housekeeping and keep work areas free of debris ▪ Do not talk or text on cellphone or look at documents while walking, focus on task. ▪ Avoid, remove, communicate and mark (if possible) hazards. ▪ Utilize adequate lighting ▪ Work slowly during transit. Jumping, running, and horseplay are prohibited. 				S	M	L

		<ul style="list-style-type: none"> ▪ Don't walk with hands in pocket. They can be used to catch you in the event of a slip, trip or fall. ▪ Wear ankle high safety shoes fully laced with good tread, keep hands out of pocket in case of fall. Do not carry more than 50 lbs by yourself, and plan your route. ▪ Clean up all spills immediately, and dispose properly. ▪ Personnel will notify the SSO of any unsafe conditions. 			
	Site Hazards Material Exposure	<ul style="list-style-type: none"> ▪ Training and safety awareness of potential exposure to contaminants at the site. ▪ Training of all personnel decontamination procedures. Provide adequate hygiene and decontamination supplies. ▪ Practice contamination avoidance, work upwind if feasible, limit contact to the extent possible, do not eat in areas with COC's, keep drink containers covered. ▪ Appropriate PPE will be worn dependent on-site conditions and actions levels. ▪ Monitoring breathing zone with PID and/or Multi-gas meter. ▪ Keep Safety Data Sheets for chemicals on site ▪ Must sign off on health and safety plan. ▪ Keep all sampling supplies and bottles upwind or crosswind. ▪ Visitor will be escorted around site by an individual with current 40 hour HAZWOPER training, unless cleared with the SSO. 	S	M	L
	Theft of Equipment/Vehicles	<ul style="list-style-type: none"> ▪ Do not leave equipment unattended. Place equipment in vehicle when not in use and ensure that vehicle is locked. ▪ Be aware of surrounding and keep lookout. ▪ Alert authorities of suspicious activities. 	U	M	L
	Heat/Cold Stress Biological Hazards Adverse Weather Uneven/Wet Terrain	<ul style="list-style-type: none"> ▪ Refer to AHA 001: Site Walk 			
Mobilization / Staging	Slips, Trips, and Falls	<ul style="list-style-type: none"> ▪ Refer to General/Work Area above. 	S	M	L

	Back Injury, Strains, Sprains, Foot Injuries	<ul style="list-style-type: none"> Observe proper lifting techniques – lift with legs, elbows in, and keep back straight. Team lift large/awkward loads. Use mechanical means to lift if the weight is awkward or the weight is greater than 50 pounds individually or 80 pounds for team lifting. Use mechanical devices (e.g., wagon, sled) to transport equipment over long distances. Take breaks frequently and rotate staff. Protect your knees with knee pads or other disposable padded material while kneeling on the ground. Keep equipment secure until needed. And avoid stacking. Wear steel-toed boots. 	S	M	L
Open Monitoring Well and Obtain Depth Measurements	Pinch Points	<ul style="list-style-type: none"> Don proper PPE (work gloves and nitrile gloves) and unlock/open well. Use appropriate tools (socket wrench, pry bar) to assist with opening flush mount wells, do not use bare hands. 	S	M	L
	Back Injury, Strains, Sprains	<ul style="list-style-type: none"> Protect your knees with knee pads or other disposable padded material while kneeling on the ground. Use proper lifting techniques. Keep back straight, bend the knees, and lift with the legs. Use two people if load is heavier than 50 lbs. or awkward to handle. 	S	M	L
	Site Hazards Material Exposure, Vapors, Splash Hazards	<ul style="list-style-type: none"> Review above measures for General/Work Area. Stand upwind when opening well and obtaining depth measurements. Obtain PID and/or Multi-gas readings of well inner casing prior to and immediately after removing inner cap. Record measurements on field log. Monitor breathing zone with PID and/or Multi-gas meter. Review Action Level Criteria per PSHEP. If elevated readings persist for greater than 5 minutes, close-up/cap well, stop work, and leave the area. Use appropriate decontamination procedures. Wear safety glasses and nitrile gloves. Reel-up water level monitoring device slowly. 	S	M	L

Groundwater Sampling	Sharp Objects (Tubing Cutter, Lab Glassware), Pinch Points	<ul style="list-style-type: none"> Wear cut-resistant gloves when cutting tubing, rope, or twine. Close and safely store cutters when not in use. Visually inspect cooler upon opening for signs of damaged bottleware and broken glass. Wear cut-resistant and nitrile gloves. Be aware of the potential presence of pinch points when handling equipment (e.g., opening and closing equipment cases, metal-to-metal contact). Use nitrile and work gloves when attaching affixing tubing to pump. For motorized pump, keep hands clear of moving parts. 	O	M	M
	Exposure to Contaminants and/or Preservatives	<ul style="list-style-type: none"> Wear nitrile gloves when handling all environmental media and bottleware. Visually inspect cooler upon opening for signs of damaged or improperly capped bottleware which may have leaked preservatives. 			
	Back Injury, Strains, Sprains	<ul style="list-style-type: none"> Protect your knees with knee pads or other disposable padded material while kneeling on the ground. Use proper lifting techniques. Keep back straight, bend the knees, and lift with the legs. Use two people if load is heavier than 50 lbs. or awkward to handle. 	S	M	L
	Site Hazards Material Exposure, Vapors, Splash Hazards	<ul style="list-style-type: none"> Review above measures for General/Work Area. Stand upwind of well location. Establish exclusion zone around monitoring well/sampling area. Monitor breathing zone continuously with PID and/or Multi-gas readings. Obtain periodic headspace measurements from well casing and from purge container. Use appropriate decontamination procedures. Wear nitrile gloves and safety glasses at all times while purging, handling bottleware, sampling, and containerizing groundwater. Ensure that purge water containers are properly sealed before moving/transporting, and use proper hazard communication. Lower and remove pump, tubing, and other equipment from well slowly. 	S	M	L
	Electrical Hazards	<ul style="list-style-type: none"> Inspect extension cords for pump and related devices prior to use. Check for any frays in the wire. Damaged cords should be taken out of service or replacement equipment should be obtained. If a car or marine battery is used as electrical source, check for signs of corrosion. Attach and tighten each cable one at a time (posited/red first, black/negative second). Avoid placing near water. Avoid working in heavy precipitation. Shut off or remove power sources to any electronic equipment and move to dry area. 	U	Ca	M

	Slips, Trips, and Falls	<ul style="list-style-type: none"> Review above measures for General/Work Area. Be aware of the location of tubing and electrical cords at all times. Places cones on top as appropriate. 	S	M	L
Packing Sample Coolers	Pinch points, Cuts from Glassware, Exposure to Preservatives	<ul style="list-style-type: none"> Maintain awareness of procedures and be attentive while handling glassware Use care and do not rush. Coolers can be heavy. Cooler lids and bottles can be pinch points. Watch trunk/tailgate as coolers are placed in field vehicles to ship samples. When packing coolers, inspect the sample containers for damage using a combination of cut-resistant and nitrile gloves. Visually inspect coolers before placing hands inside. Always cut away from body and hands. 	O	M	M
	Back Injury, Strains, Sprains	<ul style="list-style-type: none"> Use proper lifting techniques. Keep back straight, bend the knees, and lift with the legs. Use two people if load is heavier than 50 lbs. or awkward to handle. Use mechanical means (e.g., sled, wagon, hand cart) to move and transport sample coolers. 	S	M	L
Decontamination	Refer to AHA 006: Decontamination of Portable Tools				
IDW Management	Refer to AHA 008: IDW Management and Sampling				

Activity Hazard Analysis AHA 003 (Cont'd)

Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements
<p>Modified Level D- Long pants, safety glasses, hard hat (when required), steel-toed boots, nitrile outer gloves, cut proof inner gloves, safety glasses or goggles, high-visibility vest/clothing.</p> <p>Equipment: peristaltic pump, bladder pump, pump accessories (e.g., control box, air supply), marine battery, tubing, tubing cutters, water level meter, water quality meter, slug, water level transducers, sample bottleware, coolers, bags of ice.</p> <p>Depending on environment at project site: blanket, sunscreen, cold/hot drink, extra clothing, traffic</p>	<p>All personnel engaged in hazardous substance removal or other activities that expose or potentially expose them to hazardous substances or health hazards shall receive appropriate training as required by 29 CFR 1910.120(e), including, but not limited to, initial 40-hour, 8-hour Supervisor and annual 8-hour refresher.</p> <p>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. All personnel performing work onsite must have received the site specific orientation. Competent FA / CPR / AED responder will be onsite while all work is occurring at all times.</p> <p>STOP WORK AUTHORITY</p> <p>Right, Obligation and Responsibility</p>	<p>Ongoing environmental condition inspection (weather, wind, heat, cold).</p> <p>Ongoing personnel inspection (buddy system).</p> <p>Inspection of work area for general hazards as covered under this AHA prior to beginning any task.</p> <p>Take 5 Card when appropriate.</p> <p>Get Out and Look (GOAL)</p>

Activity Hazard Analysis AHA 003 (Cont'd)

warning signage, cones, hi-vis markers, etc, fire extinguisher, insect repellent.	Every single employee has the responsibility and the authority to STOP WORK at any time necessary to protect the safety or health of themselves, others, and the environment. Anyone can execute this responsibility without repercussions. We believe that the GOAL OF ZERO is possible with everyone's support and commitment.	Equipment inspection as necessary, recorded in field book. Complete daily calibration of PID, weekly calibration of Multi-gas meter, and monthly inspection of fire extinguishers.
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ACTIVITY HAZARDS ANALYSIS TRAINING ACKNOWLEDGEMENT AND SIGN OFF

Read Carefully Before Signing Below

This is to acknowledge that I have had a chance to review a copy AHA 003 Monitoring Well Gauging and Sampling and have been trained on its contents. I understand a copy will be provided to me upon request. I will read and abide by all requirements of the aforementioned AHA and any additional rules and regulations of my job. I understand that working safely, complying with and obeying any and all Company safety rules, regulations or standards is a condition of my employment. Should I not comply with Company safety rules, regulations or standards, I am subject to disciplinary action including removal from the site and possible termination of employment.

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Activity Hazard Analysis (AHA) 004

Activity/Work Task: Personnel Decontamination		Overall Risk Assessment Code (RAC) (Use highest code)				M	
Project Location: 3875 River Road, Tonawanda, NY		Risk Assessment Code (RAC) Matrix					
Project Number: 451586.02100	Severity	Probability					
Date Prepared: 03/19/2020		Frequent	Likely	Occasional	Seldom	Unlikely	
Prepared by (Name): Megan Clark	Catastrophic	E	E	H	H	M	
	Critical	E	H	H	M	L	
Reviewed by (Name): Greg Ertel	Marginal	H	M	M	L	L	
Employer / GBU: Parsons	Negligible	M	L	L	L	L	
Notes: (Field Notes, Review Comments, etc.) References: PSHEP, ESHARP Manual		Step 1: Review each "Hazard" with identified safety "Controls" and determine RAC (See above). The RAC is developed after correctly identifying all of the hazards and fully implementing all controls.					
		"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.				RAC Chart	
		"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible				E = Extremely High Risk	
		Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.				H = High Risk	
						M = Moderate Risk	
						L = Low Risk	
Job Steps	Hazards	Controls			P	S	R A C
Decontaminate personnel exiting from the Exclusion zone	<ul style="list-style-type: none"> ▪ General 	<ul style="list-style-type: none"> ▪ Personnel should dress in suitable safety equipment to reduce exposure. ▪ Collect rinse water and dispose of per appropriate standard operating procedures. ▪ Follow decontamination procedures. 			S	M	L
	<ul style="list-style-type: none"> ▪ Site Hazardous Material Exposure 	<ul style="list-style-type: none"> ▪ Training and safety awareness of potential exposure to chemicals of concern at the site and decontamination procedure. Review chemicals of concern. ▪ Training of all personnel decontamination procedures (if appropriate to visit). Provide adequate hygiene and decontamination supplies. ▪ Practice contamination avoidance, work upwind if feasible, limit contact to the extent possible, do not eat in areas with COC's, keep drink containers covered. 			S	M	L

		<ul style="list-style-type: none"> ▪ Appropriate PPE will be worn (e.g. tyvek, nitrile gloves, safety glass...). Workers should decontaminate PPE at the end of each work day or when leaving the site (e.g., boot wash station). ▪ Monitor breathing zone using PID. ▪ Must sign off on health and safety plan. ▪ Visitor will be escorted around site by an individual with current 40 hour 			
	<ul style="list-style-type: none"> ▪ Heat/Cold Stress ▪ Biological Hazards ▪ Adverse Weather ▪ Uneven/Wet Terrain 	<ul style="list-style-type: none"> ▪ Refer to AHA 001: General Site Walk 			
	<ul style="list-style-type: none"> ▪ Traffic (Including Pedestrians) 	<ul style="list-style-type: none"> ▪ Use cones, flags, and other traffic control devices to delineate work zone ▪ Don proper PPE, including reflective vest. ▪ Look both ways before exiting vehicle, have an emergency kit in the vehicle. 	O	M	M

Activity Hazard Analysis (AHA) 004 (Contd)

Activity/Work Task: Personnel Decontamination		Overall Risk Assessment Code (RAC) (Use highest code)			
Job Steps	Hazards	Controls	P	S	R A C
Decontaminate personnel exiting from the Exclusion zone (Contd)	<ul style="list-style-type: none"> Slips, Trips, Falls 	<ul style="list-style-type: none"> Workers will be aware of potentially slippery surfaces and tripping hazards. Workers will keep all areas clean and free of debris and dry to deter any unnecessary trips and falls. Avoid, remove, communication, and mark (if possible) hazards. Do not talk or text on cellphone or look at documents while walking, focus on task. Don't walk with hands in pocket. They can be used to catch you in the event of a slip, trip or fall. Work slowly during transit. Jumping, running, and horseplay are prohibited. Wear ankle high safety shoes fully laced with good tread, keep hands out of pocket in case of fall. Do not carry more than 50 lbs by yourself, and plan your route. Avoid working at dusk, dawn, or at night. Utilize adequate lighting when indoors. Clean up all spills immediately. Personnel will notify the SSO of any unsafe conditions. 	O	M	M
	<ul style="list-style-type: none"> Spill/leakage 	<ul style="list-style-type: none"> Workers will have berms or spill absorbent pads nearby to prevent the spread of contaminated water. Conduct decon activities in flat areas with impervious surfaces (concrete, asphalt, etc) and away from bare ground, surface water, and catch basins. Decontamination area will be designed to minimize exposure and maintain spill containment. 	U	Cr	L
	<ul style="list-style-type: none"> Splash Hazards/Eye Injury 	<ul style="list-style-type: none"> PPE (safety glasses, splash goggles) will be worn. 	S	Cr	M

Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements
<p>Depending on environment at project site: blanket, sunscreen, cold/hot drink, extra clothing, traffic warning signage, cones, hi-vis markers, etc, fire extinguisher, insect repellent.</p> <p>Decontamination equipment – bucket, brush, alconox, water PPE (Level D) - Long pants, safety glasses, hard hat (in presence of heavy equipment), high-visibility vest/clothing, steel-toed boots, gloves, goggles.</p>	<p>All personnel engaged in hazardous substance removal or other activities that expose or potentially expose them to hazardous substances or health hazards shall receive appropriate training as required by 29 CFR 1910.120(e), including, but not limited to, initial 40-hour, 8-hour Supervisor and annual 8-hour refresher.</p> <p>Medical qualification, training and fit-testing must be received on an annual basis for individuals that wear a respirator. If an individual wears a respirator more than 30 days per year, or they are exposed at or above the Permissible Exposure Limit (PEL) of a chemical for more than 30 days in a year, then they must participate in a Medical Surveillance Program as required by 29 CFR 1910.120(f).</p> <p>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. All personnel performing work onsite must have received the site specific orientation. Competent FA / CPR / AED responder will be onsite while all work is occurring at all times.</p> <p>STOP WORK AUTHORITY</p> <p>Right, Obligation and Responsibility</p> <p>Every single employee has the responsibility and the authority to STOP WORK at any time necessary to protect the safety or health of themselves, others, and the environment. Anyone can execute this responsibility without repercussions. We believe that the GOAL OF ZERO is possible with everyone's support and commitment.</p>	<p>Ongoing environmental condition inspection (weather, wind, heat, cold).</p> <p>Ongoing personnel inspection (buddy system)</p> <p>Inspection of work area for general hazards as covered under this AHA prior to beginning any task.</p> <p>Take 5 Card when appropriate</p> <p>Get Out and Look (GOAL)</p> <p>Equipment inspection as necessary, recorded in field book. Complete daily PID calibration and monthly fire extinguisher inspections.</p>

ACTIVITY HAZARDS ANALYSIS TRAINING ACKNOWLEDGEMENT AND SIGN OFF

Read Carefully Before Signing Below

This is to acknowledge that I have had a chance to review a copy AHA 004 Personnel Decontamination and have been trained on its contents. I understand a copy will be provided to me upon request. I will read and abide by all requirements of the aforementioned AHA and any additional rules and regulations of my job. I understand that working safely, complying with and obeying any and all Company and Honeywell safety rules, regulations or standards is a condition of my employment. Should I not comply with Company and/or Honeywell safety rules, regulations or standards, I am subject to disciplinary action including removal from the site and possible termination of employment.

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Activity Hazard Analysis (AHA) 005

Activity/Work Task: Motor Vehicle Operations		Overall Risk Assessment Code (RAC) (Use highest code)				L						
Project Location: 3875 River Road, Tonawanda, NY		Risk Assessment Code Matrix										
Job Number: 451586	Severity	Probability										
Date Prepared: 03/19/2020		Frequent	Likely	Occasional	Seldom	Unlikely						
Updated by: Megan Clark		Catastrophic	E	E	H	H	M					
Reviewed by (Name/Title): Greg Ertel		Critical	E	H	H	M	L					
		Marginal	H	M	M	L	L					
Notes: (Field Notes, Review Comments, etc.)	Negligible	M	L	L	L	L						
		<p>Step 1: Review each "Hazard" with identified safety "Controls" and determine RAC (See above). The RAC is developed after correctly identifying all hazards and fully implementing all controls.</p> <p>P "Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.</p> <p>S "Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible</p> <p>Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.</p>										
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: center;">RAC Chart</th> </tr> <tr> <td style="background-color: #FF0000; color: white;">E = Extremely High Risk</td> </tr> <tr> <td style="background-color: #FFA500; color: white;">H = High Risk</td> </tr> <tr> <td style="background-color: #FFFF00; color: black;">M = Moderate Risk</td> </tr> <tr> <td style="background-color: #00FF00; color: black;">L = Low Risk</td> </tr> </table>					RAC Chart		E = Extremely High Risk	H = High Risk	M = Moderate Risk	L = Low Risk
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L = Low Risk												
Job Steps	Hazards	Controls				P	S	R A C				
Travel by Automobile	Lack of awareness	<ul style="list-style-type: none"> Use common sense. Don't be a target for criminals due to vulnerability. Avoid bringing/carrying large amounts of cash and valuables (leave them home). Put personal items out of sight in the trunk of the car. Gather as much information as possible about the location to which you are going. Travel during daylight hours if possible. Allow adequate time for delays due to construction, accidents, or other unforeseen circumstances. Drive defensively. Complete the ParsonsU driving modules. Drive appropriately for road, traffic, and weather conditions. Postpone travel as necessary. Perform walk-around before driving off. Check the weather forecast along route prior to departing. Use lights and wipers during inclement weather. Pay attention to unusual vehicle noises and parts that appear out-of-place or broken. Have these items/deficiencies checked out and repaired as soon as possible. 				S	M	L				

Job Steps	Hazards	Controls	P	S	R A C
Travel by Automobile	Operation of motor vehicle	<ul style="list-style-type: none"> Stay alert for animals crossing your path and signs indicating animal crossings. Be aware of surroundings while arriving and departing site, specifically potential truck traffic and pedestrian traffic from bike path on west side of River Road. Drivers must have a valid driver's license and wear a seat belt at all times. Get adequate rest prior to driving. Walk around vehicle before getting in and driving away. Use of communication devices (e.g., cell phone, radio) while driving is prohibited. Do not answer cell phone. If vehicle is rented, become familiar with all controls before driving. Ensure seat, mirrors, steering wheel, radios, and other controls are set before driving. Lock doors. Ensure windows and mirrors are cleaned as needed throughout trip. Wear sunglasses as necessary to reduce glare and fatigue. Pull over and rest in a safe location if experiencing signs of fatigue or drowsiness. Do not use cruise control on rainy, snowy, or icy roads. Park only in approved parking spaces or safe areas not within the equipment travel path. Use parking brake when parking on a slope or near road edge. When exiting vehicle, observe ground surface before stepping out, watching for ice, snow, water, cracks, and uneven surfaces. If ground is slippery, hold onto secure part of vehicle. Follow posted speed limits and other traffic controls. Do not tailgate. Ignore and avoid discourteous drivers. Do not aggravate or exchange gestures with persons in other vehicles. Consider carrying useful items in your vehicle such as extra clothing and water, snacks, rain gear, gloves, paper towels, windshield washer fluid, ice scraper/squeegee, jumper cables, first aid kit, tool kit, fire extinguisher. 	U	Cr	L
	Breakdown	<ul style="list-style-type: none"> Use common sense about your safety and security. Stay with your vehicle if it is safe to do so. Otherwise move away from the vehicle. Raise vehicle hood or attach something white to antenna or out the window to indicate help needed. Be cautious if persons stop to assist. Call 911 as necessary. Use emergency flashers and safety device such as reflective triangles to indicate presence of disabled vehicle. 	U	Cr	L
	Tire blowout	<ul style="list-style-type: none"> Grip steering wheel at first sign of trouble. Do not slam on brakes, but let the vehicle slow down itself as you work the vehicle off the road and out of traffic to the safest place possible. Do not turn off vehicle because that will disable the brakes and steering. Use emergency flashers and safety device such as reflective triangles to indicate presence of disabled vehicle. 	U	Cr	L

Job Steps	Hazards	Controls	P	S	R A C
Gas Station Refueling	Fire/fuel splashes or overflow	<ul style="list-style-type: none"> • Shut down vehicle prior to refueling. • No smoking while refueling. • Do not use cell phones or perform other activities that may distract you while refueling. • Remain outside the vehicle. • Position dispensing nozzle correctly and watch to ensure the gas is not overflowing. • Be careful not to spill or drip fuel while refueling. • Ensure clothing does not become contaminated with flammable or combustible fluids. Change clothing if it becomes contaminated. 	U	Cr	L
Jump Battery	Traffic/struck-by	<ul style="list-style-type: none"> • Ensure vehicles are safely positioned out of the flow of traffic. • Use emergency flashers and a safety device such as reflective triangles to indicate presence of disabled vehicle. • Do not stand between vehicles if possible, and do not stand in the line of traffic. 	U	Cr	L
	Fire or explosion	<ul style="list-style-type: none"> • Connect red (positive) jumper cable clamp to dead battery positive (+) post. • Connect red (positive) jumper cable clamp to live battery positive (+) post. • Connect black (negative) jumper cable clamp to live battery negative (-) post. • Connect black (negative) jumper cable clamp to clean metal part of disabled vehicle, not to negative (-) post of disabled vehicle. • When the disabled vehicle starts, remove the cable in the reverse order they were placed. • Wear gloves while working on vehicles. 	U	Cr	L
Tire Changing	Traffic/struck-by	<ul style="list-style-type: none"> • Pull over to a safe place, out of traffic, where there is sufficient room to change the flat tire, sacrificing the wheel rim if you have to. • Use emergency flashers and a safety device such as reflective triangles to indicate presence of disabled vehicle. • Call for help if necessary. • Do not attempt to change the tire yourself if it is unsafe to do so. 	U	Cr	L

Tire Changing	Musculoskeletal, puncture, cuts or other bodily injury	<ul style="list-style-type: none"> • Read the owner's manual for your vehicle to determine how to free the jack assembly, place the jack under the vehicle, and remove the spare tire. • Call for help if necessary. • Minimize the amount of time body parts are under the vehicle. • Wear gloves and place blanket, jacket, or other item on ground to keep clean and minimize cuts and scrapes. • Chock the wheels with chocks supplied with the jack assembly or with available rocks or wood. • Loosen the lug nuts prior to jacking the tire off the ground. • Remove the nut covers or plastic wheel cover if necessary to access the lug nuts. • For trucks, be aware of pinch points when unfolding rods to lower spare tire. • Lower the tire with enough slack to make the spare easier to reach. • Check the tire pressure as soon as it is accessible to ensure it is properly inflated. • If you have trouble lifting the spare tire onto the hub, use the lug wrench as a lever to lift the tire enough to place it on the hub. • Ensure lug nuts are tightened adequately and evenly, tightening in a diagonal pattern. • Lifting carefully, place flat tire in trunk, truck bed, or under truck in the opposite order of lowering the tire. • If the spare tire is not a full-size tire, it cannot be driven as fast or far as a full-size tire. • Repair/replace the full-size tire as soon as possible. 	U	M	L
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Equipment to Be Used	Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements
Motor vehicle	<p>All drivers are required to have a current valid driver's license, and all vehicles must have the required state vehicle registration and/or inspection documents.</p> <p>All employees operating a company vehicle are required to familiarize themselves with the contents of this AHA before starting a work activity.</p>	<p>Perform walk-around before driving off.</p> <p>Inspect all fluid level and air pressure in tires, adjust mirrors and seat positions appropriately, watch fuel level and fill up when level is low.</p>
<p>Emergency Equipment (list type of equipment and where equipment will be located):</p> <ul style="list-style-type: none"> • First aid kits-in vehicles • Fire extinguishers-vehicles • Cellular telephone 	Training: site safety briefing and daily tailgate safety briefings	<p>The contents of first aid kits should be checked prior to use on site and at least every three months to ensure they are complete, in good condition, and have not expired. First aid kit contents shall be replaced when used.</p> <p>Fire extinguishers should be inspected monthly and maintained as specified in NFPA 10</p>

ACTIVITY HAZARDS ANALYSIS TRAINING ACKNOWLEDGEMENT AND SIGN OFF

Read Carefully Before Signing Below

This is to acknowledge that I have had a chance to review a copy AHA 005 Motor Vehicle Operation and have been trained on its contents. I understand a copy will be provided to me upon request. I will read and abide by all requirements of the aforementioned AHA and any additional rules and regulations of my job. I understand that working safely, complying with and obeying any and all Company and Honeywell safety rules, regulations or standards is a condition of my employment. Should I not comply with Company and/or Honeywell safety rules, regulations or standards, I am subject to disciplinary action including removal from the site and possible termination of employment.

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Activity Hazard Analysis (AHA) 006

Activity/Work Task: Decontamination of Portable Tools		Overall Risk Assessment Code (RAC) (Use highest code)				M		
Project Location: 3875 River Road, Tonawanda, NY		Risk Assessment Code (RAC) Matrix						
		Severity	Probability					
Date Prepared: 03/19/2020			Frequent	Likely	Occasional	Seldom	Unlikely	
Prepared by: Megan Clark		Catastrophic	E	E	H	H	M	
		Critical	E	H	H	M	L	
Reviewed by (Name/Title): Greg Ertel		Marginal		M	M	L	L	
Employer: Parsons		Negligible	M	L	L	L	L	
Notes: (Field Notes, Review Comments, etc.) References: PSHEP, ESHARP Manual		Step 1: Review each "Hazard" with identified safety "Controls" and determine RAC (See above). The RAC is developed after correctly identifying all of the hazards and fully implementing all controls.						
		"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.					RAC Chart	
		"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible					E = Extremely High Risk	
							H = High Risk	
		Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.					M = Moderate Risk	
					L = Low Risk			
Job Steps	Hazards	Controls				P	S	R A C
General	Site Hazardous Material Exposure	<ul style="list-style-type: none"> Training and safety awareness of potential exposure to contaminants at the site and decontamination procedures. Appropriate PPE will be worn (e.g., gloves, splash goggles, Tyvek, etc.). Personnel will follow decontamination procedures. 				S	M	M
	Eye Injury	<ul style="list-style-type: none"> PPE (safety glass, etc.) will be worn. 				O	N	M
	Slips, Trips, Falls	<ul style="list-style-type: none"> Workers will be aware of potentially slippery surfaces and tripping hazards. Workers will keep all areas clean and free of debris to deter any unnecessary trips and falls. Personnel will clean up all spills immediately. Personnel will notify the SSO of any unsafe conditions. 				O	N	L

Activity Hazard Analysis (Cont'd)

Job Steps (Contd)	Hazards	Controls	P	S	R A C
Remove gross contamination with brush.	Damaging equipment or tools	<ul style="list-style-type: none"> To clean instrumentation: follow manufacturer's instructions. 	O	N	L
Place in decontamination bucket or rinse with decontamination solution	Spill/leakage	<ul style="list-style-type: none"> Workers will have berms or spill absorbent pads nearby to prevent the spread of contaminated water. Decontamination area will be designed to minimize exposure and maintain spill containment. 	O	N	L
Clean with wash solution	Chemical reaction with wash solution	<ul style="list-style-type: none"> A fire extinguisher will be located in an accessible location on site. Review the chemicals of concern and use appropriate wash solution. 	O	N	L
Rinse with water	Contamination remains	<ul style="list-style-type: none"> Personnel will repeat proper decontamination procedure. 	O	N	L

Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements
<p>Level D- Long pants, safety glasses, hard hat (in presence of heavy equipment), steel-toed boots. The following safety equipment is project dependent: gloves, goggles.</p>	<p><u>Training Requirements:</u></p> <p>All personnel engaged in hazardous substance removal or other activities that expose or potentially expose them to hazardous substances or health hazards shall receive appropriate training as required by 29 CFR 1910.120(e), including, but not limited to, initial 40-hour, 8-hour Supervisor and annual 8-hour refresher.</p> <p>Medical qualification, training and fit-testing must be received on an annual basis for individuals that wear a respirator. If an individual wears a respirator more than 30 days per year, or they are exposed at or above the Permissible Exposure Limit (PEL) of a chemical for more than 30 days in a year, then they must participate in a Medical Surveillance Program as required by 29 CFR 1910.120(f).</p> <p>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. All personnel performing work onsite must have received the site specific orientation. Competent FA / CPR / AED responder will be onsite while all work is occurring at all times.</p> <p><u>STOP WORK AUTHORITY</u></p> <p><i>Right, Obligation and Responsibility</i></p> <p>Every single employee has the responsibility and the authority to STOP WORK at any time necessary to protect the safety or health of themselves, others, and the environment. Anyone can execute this responsibility without repercussions. We believe that the GOAL OF ZERO is possible with everyone's support and commitment.</p>	

ACTIVITY HAZARDS ANALYSIS TRAINING ACKNOWLEDGEMENT AND SIGN OFF

Read Carefully Before Signing Below

This is to acknowledge that I have had a chance to review a copy AHA 006 Decontamination of Portable Tools and have been trained on its contents. I understand a copy will be provided to me upon request. I will read and abide by all requirements of the aforementioned AHA and any additional rules and regulations of my job. I understand that working safely, complying with and obeying any and all Company and Honeywell safety rules, regulations or standards is a condition of my employment. Should I not comply with Company and/or Honeywell safety rules, regulations or standards, I am subject to disciplinary action including removal from the site and possible termination of employment.

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Activity Hazard Analysis (AHA) 007

Activity/Work Task: CAMP Operations		Overall Risk Assessment Code (RAC) (Use highest code)				M	
Project Location: 3875 River Road, Tonawanda, NY		Risk Assessment Code (RAC) Matrix					
Project Number: 451586	Severity	Probability					
Date Prepared: 03/19/2020		Frequent	Likely	Occasional	Seldom	Unlikely	
Prepared by (Name): Megan Clark	Catastrophic	E	E	H	H	M	
	Critical	E	H	H	M	L	
Reviewed by (Name): Greg Ertel	Marginal	H	M	M	L	L	
Employer / GBU: Parsons	Negligible	M	L	L	L	L	
Notes: (Field Notes, Review Comments, etc.) References: PSHEP, ESHARP Manual		Step 1: Review each "Hazard" with identified safety "Controls" and determine RAC (See above). The RAC is developed after correctly identifying all of the hazards and fully implementing all controls.					
		"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.				RAC Chart	
		"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible				E = Extremely High Risk	
						H = High Risk	
		Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.				M = Moderate Risk	
						L = Low Risk	
Job Steps	Hazards	Controls			P	S	R A C
CAMP Operations / Ambient Monitoring	<ul style="list-style-type: none"> ▪ Vapors (Including Site COCs and calibration gasses), particulates 	<ul style="list-style-type: none"> ▪ Approach area where vapors are suspected from upwind direction and stay upwind/crosswind of potential sources of vapors. (Use flagging to indicate wind direction). Fill calibration gas in a well ventilated area, preferably outdoors. ▪ Inspection Requirements <ul style="list-style-type: none"> ○ Use a PM-10 aerosol and a mini RAE 3000 PID to monitor upwind and down-wind locations during drilling activities. Refer to PSHEP for action levels. ○ Use a mini RAE 3000 PID to monitor worker breathing zone during drilling activities. Refer to PSHEP for action levels. ○ Regularly inspect cal gas regulator, tedlar bag, and canister. 			S	M	L

		<ul style="list-style-type: none"> ○ Monitor workers breathing zone at a minimum of once every 30 minutes. 			
	<ul style="list-style-type: none"> ▪ Transport, Movement, and Use of Compressed Gasses 	<ul style="list-style-type: none"> ▪ Properly secure canisters within vehicle when transporting. ▪ Inspect canisters for signs of leaks and corrosion. ▪ Carefully transport canister to sampling area. ▪ Keep canisters away from ignition or heat sources. ▪ Detach regulator from canister when not in use. ▪ Slowly open valves during operation. 	S	Cr	M
	<ul style="list-style-type: none"> ▪ Working in Vicinity of Indoor/Outdoor Vehicle Traffic/Active Equipment Operation 	<ul style="list-style-type: none"> ▪ Keep out of travel paths of vehicles and roadways, where possible. ▪ Set up traffic cones and flagging to secure work area ▪ Wear Level D PPE and reflective safety vest ▪ Maintain eye contact/communication with facility equipment/vehicle operators. 	S	Cr	M
	<ul style="list-style-type: none"> ▪ Heat/Cold Stress ▪ Biological Hazards ▪ Adverse Weather ▪ Uneven/Wet Terrain 	<ul style="list-style-type: none"> ▪ Refer to AHA 001: General Site Walk 			
	<ul style="list-style-type: none"> ▪ Slips, Trips, Falls 	<ul style="list-style-type: none"> ▪ Workers will be aware of potentially slippery surfaces and tripping hazards. Keep all areas dry, clean and free of debris to deter any unnecessary trips and falls. ▪ Avoid, remove, communication, and mark (if possible) hazards. ▪ Do not talk or text on cellphone or look at documents while walking, focus on task. ▪ Don't walk with hands in pocket. They can be used to catch you in the event of a slip, trip or fall. ▪ Work slowly during transit. Jumping, running, and horseplay are prohibited. ▪ Wear ankle high safety shoes fully laced with good tread, keep hands out of pocket in case of fall. Do not carry more than 50 lbs by yourself, and plan your route. ▪ Clean up all spills immediately and dispose properly. ▪ Avoid working at dusk, dawn, or at night. Utilize adequate lighting when indoors. ▪ Personnel will notify the SSO of any unsafe conditions. 	O	M	M

	<ul style="list-style-type: none"> Manual Lifting/Ergonomic Hazards 	<ul style="list-style-type: none"> When lifting objects, lift using knees not back. For repetitive lifting tasks, the use of lifting braces/supports should be considered. Plan storage and staging to minimize lifting or carrying distances. Have someone assist with the lift— especially for heavy (> 50lbs.) or awkward loads. (Note: If employee is not capable of carrying 50 lbs. or less, seek assistance.). Make sure the path of travel is clear prior to the lift. Use hand carts to move large, awkward loads Avoid carrying heavy objects above shoulder level. 	S	M	L
	<ul style="list-style-type: none"> Pinch Points 	<ul style="list-style-type: none"> Be aware of potential pinch points. Utilize leather palmed gloves for all material handling. 	S	M	L
Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)		Inspection Requirements		
<ul style="list-style-type: none"> Depending on environment at project site: blanket, sunscreen, cold/hot drink, extra clothing, traffic warning signage, cones, hi-vis markers, etc, fire extinguisher, insect repellent. Level D PPE - Long pants, safety glasses, hard hat (in presence of heavy equipment), high-visibility vest/clothing, steel-toed boots, gloves, goggles. Equipment: Particulate monitor, PID, calibration gasses, tripod. 	<p>All personnel engaged in hazardous substance removal or other activities that expose or potentially expose them to hazardous substances or health hazards shall receive appropriate training as required by 29 CFR 1910.120(e), including, but not limited to, initial 40-hour, 8-hour Supervisor and annual 8-hour refresher.</p> <p>Medical qualification, training and fit-testing must be received on an annual basis for individuals that wear a respirator. If an individual wears a respirator more than 30 days per year, or they are exposed at or above the Permissible Exposure Limit (PEL) of a chemical for more than 30 days in a year, then they must participate in a Medical Surveillance Program as required by 29 CFR 1910.120(f).</p> <p>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. All personnel performing work onsite must have received the site specific orientation. Competent FA / CPR / AED responder will be onsite while all work is occurring at all times.</p> <p>STOP WORK AUTHORITY</p> <p>Right, Obligation and Responsibility</p> <p>Every single employee has the responsibility and the authority to STOP WORK at any time necessary to protect the safety or health of themselves, others, and the environment. Anyone can execute this responsibility without repercussions. We believe that the GOAL OF ZERO is possible with everyone's support and commitment.</p>		<ul style="list-style-type: none"> Ongoing environmental condition inspection (weather, wind, heat, cold). Ongoing personnel inspection (buddy system) Inspection of work area for general hazards as covered under this AHA prior to beginning any task. Take 5 Card when appropriate Get Out and Look (GOAL) Equipment inspection as necessary, recorded in field book. Inspection condition of CAMP equipment daily. Complete daily calibration of PID, weekly calibration of Multi-gas meter, and monthly inspection of fire extinguishers. 		

ACTIVITY HAZARDS ANALYSIS TRAINING ACKNOWLEDGEMENT AND SIGN OFF

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Activity Hazard Analysis (AHA) 008

Activity/Work Task: IDW Management and Sampling		Overall Risk Assessment Code (RAC) (Use highest code)				M		
Project Location: 3875 River Road, Tonawanda, NY		Risk Assessment Code (RAC) Matrix						
Project Number: 451586		Severity	Probability					
Date Prepared: 03/19/2020			Frequent	Likely	Occasional	Seldom	Unlikely	
Prepared by (Name): Megan Clark		Catastrophic	E	E	H	H	M	
		Critical	E	H	H	M	L	
Reviewed by (Name): Greg Ertel		Marginal	H	M	M	L	L	
Employer / GBU: Parsons		Negligible	M	L	L	L	L	
Notes: (Field Notes, Review Comments, etc.) References: PSHEP, ESHARP Manual		Step 1: Review each "Hazard" with identified safety "Controls" and determine RAC (See above). The RAC is developed after correctly identifying all of the hazards and fully implementing all controls.						
		"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.					RAC Chart	
		"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible					E = Extremely High Risk	
							H = High Risk	
		Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.					M = Moderate Risk	
		L = Low Risk						
Job Steps	Hazards	Controls				P	S	R A C
General Activities/Work Zone	<ul style="list-style-type: none"> ▪ Working in Vicinity of Indoor/Outdoor Vehicle Traffic/Active Equipment Operation 	<ul style="list-style-type: none"> ▪ Keep out of travel paths of vehicles and roadways, where possible. ▪ Set up traffic cones and flagging to secure work area ▪ Wear Level D PPE and reflective safety vest ▪ Maintain eye contact/communication with facility and subcontractor's equipment/vehicle operators 				S	Cr	M
	<ul style="list-style-type: none"> ▪ Slips, Trips, Falls 	<ul style="list-style-type: none"> ▪ Use designated walkways whenever possible ▪ Avoid or remove all trip hazards by keeping materials/objects organized and out of walkways. ▪ Keep work surfaces dry ▪ Practice good housekeeping and keep work areas free of debris 				S	Cr	M

		<ul style="list-style-type: none">When entering residential and commercial buildings, be extra vigilant for hazards, particularly slipping hazards. Do not talk or text on cellphone or look at documents while walking, focus on task.Avoid, remove, communicate and mark (if possible) hazards.Utilize adequate lightingWork slowly during transit. Jumping, running, and horseplay are prohibited.Don't walk with hands in pocket. They can be used to catch you in the event of a slip, trip or fall.Wear ankle high safety shoes fully laced with good tread, keep hands out of pocket in case of fall. Do not carry more than 50 lbs by yourself, and plan your route.Clean up all spills immediately, and dispose properly.Personnel will notify the SSO of any unsafe conditions.			
	<ul style="list-style-type: none">Site Hazards Material Exposure	<ul style="list-style-type: none">Training and safety awareness of potential exposure to contaminants at the site.Training of all personnel decontamination procedures (if appropriate to visit). Provide adequate hygiene and decontamination supplies.Practice contamination avoidance, work upwind if feasible, limit contact to the extent possible, do not eat in areas with COC's, keep drink containers covered.Appropriate PPE will be worn dependent on-site conditions and actions levels.Monitoring breathing zone with PID and/or MultiRAE.Have support personnel remain upwind of the work areaKeep Safety Data Sheets for chemicals on siteMust sign off on health and safety plan.Keep all sampling supplies and bottles upwind or crosswind.Visitor will be escorted around site by an individual with current 40 hour HAZWOPER training, unless cleared with the SSO.	S	M	L
	<ul style="list-style-type: none">Heat/Cold StressBiological HazardsAdverse WeatherUneven/Wet Terrain	<ul style="list-style-type: none">Refer to AHA-001: General Site Walk			
	Unloading, Loading, Movement, and Transport of Drums/Totes	<ul style="list-style-type: none">Slips, Trips, and Falls	<ul style="list-style-type: none">Refer to general slips, trips, and falls hazards in General/Work Area job step above.Be aware of footing at all times. Clear areas of obstacles before moving through.	S	Cr
	<ul style="list-style-type: none">Falling/Sliding Items	<ul style="list-style-type: none">Secure drums/totes in truck bed prior to transport, in particular, if empty. Position items in front of truck bed opposed to back, as braking hard could cause them to slide forward and crash into cab of truck.	S	Cr	M

		<ul style="list-style-type: none"> Wear proper PPE when lifting and moving empty drums and totes – hard hat, safety glasses, steel toed boots, and heavy work gloves. 			
	<ul style="list-style-type: none"> Hand Injury and Pinch Points 	<ul style="list-style-type: none"> Be aware of potential pinch points. Used thick gloves for all material handling. 	S	M	L
	<ul style="list-style-type: none"> Foot Injury 	<ul style="list-style-type: none"> While moving and transporting drums/totes, keep feet clear of drums. Safety-toed boots should be worn when moving and transporting drums. 	S	M	L
	<ul style="list-style-type: none"> Ergonomics/Back Strains 	<ul style="list-style-type: none"> Use mechanical means (hand carts, trucks) to lift if the weight is awkward or the weight is greater than 50 pounds individually or 80 pounds for team lifting. Where possible, avoid lifting drum or totes with filled contents. Transfer contents to staging area containers using sump/trans pump. Avoid performing the same strenuous activity for extended periods. 	O	M	M
	<ul style="list-style-type: none"> Environmental Release 	<ul style="list-style-type: none"> Inspect Spill Kit supplies & locate spill kits prior to performing maintenance. Properly secure drums and totes during transport. 	U	M	L
Opening, Closing, and Filling Drums/Totes (Solid or Liquid Contents)	<ul style="list-style-type: none"> Pinch Points/Hand Injury 	<ul style="list-style-type: none"> Be aware of potential pinch points. Use proper tools for opening/closing lids. Use thick work gloves. 	U	M	L
	<ul style="list-style-type: none"> Liquid Spills and Splashes, Environmental Release 	<ul style="list-style-type: none"> Care will be taken that the liquid being placed in the drum does not spill onto the top of the drum or the ground. Use a drum funnel to assist in the task. Do not overfill the funnel. Secondary containment will be used for added protection, such as a spill pallet or plastic sheeting contained by berms. If a pump is used fill drum/tote, ensure that pump hosing is sufficient secured inside of tank or drum, using clamps where necessary. Do not turn on pump until hosing is secured into drum/tote. Turn off pump when not in use. Secondary containment will be used for added protection, such as a spill pallet or plastic sheeting contained by berms. Wear safety glasses when filling drums/totes. 	U	M	L
	<ul style="list-style-type: none"> Electrical Hazards 	<ul style="list-style-type: none"> Inspect extension cords for equipment prior to use. Check for any frays in the wire. Damaged cords should be taken out of service. If a car or marine battery is used as electrical source for pump, check for signs of corrosion. Attach and tighten each cable one at a time (posited/red first, black/negative second). Avoid placing near water. 	U	Ca	M
	<ul style="list-style-type: none"> Ergonomics/Back Strains, Eye Injury 	<ul style="list-style-type: none"> Personnel will use caution when shoveling dirt into a drum to avoid spraying rocks or dirt. If possible, only one worker will fill a drum at a time and take turns shoveling. Wear safety glasses when filling drums/totes. 	U	M	L
	<ul style="list-style-type: none"> Site Hazards Material Exposure/Vapors 	<ul style="list-style-type: none"> Wear appropriate PPE when opening drums (nitrile and work gloves, steel toed boots, safety glasses, hard hat). Screen headspace below drum/tote lid or cover with PID and/or MultiRAE upon opening to assess for the presence of strong vapors. Upon opening lid and filling contents, continuously monitoring breathing zone with PID and/or MultiRAE. 	S	M	L
Waste Characterization Sampling (Drums/Totes)	<ul style="list-style-type: none"> Site Hazards Material Exposure/Vapors 	<ul style="list-style-type: none"> Wear appropriate PPE when opening drums (nitrile and work gloves, steel toed boots, safety glasses, hard hat) and when opening frac tank hatch. 	O	M	M

		<ul style="list-style-type: none"> Screen headspace of drum/tote and below hatch of frac tank before fully opening with PID and/or MultiRAE upon opening to assess for the presence of strong vapors or hazardous atmospheres. Continuously monitoring breathing zone with PID and/or MultiRAE during sampling activities and when drums/tote/frac tank are open. If possible, position body upwind of drum, tote, or frac tank hatch. 			
	<ul style="list-style-type: none"> Pinch Points and Cuts from Glassware, Exposure to Preservatives 	<ul style="list-style-type: none"> Wear appropriate gloves (nitrile and cut-resistant gloves) and safety glasses when opening cooler and when handling bottlewear that is either glass, or contains preservatives. Visually inspect cooler upon opening and while packaging for signs of damaged bottleware and broken glass. 	O	M	M
	<ul style="list-style-type: none"> Slips, Trips, and Falls 	<ul style="list-style-type: none"> Refer to control measures listed above in General/Work Area job steps for general slips, trips, and falls. Position bottleware, coolers, and sampling apparatus so as not to create a trip hazard. Keep work surfaces dry when possible or wear non-slip rubber boots. Be aware of uneven footing. 	S	Cr	M
	<ul style="list-style-type: none"> Splash Hazards, Environmental Release 	<ul style="list-style-type: none"> Secondary containment will be used for added protection, such as a spill pallet or plastic sheeting contained by berms. Wear safety glasses and nitrile gloves. Inspect Spill Kit supplies & locate spill kits prior to performing maintenance. Secure and close drums/totes when not in use. 	U	M	L
Oversight of Pick-up/Transportation of Filled Drums and Totes	<ul style="list-style-type: none"> Pinch Points, Hand Injury 	<ul style="list-style-type: none"> Be aware of potential pinch points. Used thick gloves for all opening and closing drums. 	S	M	L
	<ul style="list-style-type: none"> Ergonomics/Back Strains 	<ul style="list-style-type: none"> Do not attempt to move drums unless with appropriate mechanical means (e.g., drum dolly). Do not attempt to lift drums into truck manually. Subcontractor shall provide lift gate on truck. 	S	M	L
	<ul style="list-style-type: none"> Vehicle and heavy equipment traffic in work area 	<ul style="list-style-type: none"> Be mindful of surroundings. Keep out of travel paths of vehicles and roadways, where possible. Set up traffic cones and flagging to secure work area Wear Level D PPE and reflective safety vest Maintain eye contact/communication with facility and subcontractor's equipment/vehicle operators 	S	Cr	M
Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)		Inspection Requirements		
Depending on environment at project site: blanket, sunscreen, cold/hot drink, extra clothing, traffic warning signage, cones, hi-vis markers,	All personnel engaged in hazardous substance removal or other activities that expose or potentially expose them to hazardous substances or health hazards shall receive appropriate training as required by 29 CFR 1910.120(e), including, but not limited to, initial 40-hour, 8-hour Supervisor and annual 8-hour refresher.		Ongoing environmental condition inspection (weather, wind, heat, cold). Ongoing personnel inspection (buddy system)		

<p>etc, fire extinguisher, insect repellent.</p> <p>Level D PPE - Long pants, safety glasses, hard hat (in presence of heavy equipment), high-visibility vest/clothing, steel-toed boots, gloves, goggles.</p>	<p>Medical qualification, training and fit-testing must be received on an annual basis for individuals that wear a respirator. If an individual wears a respirator more than 30 days per year, or they are exposed at or above the Permissible Exposure Limit (PEL) of a chemical for more than 30 days in a year, then they must participate in a Medical Surveillance Program as required by 29 CFR 1910.120(f).</p> <p>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. All personnel performing work onsite must have received the site specific orientation. Competent FA / CPR / AED responder will be onsite while all work is occurring at all times.</p> <p>STOP WORK AUTHORITY</p> <p>Right, Obligation and Responsibility</p> <p>Every single employee has the responsibility and the authority to STOP WORK at any time necessary to protect the safety or health of themselves, others, and the environment. Anyone can execute this responsibility without repercussions. We believe that the GOAL OF ZERO is possible with everyone's support and commitment.</p>	<p>Inspection of work area for general hazards as covered under this AHA prior to beginning any task. Inspect drugs and totes for any signs of bulging daily. Inspect conditions of frac tank (rails and steps)</p> <p>Take 5 Card when appropriate</p> <p>Get Out and Look (GOAL)</p> <p>Equipment inspection as necessary, recorded in field book. Complete daily calibration of PID, weekly calibration of Multi-gas meter, and monthly inspection of fire extinguishers.</p>
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ACTIVITY HAZARDS ANALYSIS TRAINING ACKNOWLEDGEMENT AND SIGN OFF

Read Carefully Before Signing Below

This is to acknowledge that I have had a chance to review a copy AHA 008 IDW Management and Sampling and have been trained on its contents. I understand a copy will be provided to me upon request. I will read and abide by all requirements of the aforementioned AHA and any additional rules and regulations of my job. I understand that working safely, complying with and obeying any and all Company safety rules, regulations or standards is a condition of my employment. Should I not comply with Company safety rules, regulations or standards, I am subject to disciplinary action including removal from the site and possible termination of employment.

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Activity Hazard Analysis (AHA) 009

Activity/Work Task: Oversight of Test Pit Activities		Overall Risk Assessment Code (RAC) (Use highest code)					M	
Project Location: 3875 River Road, Tonawanda, NY		Risk Assessment Code (RAC) Matrix						
Contract Number:		Severity	Probability					
Date Prepared (MM/DD/YY): 03/19/2020			Frequent	Likely	Occasional	Seldom	Unlikely	
Prepared by (Name/Title): Megan Clark		Catastrophic	E	E	H	H	M	
		Critical	E	H	H	M	L	
Reviewed by (Name/Title): Greg Ertel		Marginal	H	M	M	L	L	
Employer / GBU: Parsons		Negligible	M	L	L	L	L	
Notes: Oversight of contractor excavating test pits and a survey crew marking utilities Minimum PPE includes: Hard hat, High Vis Vest, Safety Shoes and Glasses, Long sleeves FRC, gloves suitable for the task References: PSHEP		Step 1: Review each "Hazard" with identified safety "Controls" and determine RAC (See above). The RAC is developed after correctly identifying all of the hazards and fully implementing all controls.						
		"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.					RAC Chart	
		"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible					E = Extremely High Risk	
							H = High Risk	
		Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.					M = Moderate Risk	
							L = Low Risk	
Job Steps	Hazards	Controls				P	S	RAC
1) Evaluation of work site, establish work zones	Traffic	Be seen Be Aware! Wear a brightly colored traffic vest and hard hat at all times while on site. Look around corners of vehicle, equipment or buildings before entering areas of traffic. Have designated routes of travel, post and enforce site speed Limit. Parking facing out if possible use spotters when backing.				U	Cr	L
	Working around equipment, buildings and piping	Review Site Layout and work area: Make sure all utilities have been identified and we maintain adequate distance				S	Cr	M
	Slips Trips and Fall	Ensure that working surface is free of debris eliminating slips, trips and falls and there is adequate room to maneuver safely. Discuss tasks at tailgate and coordinate work activities.				S	M	L

Activity/Work Task: Oversight of Test Pit Activities		Overall Risk Assessment Code (RAC) (Use highest code)				M
Project Location: 3875 River Road, Tonawanda, NY		Risk Assessment Code (RAC) Matrix				
	Site Security	Maintain integrity of fence, avoid confrontation with trespassers if present. Call Police if necessary. All visitors must check in before starting work.	S	M		L
2) Oversight of Excavation	Slip, trip & fall	Conduct area survey and follow plan for excavation. Continuous housekeeping during operations.	S	M		L
	Noise	Wear hearing protection (ear muffs or foam inserts) if difficult to communicate or working around high noise equipment	S	M		L
	Electrical Contact with overhead lines	Potential for contact with electrical systems. Stay out of the exclusion zone unless trained and authorized to do so. Only trained employees will be involved in electrical work. Identify and point out low OH lines to contractor as part of orientation.	S	M		L
3) Begin Test Pit Activities	Slip, trip & fall	Conduct area survey and follow plan for excavation. Continuous housekeeping during operations.	S	M		L
	Contact & entanglement with hazards and points of operation from hand or power tools	Inspect equipment before use, only use trained operators. Follow manufacturer's instructions. Be very aware of the dangers of loose clothing near rotating machinery.	S	Cr		M
	Noise	Wear hearing protection (ear muffs or foam inserts).	U	M		L
	Head bump	Wear hard hat to protect head from head bump hazards or falling equipment.	S	M		L
	Lifting – muscle/joint strain	Use proper body mechanics when carrying equipment or packages. Avoid bending at the waist, twisting or awkward postures. Get a firm grip on the load and plan your route. Use two person lift for loads greater than 50 pounds	S	M		L
	Struck-by or caught between equipment	Stay a safe distance from contractors, notify them and be sure it is safe before approaching	U	C		L
4) Soil Sampling	Cuts and Abrasions	Wear cut resistant gloves when conducting sampling activities	S	M		L
	Contaminated materials	Wear appropriate PPE, including nitrile gloves	U	M		L

Activity/Work Task: Oversight of Test Pit Activities		Overall Risk Assessment Code (RAC) (Use highest code)			M
Project Location: 3875 River Road, Tonawanda, NY		Risk Assessment Code (RAC) Matrix			
	Cuts and Abrasions	Wear cut resistant gloves when conducting sampling activities	U	M	L
	Contaminated materials	Wear appropriate PPE, including nitrile gloves			
Equipment to be Used	Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements			
High Visibility Safety Vest, Level D with long sleeves, FRC Protective Gloves – Cut-resistant, nitriles as needed, Hearing Protection - Ear plugs or muffs as needed, Excavator and related equipment, survey equipment	Review HASP Equipment operator	Inspect equipment and site at the beginning of the day, prior to beginning work and mid-day. Daily Pre-use Equipment check and PPE			

ACTIVITY HAZARDS ANALYSIS TRAINING ACKNOWLEDGEMENT AND SIGN OFF

Read Carefully Before Signing Below

This is to acknowledge that I have had a chance to review a copy AHA 009 Oversight of Test Pit Activities and have been trained on its contents. I understand a copy will be provided to me upon request. I will read and abide by all requirements of the aforementioned AHA and any additional rules and regulations of my job. I understand that working safely, complying with and obeying any and all Company safety rules, regulations or standards is a condition of my employment. Should I not comply with Company safety rules, regulations or standards, I am subject to disciplinary action including removal from the site and possible termination of employment.

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Activity Hazard Analysis (AHA) 010

Activity/Work Task: Well Maintenance and Repair		Overall Risk Assessment Code (RAC) (Use highest code)					L
Project Location: 3875 River Road, Tonawanda, NY		Risk Assessment Code (RAC) Matrix					
Contract Number:	Severity	Probability					
Date Prepared (MM/DD/YY): 03/19/2020		Frequent	Likely	Occasional	Seldom	Unlikely	
Prepared by (Name/Title): Megan Clark	Catastrophic	E	E	H	H	M	
	Critical	E	H	H	M	L	
Reviewed by (Name/Title): Greg Ertel	Marginal		M	M	L	L	
Employer / GBU: Parsons	Negligible	M	L	L	L	L	
Notes: (Field Notes, Review Comments, etc.) References:		Step 1: Review each "Hazard" with identified safety "Controls" and determine RAC (See above). The RAC is developed after correctly identifying all of the hazards and fully implementing all controls.					
		"Probability" is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.				RAC Chart	
		"Severity" is the outcome/degree if an incident, near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible				E = Extremely High Risk	
						H = High Risk	
						M = Moderate Risk	
Step 2: Identify the RAC (Probability/Severity) as E, H, M, or L for each "Hazard" on AHA. Annotate the overall highest RAC at the top of AHA.				L = Low Risk			

Job Steps	Hazards	Controls	P	S	R A C
Access site monitoring wells	<ul style="list-style-type: none"> Pinch points Sharp Edges Slip/trip/falls Hand Injury Splash/spill/direct contact with water 	<ul style="list-style-type: none"> Use gloves to protect hands from sharp edges and direct contact when appropriate Maintain clear vision of where you are walking, maintain good housekeeping Wear work gloves to loosen bolts and pry lid open, place pry bar between lid and ground surface before grabbing lid with gloved hand Wear appropriate safety equipment (i.e., goggles, gloves, boots) as appropriate for reducing risk of contamination. 	S	M	L

Note: This is a separate page. Keep as first page only. If you use and it continues to the next page, paste the text on the following continue page.

Activity Hazard Analysis (AHA) Example (Contd)

Job Steps (Contd)	Hazards	Controls	P	S	R A C
	<ul style="list-style-type: none"> Contact with water Occasional Vehicular traffic Lifting 	<ul style="list-style-type: none"> Wear safety glasses, latex inner and nitrile outer gloves Wear brightly colored traffic vest when appropriate or use traffic cones to block off the area Prepare and think through each lift, use good body mechanics 	S	M	L
Breaking concrete apron	<ul style="list-style-type: none"> Flying debris Contact with soil Lifting Slip/trip/fall 	<ul style="list-style-type: none"> Wear safety glasses, appropriate gloves Practice good housekeeping, watch where you step Personnel will utilize proper lifting techniques or ask for assistance with moving/lifting objects. 	S	M	L
Install Concrete apron	<ul style="list-style-type: none"> Slips/trips/falls Splash and spill hazards Back strain 	<ul style="list-style-type: none"> Wear safety glasses, appropriate gloves Practice good housekeeping, watch where you step Personnel will utilize proper lifting techniques or ask for assistance with moving/lifting objects. 	S	M	L
Well painting	<ul style="list-style-type: none"> Slips/trips/falls 	<ul style="list-style-type: none"> Wear safety glasses, appropriate gloves Practice good housekeeping, watch where you step 	S	M	L
General well repair	<ul style="list-style-type: none"> Pinch points Sharp Edges Slip/trip/falls Hand Injury 	<ul style="list-style-type: none"> Use gloves to protect hands from sharp edges and direct contact when appropriate Maintain clear vision of where you are walking, maintain good housekeeping Wear work gloves to loosen bolts and pry lid open, place pry bar between lid and ground surface before grabbing lid with gloved hand 	S	M	L
Equipment to be Used		Training Requirements/Competent or Qualified Personnel name(s)	Inspection Requirements		
Hard hat, safety boots, protective glasses, high visibility clothing		All persons must have site specific training annually and carry card showing completion while on site.	Parsons will observe all subcontractor activities while on site. Honeywell will inspect on intervals daily.		

ACTIVITY HAZARDS ANALYSIS TRAINING ACKNOWLEDGEMENT AND SIGN OFF

Read Carefully Before Signing Below

This is to acknowledge that I have had a chance to review a copy AHA 010 Well Maintenance and Repair and have been trained on its contents. I understand a copy will be provided to me upon request. I will read and abide by all requirements of the aforementioned AHA and any additional rules and regulations of my job. I understand that working safely, complying with and obeying any and all Company safety rules, regulations or standards is a condition of my employment. Should I not comply with Company safety rules, regulations or standards, I am subject to disciplinary action including removal from the site and possible termination of employment.

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ATTACHMENT D CONTRACTOR MODEL SUBCONTRACTOR SAFETY, HEALTH, AND ENVIRONMENT PLAN (SSHEP)

HAZWOPER Template - Subcontractor Safety Plan (SSP)

Instructions for Completing this SSP – Delete from final version

Your actual SSP will begin with the cover/signature page

Welcome to the Honeywell Syracuse Portfolio

Health and Safety Program

(HSP²)

NOTE: The yellow highlight is used to show you where instructions are and where you are to modify this template. After providing the information requested, delete the yellow highlighted instructions. You can turn the yellow highlighting feature off or on throughout the entire document by clicking on TOOLS, OPTIONS, VIEW, HIGHLIGHT, from the toolbar.

Every Subcontractor working on a Honeywell Syracuse Portfolio Site (and their lower tier subcontractors) must establish, implement and maintain a written Subcontractor Safety Plan (SSP) and a copy must be maintained at each work site. The minimum requirements for establishing, implementing and maintaining an effective written Subcontractor Safety Plan are referenced in the contract and are described more thoroughly in the Honeywell Syracuse Portfolio Health and Safety Program (HSP²) guidance document. The Subcontractor and their lower tier subcontractors shall comply with the contract terms and shall complete their SSP to include detailed and specific descriptions relating to the following elements:

- Accountability/Responsibility/Key Line Personnel
- Statement of Subcontractor's Safety and Health Policy
- Drug and Alcohol Free Workplace
- Medical Surveillance Program
- Identification of Competent/Qualified Persons
- Scope of Work Evaluation
- Hazard/Risk/Exposure Assessment
- Hazard Control Measures/Job Safety Analyses (JSA's)
- Subcontractor Periodic Safety Audits/Inspections
- Subcontractor's Risk Mitigation – Two-Week Look Ahead Plan
- Compliance Requirements Policy



- Written Progressive Disciplinary Program
- Hazard Correction Policy
- Training and Instruction
- Project Site Orientation
- Employee Communication System
- Recordkeeping
- Incident/Near Miss Incident Investigations
- Emergency Action Plan
- Site-Specific Medical Emergency Plan
- Hazard Communication Program
- Respiratory Protection Program
- Medical Surveillance Program
- Other written programs as specified by regulatory agency or contract Requirements
- SSP Review and Modifications
- Detailed List of Tables, Forms, Appendices and Attachments

This SSP template has been prepared as an aid for use by Subcontractors and their lower tier subcontractors. Subcontractors should include the scope of work and corresponding safety requirements associated with their lower tier subcontractors in their SSP, unless the lower tiered subcontractor chooses to write a similarly detailed version themselves. This model SSP template was written for a broad spectrum of subcontractor employers so it should be modified to provide the appropriate information for your scope of work. If a section of this SSP does not apply to your project, insert “not applicable” or N/A. Do not delete any sections or change the numbering sequence.

The requirements you write into this SSP must be followed and compliance to those requirements must be audited by the Subcontractor’s Project Manager in order to be effective. In other words, “Plan your Work and Work your Plan”.

SUBCONTRACTOR SAFETY PLAN (SSP)

Prepared For:



Honeywell Syracuse Portfolio
Health and Safety Program

(Insert Office Name - Times New Roman 12 pt.)
(Insert Street Address - Times New Roman 12 pt.)
(Insert City, State and Zip Code - Times New Roman 12 pt.)

Project Name:

(Insert Client Name - Times New Roman 12 pt.)
(Insert Project Name - Times New Roman 12 pt.)
(Insert Street Address - Times New Roman 12 pt.)
(Insert City, State and Zip Code - Times New Roman 12 pt.)

Prepared By:

**(Insert Subcontractor Name – Times New Roman 18 pt.
Bold)**

(Insert Street Address – Times New Roman 12 pt.)
(Insert City, State, and Zip Code – Times New Roman 12 pt.)
Author: (Insert Name and Title)

REVIEWED AND APPROVED BY:

Subcontractor Project Manager: _____
Date

(INSERT DATE)

O'BRIEN AND GERE

Honeywell

PARSONS

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LIST OF ACRYNOMS

ATV	All-Terrain Vehicle
BEI	Biological Exposure Index
CPR	Cardio Pulmonary Resuscitation
HSP ²	Honeywell Syracuse Portfolio Health and Safety Program
JSA	Job Safety Analysis
MSDS	Material Safety Data Sheet
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PM	Project Manager
PPE	Personal Protective Equipment
PSP	Project Safety Plan
SCBA	Self-Contained Breathing Apparatus
SHSO	Site Health and Safety Officer
SSP	Subcontractor Safety Plan
TLV	Threshold Limit Value



1. RESPONSIBILITY/IDENTIFICATION OF KEY LINE PERSONNEL

The following personnel have the authority and responsibility for implementing the provisions of this Subcontractor Safety Plan (SSP) for:

1.1 Site Contact Information

Project Site Location

On-site Contact No.

1.2 Key Project Personnel

Contractor:

Address:

Telephone:

Email:

Company Executive responsible for project:

Contact No.

Manager/Superintendent:

Contact No.

Safety Representative/Manager:

Contact No.

Key Foreperson(s):

Contact No.

Client Project Management Point of Contact:

Contact No.

All managers and supervisors are responsible for implementing and maintaining the SSP in their work areas and for answering worker questions about the SSP. A copy of this SSP is available for any employee to review.

2. STATEMENT OF SUBCONTRACTOR'S SAFETY AND HEALTH POLICY

(Include or attach your company's Safety and Health Policy Statement – not a company Health and Safety Manual or Standard Operating Procedures.)

2.1 Drug and Alcohol Free Workplace

State your company's drug and alcohol policy.



Describe your company's drug and alcohol testing requirements. At a minimum, they must meet the Honeywell Syracuse Portfolio Health and Safety Program (HSP²) requirements, summarized below:

- Pre-work. HSP² requirements call for pre-work testing for drugs and alcohol within two weeks prior to initial assignment for work on Honeywell projects, or a reasonable time frame acceptable to the Project Manager. Such testing will be repeated annually.
- Reasonable Suspicion. Project personnel may be tested if observed by trained management as exhibiting signs of use or possession of illegal drugs or alcohol.
- Post Accident. Personnel involved in an accident resulting in a fatality, disabling motor vehicle accident (requiring one or more vehicle to be towed away), injury requiring off-site medical treatment or property damage expected to result in > \$5,000 in loss will be tested for drugs and alcohol.
- Random. Certain projects may be selected for random testing at the discretion of the HSP² Safety Director.

State your company's policy on the use of legally obtained prescription drugs which may affect the safe performance of a worker.

State the disciplinary measures that will result from a positive drug test or a worker's refusal to submit to drug or alcohol testing. At a minimum, workers who test positive or refuse to be tested will immediately be removed from Honeywell projects.

3. IDENTIFICATION OF COMPETENT/QUALIFIED PERSONS

(Provide the individual names and job titles of personnel assigned to the project, including the dates of training for the topics mentioned below. Add rows as necessary, and indicate the appropriate training information. Include copies of certifications in the Appendix. Include certifications for the competent/qualified personnel, when applicable.)

(If the scope of work for lower tier subcontractors is included in this SSP, then the identification of competent/qualified persons for the lower tier subs must also be included in this section).



3.1 Competent/Qualified Personnel

Name	Job Title	40-hr HAZWOPER	8-hr HAZWOPER Supervisor	8-hr HAZWOPER refresher expires	Other training (i.e. CPR, excavation, confined space)
Insert name or “Not applicable”	Insert job title	Insert date of completion	Insert date of completion or “Not applicable”	Insert expiration date	Insert date of completion

NOTE: This table may be expanded and included as an appendix. If so, describe its location.

Training requirements include:

- 40-hour HAZWOPER and 8-hour annual refresher certificates – required for general site workers (such as equipment operators, general laborers and supervisory personnel) engaged in hazardous substance removal or other activities which expose or potentially expose workers to hazardous substances and health hazard.
- 8-hour HAZWOPER Supervisor certificate – required for on-site management and supervisors directly responsible for, or who supervise employees engaged in, hazardous waste operations.
- Respirator Clearance – required for all personnel that may need to wear a half facepiece, full facepiece or supplied air respirator, or self-contained breathing apparatus (SCBA). Provide dates of training, medical clearance and fit testing. Include copies of medical clearance and fit testing records in the Appendix.
- Excavation Competent Person certificate – required for daily inspections of excavations greater than four feet in depth, the adjacent areas, and protective systems for evidence of a situation that could result in possible cave-ins, indications of failure of protective systems, hazardous atmospheres, or other hazardous conditions. An inspection shall be conducted by the competent person prior to the start of work and as needed throughout the shift. Inspections shall also be made after every rainstorm or other hazard increasing occurrence. These inspections are required when employee exposure can be reasonably anticipated.
- CPR/First Aid certification – 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 in the absence of an infirmary, clinic, hospital, or physician, that is reasonably accessible in terms of time and distance to the worksite. For on-the-water activities, time, rather than

distance, is the critical factor in determining whether first aid and CPR trained personnel are required. The vessel itself shall be considered the worksite.

- Confined Space Entry (Supervisor) certificate – the employer shall ensure that each entry supervisor knows the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure. Verifies, by checking that the appropriate entries have been made on the permit, that all tests specified by the permit have been conducted and that all procedures and equipment specified by the permit are in place before endorsing the permit and allowing entry to begin. Terminates the entry and cancels the permit as necessary. Verifies that rescue services are available and that the means for summoning them are operable. Removes unauthorized individuals who enter or who attempt to enter the permit space during entry operations. Determines, whenever responsibility for a permit space entry operation is transferred and at intervals dictated by the hazards and operations performed within the space that entry operations remain consistent with terms of the entry permit and that acceptable entry conditions are maintained. Entrants and attendants, before assignment to a confined space operation, must demonstrate written documentation of confined space training appropriate to their assignment.

No worker will enter the exclusion zone, be exposed to hazardous substances or conditions or be assigned work unless they are properly trained, and the up-to-date documentation of such training has been submitted in advance.

4. SCOPE OF WORK EVALUATION

The work activities that will take place are described below. Activities of lower tier subcontractors will either be included in this section, or the lower tier subcontractor will complete their own SSP.

For this project, there *(insert “will” or “will not”)* be any lower tier subcontractors. Lower tier subcontractor activities *(insert “are” or “are not”)* included in this section. *(If there will be lower tier subcontractors, include the statement and table below):*

4.1 The lower tier subcontractors that will be working on the project will be:

SUBCONTRACTOR	WORK ACTIVITIES	HONEYWELL EVALUATION GRADE
Insert Company Name or N/A	i.e. Groundwater Sampling	B (for example)

NOTE: Each subcontractor must complete an HSP² Contractor Safety Evaluation package before being eligible to work on a Honeywell Syracuse Portfolio Project. Your Project Manager



or contact person will have access to a database of contractors that have submitted a Contractor Safety Evaluation package to determine the Evaluation Grade. If a “C” or “D” grade contractor is listed, justification must be included why the subcontractor is being used rather than an “A” or “B” grade subcontractor. Additional oversight and controls are required for the use of “C” or “D” contractors.

Major Activities of Contractor – describe activities in bullet format, in some degree of detail.

Major Activities of lower tier subcontractor(s) – describe activities in bullet format or insert “Not Applicable.”

5. HAZARD/RISK/EXPOSURE ASSESSMENT AND CONTROL MEASURES

(Describe the major activities and identify the associated hazards, risks and exposures. Thoroughly describe the control measures that will be used to minimize the identified hazards. This may be presented as a Table in this section, or a Job Safety Analysis (JSA) may be used for each major activity and added to this SSP as an appendix.) Regardless of the format, the Risk Assessment or JSA shall be updated and communicated to all affected parties daily or as frequently as necessary.

Major hazards or risks and exposures associated with the scope of work evaluation are listed below.

5.1 Job Safety Analysis

Task	Hazards/Risks	Controls
Insert Task	Hazard or Risk	Control

5.2 Chemical Safety Analysis

Chemical or Class	PEL/TLV	Hazards, Target Organs

PEL = OSHA Permissible Exposure Limit

TLV = ACGIH Threshold Limit Value



5.3 Chemical Monitoring Requirements

Chemical	Instrument	Location	Frequency

5.4 Action Levels and Response Summary

Chemical (or Class)	Action Level	Response

Complete table in detail, or state: “For each major activity listed, a JSA has been developed and is included as an appendix.”

Provide an evaluation of reasonably anticipated exposures, action limits, Permissible Exposure Limits (PEL’s), other relevant Occupational Exposure Limits (OEL), and the response required when an action level or exposure limit has been reached.

Insert any applicable measures to mitigate identified risks or hazards, using the hierarchy of hazard controls:

- Elimination of hazard or substitution of safer method
- Engineering controls
- Administrative controls
- Personal Protective Equipment, and
- Emergency response equipment or supplies

Some of these measures should include methods for identification of work zones, the level of personal protective equipment (PPE) to be worn (including respiratory protection), action levels based on potential chemical exposures (i.e., personal monitoring, area monitoring, etc.) and procedures for decontaminating personnel and equipment. This section should include specifics, not broad generalities.

6. SUBCONTRACTOR PERIODIC SAFETY INSPECTIONS/AUDITS

Inspections and audits shall be performed by competent persons or observers in the various areas of our workplace. Inspections will focus on worker behaviors as well as site and equipment conditions. An inspection is not considered completed until all identified corrective actions are implemented.

Daily inspections are required by the Site Health and Safety Officer (SHSO), foreman or other responsible party. The completion of the daily inspection must be noted in the construction or safety log. Any corrective actions taken or required must be noted as well.

Periodic, documented inspections are performed according to the following schedule:

- At least weekly
- When we initially establish our SSP
- When new substances, processes, procedures or equipment which present potential new hazards are introduced into our workplace
- When new, previously unidentified hazards are recognized
- When occupational injuries and illnesses occur
- When we assign workers to unfamiliar processes, operations, or tasks, and
- Whenever workplace conditions warrant an inspection

Periodic inspections consist of identification and evaluation of workplace hazards or behaviors, and specifying corrective actions that will eliminate or mitigate the identified hazards. The corrective actions will be assigned to a responsible person with a target completion date and tracked to completion. Temporary or interim measures will be applied and documented as well.

7. SUBCONTRACTOR RISK MITIGATION: TWO-WEEK LOOK-AHEAD

The Risk Mitigation Two-Week Look-Ahead Form is used to review risk mitigation strategies for previously identified tasks at weekly progress meetings.

The addition of previously unanticipated activities that have not been evaluated for risks and mitigation strategies typically would require the completion of additional JSA(s).

8. COMPLIANCE REQUIREMENTS POLICY

Management is responsible for ensuring that all safety and health policies and procedures are clearly communicated and understood by all employees. Managers and supervisors are expected to enforce the rules fairly and uniformly.



All employees are responsible for using safe work practices, for following all directives, policies and procedures, and for assisting in maintaining a safe work environment.

Our system of ensuring that all workers comply with the rules and maintain a safe work environment includes:

- Informing workers of the provisions of our SSP
- Responding to concerns expressed by the workers
- Evaluating the safety performance of all workers
- Recognizing employees who perform safe and healthful work practices
- Providing training to workers whose safety performance is deficient
- Disciplining workers for failure to comply with safe and healthful work practices, and
- The following practices:

— _____

9. WRITTEN PROGRESSIVE DISCIPLINARY PROGRAM

(Explain your company's program or include a written program in the Appendix)

10. HAZARD CORRECTION POLICY

Unsafe or unhealthy work conditions, practices or procedures shall be corrected in a timely manner based on the severity of the hazards. Hazards shall be corrected according to the following procedures:

- When observed or discovered
- When an imminent hazard exists which cannot be immediately abated without endangering employees or property, we will remove all exposed workers from the area except those necessary to correct the existing condition. Workers necessary to correct the hazardous condition shall be provided with the necessary protection, and
- All such actions taken and dates they are completed shall be documented on the appropriate forms

11. TRAINING AND INSTRUCTION

All workers, including managers and supervisors, shall have training and instruction on general and job-specific safety and health practices. Training and instruction shall be provided as follows:

- When the SSP is first established
- To all new workers
- To all workers with respect to hazards specific to each employee's job assignment
- To all workers given new job assignments for which training has not previously provided
- Whenever new substances, processes, procedures or equipment are introduced to the workplace and represent a new hazard
- Whenever the employer is made aware of a new or previously unrecognized hazard, and
- To supervisors to familiarize them with the safety and health hazards to which workers under their immediate direction and control may be exposed

Workplace safety and health practices for all locations include, but are not limited to, the following:

- Explanation of the employer's SSP
- HSP² requirements
- Honeywell Contractor's Safety Handbook
- Site Emergency Action Plan
- Measures for reporting any unsafe conditions, work practices and injuries, and
- Means for identifying when additional instruction is needed

In addition, we provide specific instructions to all workers regarding hazards unique to their job assignment, to the extent that such information was not already covered in other training.

12. PROJECT SITE EMPLOYEES ORIENTATION PROGRAM SUBJECTS

As a condition of working on a remediation project involving the potential for exposure to hazardous substances and health hazards, our workers will receive information about the following subjects:

- Names of personnel responsible for site safety and health



- Honeywell’s contractor safety requirements
- Promptly reporting emergencies, incidents and unsafe conditions
- Emergency/evacuation plans
- Provisions for medical services and first aid including emergency procedures
- Safety, health and other hazards at the site
- Review of all activities on site and related Job Safety Analyses JSA’s
- Proper use of personal protective equipment
- Work practices by which a worker can minimize risk from hazards
- Safe use of engineering controls and equipment on site
- Acute and chronic effects of compounds at the site
- Decontamination procedures, and
- Hygiene requirements - Availability of toilet, hand-washing, and drinking water facilities

In addition to the above-mentioned information, we also orient our employees on: (Line out or write “not applicable” – DO NOT delete - topics that are not covered in your employee orientation.)

12.1 Site Orientation Topics

Covered or N/A	Site Orientation Topic
	Good housekeeping
	Road and highway safety practices – flagging, traffic control
	Heavy equipment operation – cranes, excavators, articulating dump trucks, etc.
	Driver safety - defensive driving, operation of pick-up trucks, all-terrain vehicles (ATVs), etc.
	Ladder and scaffold inspection and safety rules;
	Use of elevated platforms – aerial lifts and scissor lifts
	Other fall protection measures
	Fire prevention including Hot Work Permits



	Cleaning, repairing and servicing equipment and machinery
	Proper use of hand and power tools
	Guarding of belts and pulleys, gears and sprockets, and conveyor nip points
	Machine, machine parts, and prime movers guarding
	Lockout/Tagout procedures
	Materials handling
	Chainsaw and other power tool operation
	Unsafe weather conditions – lightning, high winds, etc.
	Mobilization/demobilization
	Yard operations: moving vehicles and equipment, receiving and shipping
	Landing and loading areas – rigging, tag lines, landing areas, release of rigging
	Ergonomic hazards - proper lifting techniques
	Personal protective equipment
	Hazardous chemical exposures
	Hazard Communication/Right to Know
	Physical hazards
	Heat and cold stress
	Noise
	Ionizing and non-ionizing radiation
	Biological hazards – poisonous plants, animals, bloodborne pathogens, etc. and
	Other job-specific hazards, such as:
	•
	•
	•

13. EMPLOYEE COMMUNICATION SYSTEM AND POLICY

We recognize that open, two-way communication between management and staff on health and safety issues is essential to an injury-free, productive workplace. The following system of communication is designed to facilitate a continuous flow of safety and health information between management and staff in a form that is readily understandable and consists of one or more of the following checked items:

- New worker orientation including a discussion of safety and health policies and procedures
- Review of our SSP and Construction Manager's Project Safety Plan (PSP)
- Workplace safety and health training programs
- Regular daily and weekly safety meetings
- Effective communication of safety and health concerns between workers and supervisors, including translation where appropriate
- Awareness campaign: Posted or distributed safety information
- A system for workers to anonymously inform management about workplace hazards
- A labor/management safety and health committee that
 - Meets regularly
 - Keeps written records of the safety and health committees meetings
 - Reviews results of the periodic scheduled inspections
 - Reviews investigations of accidents and exposures
 - Makes suggestions to management for the prevention of future incidents
 - Reviews investigations of alleged hazardous conditions, and
 - Submits recommendations to assist in the evaluation of employee safety suggestion
- Other: _____

14. RECORDKEEPING POLICY

We have taken the following steps to document implementation of our SSP:

- Records of hazard assessment inspections, including:
 - The persons conducting the inspection

- The unsafe conditions and work practices that were identified, and
- The action(s) taken to correct the identified unsafe conditions or work practices
- Documentation of safety and health training for each worker, including:
 - The worker's name or other identifier
 - Training dates
 - Types/topics of training, and
 - Training provider
- Air monitoring and other exposure records
- Written reports describing in detail, any accidents, incidents or near misses. A root cause shall be determined for such events. Corrective actions will be implemented and communicated to all site team members.
- Other records are retained as required by contract specifications or by local, state or federal (Occupational Safety and Health Administration (OSHA) regulations). Where regulations do not specify the length of records retention, a minimum period of three years after project completion will be used.

15. INCIDENT/NEAR-MISS INCIDENT INVESTIGATIONS POLICY

Procedures for investigating workplace incidents and near-miss incidents include:

- Responding to the incident scene as soon as possible
- Implementing measures to prevent further injury or damage and to preserve evidence
- Providing First Aid or coordinating any needed medical care
- Reporting incidents and near-miss incidents immediately to the appropriate HSP² point-of-contact. DO NOT delay! Certain levels of incident require immediate communication to Honeywell's upper management, and possibly to regulatory authorities
- Interviewing injured workers and witnesses
- Examining the workplace for factors associated with the incident/near-miss incident
- Determining the root cause of the incident/near-miss incident
- Taking corrective action to prevent the incident/near-miss incident from reoccurring
- Recording the findings and corrective actions taken, and
- Coordinating post-accident substance abuse testing



16. EMERGENCY ACTION PLAN

(Use this section to describe alarm signals, reporting procedures, evacuation routes, assembly areas, head count procedure, etc.)

Suggest:

- Warning alarm: multiple horn blasts, repeated
- Assembly area: Command post/trailer area
- A head count will be performed at the assembly area. Individuals should not leave work for the day until they are accounted for and properly reassigned or dismissed
- Evacuation route: site specific

Describe the preventative measures and response for unanticipated spills or releases to the environment. Include materials to be staged (e.g., spill kits) and their locations, procedures for containment and cleanup and reporting requirements, using the chain-of-command concept.

17. SITE SPECIFIC MEDICAL EMERGENCY PLAN

(Provide the name of emergency treatment facilities (Emergency Room) including contact numbers and route to the hospital. Also provide contact information for a local Occupational Medicine Clinic (for non-emergency use) that your company has contracted with for the treatment of routine or non-emergency incidents. The Occupational Medicine Clinic is a valuable asset in post-injury management and return-to-work programs. Provide names of competent first-aid and CPR personnel with dates of training certification and expiration. Include copies of employee certificates in the Appendix.)

17.1 Emergency Medical Care

Hospital/Emergency Care	Address	Telephone Number(s)

17.2 Occupational Medicine Clinic

Occupational Medicine Clinic	Address	Telephone Number(s)

17.3 Competent First Aid/CPR Personnel

Name(s) Competent Persons	First Aid	CPR

O'BRIEN AND GERE

Honeywell

PARSONS



	Expiration Date	Expiration Date

NOTE: This table may be expanded and included as an appendix. If so, describe its location.

18. HAZARD COMMUNICATION PROGRAM

(In this section provide the name of the Haz Com Officer, a program outline, a list of the hazardous chemicals to be used and a description of where material safety data sheets (MSDS's) will be located. Include the written HAZ COM program and MSDS's for all chemicals to be used on site as an Appendix.)

19. RESPIRATORY PROTECTION PROGRAM

(If applicable to this project, provide an outline or summary of your company's written Respiratory Protection Program.)

(In this SSP, provide a description of the change schedule for canisters and cartridges that is based on objective information or data that will ensure that canisters and cartridges are changed before the end of their service life must be provided in this section. The employer shall describe in the respirator program the information and data relied upon and the basis for the canister and cartridge change schedule and the basis for reliance on the data.)

(Include the written respiratory protection program and copies of individual records (i.e., medical clearance, fit test and training) as an Appendix.)

20. MEDICAL SURVEILLANCE AND RESPIRATORY PROTECTION PROGRAMS

All project personnel performing intrusive work or entering the restricted area where intrusive work is being conducted, must be involved in a medical surveillance program meeting, at a minimum, the requirements of 29 CFR 1910.120.

Describe your company's medical surveillance requirements for this project. Include any biological monitoring, the relevant Biological Exposure Indices (BEI's) and the action limits, if any, that would initiate such biological monitoring.

Written evidence of medical surveillance requirements shall be maintained on-site and submitted prior to work for each affected person.



20.1 Medical Surveillance Requirements

Name	Job Title	Respiratory Clearance	Medical Exam	Respirator Fit Test	Other Med Surveillance Requirement
Insert name"	Insert job title	Insert expiration date	Insert expiration date	Insert expiration date	Describe frequency

NOTE: This table may be expanded and included as an appendix. If so, describe its location.

21. OTHER WRITTEN PLANS OR PROGRAMS AS REQUIRED BY REGULATION AND APPLICABLE TO THIS PROJECT.

(If applicable, attach other written programs as an appendix. If a plan listed below is not applicable, write N/A or lineout. DO NOT delete.

21.1 Other Written Plans or Programs

Included or N/A	Name of Plan or Program
	Site sanitation plan
	Layout/material storage plans
	Access and haul road plan/traffic patterns
	Procedures and tests
	Wild fire prevention plan
	Diving plan
	Man overboard plan
	Fire Aboard/Abandon ship plan
	Asbestos abatement plan
	Lead abatement plan
	Abrasive blasting
	Critical lift procedures
	Dangerous weather contingency planning
	Demolition plan



	Formwork and shoring erection and removal plans
	Blasting plan
	Nighttime operations plan
	Control of Hazardous Energy (Lockout/Tagout)
	Operation of a Forklift
	Confined Space Entry
	100 % Fall Protection Plan
	Other:

(Include any of the applicable written programs as an Appendix.)

22. SUBCONTRACTOR SAFETY PLAN (SSP) REVIEW AND MODIFICATIONS

The SSP shall be submitted to the Project Manager (PM) at least ten days before commencement of any field activities. The SSP will be reviewed, and may be returned with comments or requests for more details or clarification. Fieldwork shall not commence until the PM has provided written acceptance that the SSP meets contractual requirements. The responsibility for completeness, accuracy and regulatory compliance of the SSP rests solely with the subcontractor.

Minor modifications, such as typographical corrections, changing names or updating contact information, may be made by means of a routine submittal to the PM. JSA's for a new activity or previously unanticipated methodology should be submitted to the PM for review at least ten days before commencement of the new activity, or as early as practicable. Acceptable JSA's become an appendix to the existing SSP.

23. LIST OF TABLES, FORMS, APPENDICES AND ATTACHMENTS

List in detail any tables, forms, appendices and attachments. These elements are attached to and become part of the completed PSP.

Tables

- _____
- _____
- _____
- _____



Forms

- _____
- _____
- _____
- _____

Appendices

- _____
- _____
- _____
- _____

Attachments

- _____
- _____
- _____
- _____

ATTACHMENT E HONEYWELL CONTRACTOR SAFETY HANDBOOK

Honeywell Contractor Safety Handbook

This informational Handbook is intended to provide a generic, non-exhaustive overview of a particular standards-related topic. This publication does not itself alter or determine compliance responsibilities, which are set forth in OSHA standards themselves and in the Occupational Safety and Health Act of 1970. Since the regulations, interpretations and enforcement policy may change over time, it may be necessary to seek additional guidance on OSHA compliance requirements. Any and all deviations from the guidelines and rules set forth in this Handbook shall have prior approval by Honeywell.

This Handbook serves as a guide and reference for the minimum rules and standards for contractors performing capital work, maintenance, repair, dismantlement, remediation or other activities that have the potential for an incident.

This Handbook should be issued to each contract employee working at a Honeywell facility, location or site. The perforated page at the back of the Handbook must be signed and returned to the Honeywell contact/representative prior to commencing work. After reviewing each Section of this Handbook, specific attention should be focused on the topics that will be encountered during the project/task.

Contract employees must also be familiar with their company's health, safety and environmental policies, procedures and guidelines.

Revised 12/99

Contractor Safety Excellence

Our Mission

We will achieve a premier level of safety performance for contractors working at Honeywell locations through increased safety awareness, communication of expectations, following work processes that reduce at-risk behaviors and ensuring the proper management of incidents.

Our Commitment

We recognize that outstanding safety performance is essential to the welfare of our employees, contractors and to business excellence. We will continue to improve our global competitiveness by making safety an integral part of all business activities.

Our Safety Principles

- We strive to prevent all incidents that may lead to injuries or illnesses.
- Safety performance is a responsibility of line management and every contractor.
- We design safety into the work place.
- Individual behavior is the most important factor in preventing incidents.
- We expect and require every contractor to work safely.
- Working safely is good business.
- Safety is an integral part of our culture and total quality processes.
- Our safety process must react to all incidents, not just accidents.
- We continually improve our safety process by auditing the process and correcting the root cause of deficiencies.
- We promote safety, both on and off the job.
- We prepare for emergencies.

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A. Introduction

- This handbook sets forth the safety requirements of Honeywell International Inc. ("Honeywell")
- At Honeywell, it is our policy to provide a safe and healthful place in which to work. It is everyone's obligation to work safely and to correct unsafe acts, practices and/or conditions for the protection of yourself and others.
- It is extremely important that you understand how your work is to be done in a safe manner. If you don't know, stop and ask before you begin work.
- All work must conform to plant, local, state, and federal (OSHA) regulations (CFR 29 Part 1910 and 1926).
- The information in this handbook is general in nature and is to be considered the minimum.
Save
All
Fellow
Employees
This
Year
- During your orientation, you will be informed of the specific safety requirements for your particular site or plant.

B. General Information

Site Entry

- Personnel, vehicles, and equipment are subject to search upon entering or exiting the site premises.
- Personnel may be required to pass a drug test or show proof of passing a drug test within the past thirty (30) days prior to working at the site.

Vehicle Safety

- Operators of vehicles and equipment shall observe all site traffic regulations. Seat belts are to be worn at all times.

Pedestrians

- Pedestrians have the right of way. Pedestrians should use walkways where provided and should not take shortcuts through operating areas, buildings or other areas.

Cameras

- Cameras are not allowed on site without the proper authorization.

Running

- Running is not permitted on site except in an extreme emergency.

Smoking

- Smoking is permitted in designated areas only. Discard smoking materials in approved containers.

Conduct

- Horseplay, fighting, gambling, sexual harassment and the possession or use of firearms, alcoholic beverages and illegal substances is strictly prohibited.

Dress Code

- Pants must cover top of steel-toed leather work shoe and be in good condition. Shirts must have at least 4" of sleeve. Long sleeve shirts may be required at specific locations or for certain tasks.

C. Emergency and Disaster Procedures

In the event there is an emergency, anyone can activate the alarm any time there is a:

- Serious injury or illness
- Fire
- Major spill or release

When an alarm sounds, the following rules are in effect:

- All flame or hot work permits for welding, cutting, and spark producing equipment will be suspended until the all-clear signal is given.
- Smoking is prohibited.
- All traffic will pull to the side of plant roads and shut off engines until the all-clear signal is given.
- Report to your assembly point / area (if previously designated), or contact your Honeywell host.

Site Specific Emergency and Disaster Procedures

- Each Honeywell plant is equipped with an emergency alarm system, designated assembly areas and emergency phone numbers. The specific guidelines for reporting emergencies and disasters should be determined in your orientation.

D. Personal Protective Equipment (PPE)**Head Protection**

- Contractors are required to wear approved hard hats that meet ANSI Z89.1-1971. Hard hats must be in good condition and be worn with brim to the front.

Eyes and Ears

- Each employee should know the location of the nearest eye wash/safety shower station in their area before starting work.
- Contractors are required to wear approved ANSI Z87.1 safety glasses with rigid side shields. Additional eye/face protection will be required when performing certain tasks (e.g.: welding, burning, grinding, chipping, sawing, drilling, handling chemicals or corrosive liquids, and pouring concrete or molten materials.) Check plant procedures.
- Approved hearing protection must be worn as specified in all posted areas and while working with or around high noise level producing tools, machines or equipment.

Fingers, Hand and Wrist

- Gloves suitable for the job being performed shall be worn unless the job cannot be done with gloves or wearing gloves increases the hazard.
- Tool holders should be used when driving stakes and wedges or when holding star drills, bull pins or similar tools.

Foot Protection

- In accordance with OSHA 1910.136, all contractors must determine if hazards are present (or are likely to be present) that may require the use of safety footwear.
- Safety footwear for contractors must be in accordance with ANSI Z41-1991, constructed of industrial quality leather and without urethane soles.
- Rubber boots with safety toe protection are required on jobs subject to chemically hazardous conditions.
- Metatarsal protection should be worn when using jack hammers, tamps and similar equipment which has the potential for foot injury above the toes.

Respiratory

- Respirators used by contractors must meet NIOSH/MSHA standards.
- Respirators must be inspected regularly and stored in a dust-free container.
- Employees required to wear a respirator must have a physician's approval and be fit tested. Employees must be clean shaven in the facial area to obtain an acceptable seal.
- Contractor must keep records of qualified users.

Skin

- If the possibility of skin contact with chemicals exists, personal protective equipment required by Material Safety Data Sheets shall be worn.

E. Hazard Communication / Right To Know

Upon beginning work at a Honeywell facility, each individual has the right to know information concerning the hazardous properties of any materials he/she may come in contact with. Training regarding potential hazards must be given to each individual and will include, but not be limited to, the following:

- An explanation of the hazard communication standard and the training requirements.
- An explanation of the project hazard communication program and its location.
- Notification of the locations of the hazardous

- chemicals.
- A description of the plant labeling and hazard rating system.
- A description of the Material Safety Data Sheet (MSDS), their use and location.

F. Permits

Certain types of work are not to be started until approval is given in the form of a signed permit. A written, properly authorized permit listed below may be required before you begin any activities in any production or operating area of the plant.

- **Work Permit** - required before any work can be started on any job in any area of the plant.
- **Line Breaking Permit** - required before breaking screwed, flanged, welded or other type joints on pipelines or vessels containing hazardous materials, or breaking into (disconnecting, drilling, sawing, etc.) non-hazardous materials under pressure.
- **Confined Space or Vessel Entry Permit** - required before entering tanks, vessels, manholes or similar confined spaces that have been in service or connected to operating process equipment and may contain potentially hazardous atmospheric conditions.
- **Lockout / Tagout Permit** - required for the service and maintenance of machines and equipment in which the *unexpected* energization or start up of the machines or equipment, or release of stored energy could cause injury to workers.
- **Excavation Permit** - required to minimize hazards during excavation work and ground breaking operations, specifically when a machine or hand tools are used at a depth greater than one foot. Excavations greater than four foot in depth must be inspected and approved by a competent person and have a Confined Space permit before access by personnel.
- **Hot Work Permit** - required before any flame or spark producing activity can begin in any production, operating, or some construction areas of the plant. This includes, but is not limited to:
 - Welding / Repair of pipe lines under pressure greater than 5 PSI.
 - Welding / Repair of pipe lines containing hazardous or flammable materials.
 - Welding / Repair on any pressure vessel, fired or unfired, under pressure or in the presence of hazardous or flammable materials.
 - Work on energized circuits.
 - Cutting / Burning of pipe lines, vessels, equipment, etc. that may have contained any hazardous material.
 - Grinding
 - Any hot work on carbon steel pipe lines, vessels, equipment, etc. that may have contained sulfuric acid will not be permitted without extensive review with project and plant personnel due to the possible generation of hydrogen gas.

Each plant may have permits that are required for other specific work procedures. Check with your supervisor for these permits.

G. Fall Protection

- 100% fall protection (i.e. two lanyards when moving in certain areas) is required for all work above six (6) feet.
- Safety full body harnesses must be arranged so the d-ring is in the rear.
- Safety belts are not to be used for support or as a lineman's belt.
- Lanyards must be secured to an anchorage point overhead that can support 5,000 lbs. using as short a line as possible, not to exceed five (5) feet..
- All fall protection equipment shall be inspected by the user prior to each use.
- Lanyards may not be tied-off to any pipe/conduit less than 2" in diameter.
- Safety harnesses shall be worn and tied off when performing work on the following:
 - Sloped roofs
 - Flat roofs without handrails, if within 6 feet of the edge of the roof or opening
 - Any suspended platform or stage
 - All scaffolding six (6) feet above supporting work surface
 - When working on the sixth step or higher

- on a ladder
- Ladders near the edge of roofs or floor openings
- Any unguarded areas six (6) feet above any supporting work surface
- An aerial lift.

H. Barricades, Signs, and Floor Openings

All floor openings/penetrations (i.e. holes > 2") must be properly covered or guarded. Barricades and signs must be posted when working in or around the following:

- All manlifts and the immediate working area.
- In ceilings, pipe bridges, etc.
- Removing roofing panels, walls, etc.
- Swing radius of cranes and the area where the lift will be made and moved to.
- Any open excavation.
- Any confined space entry.

Types of Barricades

- Warning barricades call your attention to a hazard but offer no physical protection. Examples: yellow, red, blue synthetic tape on stands or posts, plastic, or wooden snow fence.
- Protective barricades warn and provide physical protection and shall withstand 200 lbs. of force in any direction with minimal deflection (3"). Examples: wood post and rail, cable and wood post and chain.

Guidelines

- Barricades shall be 42 inches high and maintained square and level.
- Barricades shall be erected before any work begins.
- Blinking lights must be used on road blocks after dark.
- An access opening or gate should be provided where practical.
- Barricades and signs shall be fully informative, legible, and visibly displayed.
- Barricades and signs shall be removed when no longer needed.

Hole Covers

- Must be installed immediately.
- Hole covers or barricades are required at any floor elevation.
- Material and equipment must not be stored on a hole cover.
- Must be secured to prevent movement and be marked with the word "HOLE" or "COVER".
- Must extend adequately beyond the edge of the opening (i.e. 3") and must not be more than 1" high.
- 3/4" plywood will be used providing the opening is less than 18". For any opening greater than 18 inches, 2 inch lumber or doubled 3/4 inch plywood is required.

I. Ladders and Scaffolds

- Inspect ladders before use - identify defective ladders with "Do Not Use" tag.
- Only a "Type I" ladder with a minimum rating of 250 lbs. is acceptable.
- Metal ladders are prohibited.
- Fall protection must be worn when working on the sixth step or higher.
- When ascending and descending a ladder, face the approved side of the ladder, use at least one hand to grasp the ladder, and do not carry tools or materials in your hands.
- All ladders shall have a tie-off rope, non-skid safety feet and be tied-off.
- Never work off a ladder where the midpoint of the body (i.e. belt buckle) must be extended beyond the side rails.

Straight or Extension Ladders

- Follow the 4-to-1 rule when using an extension or straight ladder - position the base of the ladder one (1) foot from the supporting structure for every four (4) foot in height.
- If a ladder is used to reach a higher platform, the top of the ladder must extend three (3) feet past the platform.
- Do not work off of the top three (3) rungs of any straight or extension ladder.

Step Ladders

- Step ladders shall be set with all four (4) feet level.
- Ladders used in traffic areas must be secured or barricaded to prevent displacement.
- Never work off of the top two steps of step ladder.
- Never stand or sit on top of step ladders.

Scaffolding

- All scaffolds must conform to the OSHA Standard (Subpart L)
- All scaffolds are to be erected level - plumb on a firm base.
- When space allows, all scaffolds must be equipped with access ladders that extends three (3) feet past the landing gate. At landings, 42" high handrails rigidly secure, 21" high mid-rails rigidly secure, completely decked with safety planking or manufactured scaffold decking and rigidly secured toeboards on all four sides.
- A competent person must determine the feasibility and safety of providing fall protection for employees erecting and dismantling scaffolds, and train those employees accordingly.
- All scaffolds shall have a tag attached, completed by the competent person, stating what type of fall arrest system is required.
- All personnel working on scaffolds must be trained by a qualified person in the subject matter to recognize the hazards associated with the type of scaffold being used and the nature of any hazards (i.e. electrical, fall, falling objects, etc.).
- Retraining must be provided where inadequacies in an affected employee's work practices involving scaffolds are observed.
- Safety harness and tie-off required when working from scaffolding over one buck high.
- Personnel shall not climb or do any rigging from a scaffold, handrail, mid-rail or braces.
- No one may alter any scaffold member by welding, burning, cutting, drilling or bending.
- Scaffolds shall be tied off or stabilized with outriggers when its height exceeds three times the smaller dimension of its base, but tie-offs must not exceed 26 feet vertically.
- Scaffolds must be tied off horizontally every 30 feet.
- No one shall ride on a rolling scaffold when it is being moved. All tools and materials shall be removed or secured to the decking before moving the scaffold.

J. Housekeeping

Good housekeeping plays a key role in preventing accidents and fires. Good housekeeping is emphasized as a vital safety measure.

- Keep everything in its proper place - store materials and equipment in a safe and orderly manner.
- Put trash, scrap materials and other waste in the proper containers.
- Clean up tools and work areas as your job progresses - do not wait until the end of the work day.
- Keep the floor of the work area clear of tools, cords, and scrap materials.
- Insure that work tables are occupied only by work at hand and tools required for work being done.
- All work areas are to be left in orderly and clean condition at the end of each work day.
- Keep cords and hoses at least seven (7) feet overhead over walkways and work areas or lay them flat outside of walkways.
- Maintain clear access to all work areas. Do not block fire extinguishers, emergency equipment, electrical boxes or panels, or other safety/fire equipment.

K. Tools - Hand and Power

- Do not operate any tool without proper instruction.
- Only qualified persons are to use tools and equipment.
- Honeywell tools and equipment are not to be used by contractors.
- Do not use any tool or equipment for any purpose other than that for which it was designed.
- Personal tools are subject to inspection at any time.

- It is your responsibility to inspect all tools prior to each use. Do not use a tool that is deemed defective. Report and tag all defective tools.
- Do not lift electrical tools by the cord.
- Tools may be inspected and marked with color-coded tape each month. Check with your Supervisor for designations and do not use a tool without the appropriate color-coded tape.

Hand Tools

- Worn tools are dangerous! Replace or repair the tool.
- Every tool was designed to do a certain job. Use a tool for its intended use only.
- Tools subject to impact (chisels, star drills and caulking irons) tend to “mushroom.” Keep them dressed to avoid flying spalls. Use tool holders.
- Don’t force tools beyond their capacity or use “cheaters” to increase their capacity.

Power Tools

- Material should be secured when power tools are applied to it.
- Each power tool should be examined for damaged parts, loose fittings, and frayed or cut electrical cords before use.
- Portable electrical equipment and tools shall be grounded unless “double insulated.” A ground fault circuit interrupter (G.F.C.I.) shall be used for working in damp areas when using permanent plant power or as otherwise required.
- Electrical cords shall be unplugged and air lines deactivated and bled down before adjusting, servicing, repairing, or changing bits and blades in electrical or pneumatic tools.
- Any pneumatic hoses exceeding ½ inch in diameter shall have a safety device at the source of supply or branch line to reduce pressure in case of hose failure. All hose connections shall be properly secured.
- All tools shall be used with the correct shield, guard, or attachment recommended by the manufacturer.
- Only licensed and qualified personnel shall be allowed to operate power-actuated tools.
- Power tools should be unplugged when not in use.

L. Mobile Equipment

- Anyone who operates any mobile equipment (cranes, manlifts, pick-ups, forklifts, etc.) must demonstrate knowledge and competency for each make of equipment.
- All equipment will be inspected daily before use to insure it is in proper operating condition. If the equipment becomes defective in any way, notify your supervisor at once and place a “DANGER - DO NOT USE” tag on it.
- All equipment is to be supplied with seat belts, back-up alarm and fire extinguishers (back-up alarm is not required on pickup trucks.)
- Use of gas/diesel equipment inside operating building is prohibited unless approved by the Safety Department.

M. Cranes

- All operators must be certified and licensed to operate each make and model of crane.
- The operator is solely responsible for the safe operation of the crane.
- The operator has full responsibility for the safety of a lift and may not make a lift until safety is assured.
- A copy of the load chart, manufacturer’s operators’ manual and inspection record must be in the crane cab or on project site.
- All cranes and the immediate work area must be barricaded at all times.
- No load shall be swung over any persons.
- Outriggers must be leveled and fully extended when making a lift.
- No part of the crane, load, hoist (load and boom) lines, boom and tag line shall come within 10 feet of energized electrical lines.
- For pick and carry operations, consult the manufacturer’s operator manual.
- Riding on crane hooks and/or “headache” balls is prohibited.
- Operators are not permitted to leave the crane while holding a live load.

- The use of suspended personnel platforms (crane baskets) must meet all OSHA requirements. The use of a crane or derrick to hoist employees on a personnel platform is prohibited unless all requirements of 1926.550 (g) are met. A company plan and check list must be used.
- A lift plan is required for any critical lift.
- Lifting in high winds (e.g. greater than 20 mph) is not recommended.

N. Material Handling Equipment

- All material handling machines must have backup alarms, horns, rollover protection structures and seat belts when provided by manufacturer.
- The operator must be trained to operate each make and model of machine.

O. Personnel Lifting Equipment

- The operator must be trained to operate all personnel lifts.
- All employees are to have a safety belt or safety harness on and tied off when working out of: manual personnel lifts, power platform lifts, scissors lifts, high-reach lifts, etc.
- Tie-off shall be made to the lifting equipment.
- Personnel are not to get under lifts.
- When exiting the lifting equipment onto a proper working elevated platform, the employee must be tied off to that platform immediately prior to, and during, that exit.

P. Cars, Pickups, and Trucks

You must have a valid driver's permit to operate any vehicles on plant property. You must obey the following rules:

- Wear your seat belt.
- Obey plant speed limits and stop signs.
- Motors must be shut-off when refueling.
- Stop at all railroad crossings.
- No more than three (3) people on a front bench seat, two (2) people if bucket seats.
- Mount and dismount the vehicle only when it is stopped.
- Keep arms, feet and bodies inside the vehicle.
- Look to the rear and sound your horn before backing up.
- Inspect the vehicle each day before use.
- Riding in the rear of a truck is prohibited unless approved seating with seat belts has been provided.

Q. Rigging

- All personnel who perform or assist in rigging operations shall have received appropriate training and be competent.
- Only ONE eye in a hook. Use a shackle to hold two (2) or more eyes.
- Tag lines are required to control lifted loads made by mechanical equipment. Never put hands on a load or wrap tag lines around your hands or body.
- Never raise a load over other people.
- Know the capacities of the rigging equipment and the weights of the loads.
- Never rig from any structural member until you are sure it will support the load.
- Never use plate grips, tongs, pipe clamps, etc. as substitutes for beam clamps.
- Two slings will be used unless impractical. If one sling is used, double wrapping is required.
- Continuous synthetic slings may be used only when heat or chemicals are not a factor, and where load permits.
- Flat nylon straps should not be used for erecting steel. Wide nylon straps may be used for lifting tube bundles, fiberglass ducts or other material that could be damaged by a metal sling. The use of flat nylon strap with any visible tear or defect is strictly prohibited.
- Steel slings should be used where heat or chemicals are a potential factor. The use of steel slings with damaged strands or other defect is strictly prohibited.
- The use of a come-a-longs with cracked or damaged handles is strictly prohibited.
- Chainfalls and come-a-longs must have OSHA approved safety spring return latches on all hooks.
- Daily, weekly, and monthly inspection records will be kept by the contractor.

R. Chain Falls and Hoists

- Inspect hoists daily (operations), monthly (maintenance) and annually (3rd party vendor).
- A chain hoist must be used within its rated capacity, marked on the equipment.
- Do not leave an unsecured and unattended load hanging on a hoist or chain fall.
- Do not stand or have any part of the body below a load suspended on a chain hoist.
- Do not wrap the load chain around the load to be lifted.
- Use of "cheater bars" is strictly prohibited.
- Use a shackle to connect straps to a hook.

S. Fire Protection and Prevention

- Be sure to locate the nearest fire extinguishers in your work area before starting work.
- As warranted by the project, a trained and equipped fire fighting organization (Fire Brigade) will be provided to assure adequate protection of life.
- All fire hydrants, fire extinguishers, fire blankets, etc. shall be clearly marked and not obstructed.
- Combustible materials shall be kept away from steam lines, radiators, heaters, hot process and service lines.
- For any job requiring hot work or open flame or welding, a fire extinguisher must be within 20 feet of where the work is taking place.
- Fire extinguishers shall be checked daily before starting work.
- Portable power equipment must not be refueled while running or when hot. Attach the ground wire before refueling.
- Store flammables in properly labeled metal type containers and in designated areas.
- Fire blankets must be used to protect equipment, control panels, instrumentation, etc. when welding, cutting, burning, or grinding overhead.
- "Borrowing" plant fire extinguishers is not permitted.

T. Material Handling / Stability Control

Proper material handling and stability control insures that personnel, material, and equipment are safe from unexpected movement such as falling, slipping, rolling, tripping, or any other uncontrolled motion.

- Clean up ragged metal edges.
- Pull all protruding nails and wires or bend them flush.
- Set on dunnage for ease of handling.
- Check all material and equipment to prevent rolling.
- Tie down all light, large-surface-area material that might be moved by the wind.
- Put absorbent on all grease and oil spills immediately and clean them up. Notify proper plant personnel of spills if significant.
- Salt or sand icy walk areas immediately.
- Use proper lifting techniques when moving material by hand.
- Know the weight of the object to be handled.
- Protect the area around and below you.

U. Welding and Burning

General

- Before beginning any flame or spark producing operations in the plant, check with your supervisor about any permits that may be required. Follow the requirements on the permit.
- Keep welding leads and burning hoses clear of passageways.
- Each welder is responsible for containing sparks and slag and/or removing combustibles to prevent fires. The welder is also responsible for making sure there is a fire watch and a good fire extinguisher for the duration of the operation.
- Provide adequate screens to protect vision of general public.

Welding - Electric

- All work must have a separate and adequate ground.
- Welding rods are not to be left in the electrode holder when not in use. Stub ends are to be put in proper containers - not on the floor.

- All weld arcs shall be shielded.
- All welding machines are to be shut off when not in use.
- Hard hats with the brim to the front must be worn during welding operations by the welder.
- An approved welding shield must be worn. Use no less than a No. 10 filter plate with safety plate on both sides of the filter plate.
- Powered welding machines should be operated in well ventilated area only and will be diesel fueled only, unless otherwise approved by safety.

Burning - Gas

- The operation of oxygen and fuel gas burning equipment shall only be done by trained and experienced personnel.
 - Do not exceed 15 P.S.I. on the torch side of the gauge when using acetylene.
 - Only an approved spark lighter should be used to light a burning torch. Do not use matches, cigarettes, lighters or hot work.
 - Always clean burning tips with the proper type cleaner.
 - All burning rigs must be broken down at the end of the shift with regulators removed and caps screwed down hand tight.
 - Approved burning goggles must be worn and No. 4 lenses or darker must be used.
 - Keep oil and grease away from oxygen regulators, hoses and fittings. Do not store wrenches, dies, cutters, or other grease covered tools in the same compartment with oxygen equipment.
 - Compressed gas bottles shall be kept in bottle carts or secured in an upright position. They must be transported and stored in a secured, upright position with protective caps in place.
 - Oxygen and acetylene compressed gas bottles should not be stored together. They must be stored a minimum of 20' apart or have a 5 feet high, 30 minute rated fireproof wall between the two bottles.
 - All gauges, hoses, and torches should be inspected on a regular basis. A back flow preventer is required on all regulators.
 - When in use, place cylinders and hoses where they are not exposed to sparks and slag from the burning operation.
-
- Any hot work on carbon steel pipe lines, vessels, equipment, etc. that may have contained sulfuric acid will not be permitted without extensive review with project and plant personnel due to the possible generation of hydrogen gas.
 - Handle cylinders with care.
 - Lift to upper levels with approved carts only.
 - Do not strike an arc on cylinders.
 - Do not use cylinders as rollers.
 - Do not lift with slings or by the protective cap.

Protective Clothing

- Only cotton, woolen, leather or special fire retardant synthetic clothing should be worn when burning or welding. Synthetics are very flammable and melt and cause more serious burns when exposed to flames and high temperatures.

V. Steel Erection

General

- 100% tie-off is required at ALL times
- Containers shall be provided for storing or carrying rivets, bolts and drift pins, and secured against accidental displacement when aloft.
- A load shall not be released from the hoisting line until the members are secured with not less than two bolts, or equivalent at each connection and drawn up wrench tight.
- Tag lines are required for controlling loads.
- When bolts, drift pins or rivet heads are being knocked out/off, means shall be provided to keep them from falling.
- Impact wrenches shall be provided with a locking device for retaining the socket.

W. Accident / Incident Investigation

- Notify Honeywell personnel (project engineer, plant safety, construction safety, etc.) immediately after any injury (medical treatment and first aid cases), equipment or property damage, environmental excursions, or near-miss incidents.
- A Honeywell Contractor Incident Investigation Report shall be completed by the contractor company immediately upon knowledge of the incident.
- The report may be completed by an investigation team headed up by the contractor company, and assisted by the Honeywell project manager / engineer, site safety leader, the individual(s) involved and any other necessary personnel. All sections of the report are to be completed, signed and dated.

X. OSHA Reference Guide

<u>Subject</u>	<u>Reference</u>
Barricades	Subpart G - 1926.202 Barricades
Cars, Pickups & Trucks	Subpart O - 1926.601 Motor Vehicles
Chain Falls	Subpart H - 1926.251 Rigging Equip. for Mat. Handling
Compressed Gases	Subpart H - 1910.101 General Requirements
Concrete & Masonry	Subpart Q - 1926.700 Scope, Application & Requirements
Confined Space Entry	Subpart J - 1910.146 Permit- Required Confined Spaces
Cranes	Subpart N - 1926.550 Cranes & Derricks Subpart N - 1910.179 Overhead & Gantry Cranes
Demolition	Subpart T - 1926.850 Preparatory Operations
Egress	Subpart C - 1926.34 Means of Egress Subpart E - 1910.35 Definitions
Electrical	Subpart K - 1926.400 Introduction Subpart S - 1910.301 Introduction
Emergency Procedures	Subpart C - 1926.35 Employee Emergency Action Plans Subpart D - 1910.38 Employee Emergency Plans
Excavations	Subpart P - 1926.650 Scope, Application & Definitions
Eye Protection	Subpart E - 1926.102 Eye and Face Protection Subpart I - 1910.133 Eye and Face Protection

<u>Subject</u>	<u>Reference</u>
Fall Protection	Subpart E - 1926.104 Safety Belts, Lifelines & Lanyards Subpart M - 1926.500 Scope, Application & Definitions
Fire Protection	Subpart C - 1926.24 Fire Protection and Prevention Subpart F- 1926.150 Fire Protection Subpart L - 1910.155 Scope, Application & Definitions
First Aid	Subpart C - 1926.23 First Aid and

	Medical Attention
	Subpart D - 1926.50 Medical Services & First Aid
	Subpart K - 1910.151 Medical Services & First Aid
Floor Openings	Subpart M - 1926.502 Fall Protection Criteria & Practices
	Subpart D - 1910.23 Guarding Floor and Wall Openings
Foot Protection	Subpart E - 1926.96 Occupational Foot Protection
	Subpart I - 1910.136 Foot Protection
Hand Protection	Subpart I - 1910.138 Hand Protection
Hazard Communication	Subpart D - 1926.59 Hazard Communication
Hazardous Waste	Subpart D - 1926.65 Operations & Emergency Response
	Subpart H - 1910.120 Operations & Emerg. Response

<u>Subject</u>	<u>Reference</u>
Head Protection	Subpart E - 1926.100 Head Protection
	Subpart I - 1910.135 Head Protection
Hearing Protection	Subpart E - 1926.101 Hearing Protection
	Subpart G - 1910.95 Occupational Noise Exposure
Hoists	Subpart N - 1926.552 Mat. Hoist, Personnel Hoist & Elev.
Housekeeping	Subpart C - 1926.25 Housekeeping
Illumination	Subpart D - 1926.56 Illumination
Incident Investigation	Honeywell Contractor Near Miss/ Incident Investigation Report.
Ladders	Subpart X - 1926.1053 Ladders
	Subpart D - 1910.22 General Requirements
Lockout/ Tagout	Subpart K - 1926.417 Lockout and Tagging of Circuits
	Subpart J - 1910.147 Control of Hazardous Energy
Material Handling Equip.	Subpart O - 1926.602 Material Handling Equipment
Materials Handling	Subpart H - 1926.250 General Requirements for Storage
Mobile Equipment	Subpart O - 1926.600 Equipment
Permits	Per Site Specifics. Check With Your Site Contact.
Personal Protective Equip.	Subpart C - 1926.28 Personal Protective Equipment
	Subpart E - 1926.95 Criteria for Personal Protect. Equip.

Subpart I - 1910.32 General
Requirements

<u>Subject</u>	<u>Reference</u>
Personnel	Subpart L - 1926.453 Aerial Lifts
Lifting	Subpart N - 1926.552 Personnel
Equipment	Hoist & Elevators
	Subpart F - 1910.68 Manlifts
Respiratory	Subpart E - 1926.103 Respiratory
Protection	Protection
	Subpart I - 1910.134 Respiratory
	Protection
Rigging	Subpart H - 1926.251 Rigging
	Material
	Subpart N - 1910.184 Slings
Sanitation	Subpart D - 1926.51 Sanitation
	Subpart J - 1910.141 Sanitation
Scaffolds	Subpart L - 1926.451 Scope, Application & Definitions
	Subpart D - 1910.28 Safety
	Requirements for Scaffolding
Signaling	Subpart G - 1926.201 Signaling
Signs	Subpart G - 1926.200 Accident Prevention Signs & Tags
	Subpart J - 1910.145
	Specifications for Signs & Tags
Stairways	Subpart X - 1926.1050 Scope, Application & Definitions
Steel Erection	Subpart R - 1926.750 Steel Erection
Tools - Hand & Power	Subpart I - 1926.300 General Requirements
	Subpart P - 1910.241 Definitions
Training & Orientation	Subpart C - 1926.21 Safety Training and Education Per Site Specifics. Check With Your Site Contact.
Ventilation	Subpart J - 1926.353 Ventilation and Protection
	Subpart G - 1910.94 Ventilation
Welding & Burning	Subpart J - 1926.350 Welding & Cutting
	Subpart Q - 1910.251 Definitions

Y. Acknowledgement Page - Read Carefully Before Signing Below

This is to acknowledge that I have received my copy of the Honeywell Contractor Safety Handbook and an orientation on its contents as well as other project rules and policies. I will read and abide by all rules and regulations in the handbook and any additional rules and regulations of my job. I understand that working safely, complying with and obeying any and all Company and Honeywell safety rules, regulations or standards is a condition of employment. Should I not comply with Company and/or Honeywell safety rules, regulations or standards, I am subject to disciplinary action including removal from the site and possible termination of employment. In consideration of my employment, I further agree that my employment and compensation can be terminated at any time, with or without cause or notice, at the option of either the Company or myself. I understand further that this handbook and the rules and regulations it contains do not in any way constitute a contract (either expressed or implied) of employment between the Company as my employer and me for any indefinite or specified period of time. The Company reserves the right to change its policies as summarized herein.

Print Full Name

Signature

Contractor Company Name

Craft

Honeywell Contact/Representative

Date

Note: The perforated last page and the back cover of this booklet contain the same wording. After properly endorsed, the perforated page is to be removed and given to the Honeywell contact/representative.

Rev. 12/99

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Rev. 12/99

*** To be completed by the Contractor Company with assistance from
Honeywell personnel**

Date Incident Reported:		Honeywell Location:		Honeywell Contact:	
Date of Incident:		Time of Incident:		Name of Contractor Company:	
Name of Individual(s) Involved w/Incident:			Name of Injured Worker (if applicable):		Name of Supervisor/Foreman:
If an Individual was Injured, were they working under the direct supervision of Honeywell?			Age of Individual Involved:		Job Classification/Title/Craft:
Length of Work Experience at Job Classification:			Length of Employment with Company:		Length of Time Working at Site:
Was the Individual Involved with the Incident Performing their Regular Job? If "No", explain why:			Date of Site Safety Orientation:		Last Formal/Documented Safety Meeting Attended:
Hours Worked that Day/shift Prior to the	Hours Worked that Week Prior to the Incident:	Consecutive Days/Shifts Worked Prior to the Incident:		Last Day Off Prior to the Incident:	
Description of incident according to the individual(s) involved or injured (including what happened and how the incident occurred):					
According to the individual(s) involved with the incident or injured, what could have been done differently to prevent this incident from occurring?					
Why weren't these done prior to the incident?					
Describe any First Aid or Medical Treatment Provided On Site and/or at a Medical Facility. NOTE: Any follow-up treatment at a later date must be communicated to Honeywell (Contractor Safety Leader).					
Date that the Injured Individual Returned to Work?		Any Work Restrictions or Lost Time?		If "Yes", describe:	
		NOTE: Any work restrictions or lost time at a later date must be communicated to Honeywell (Contractor Safety Leader).			
Was there any Property Damage?		If "Yes", describe:			

Contractor Supervisor/Foreman should complete the information below with an Investigation Team

Team Investigation – List the Possible Causes of the Incident Below.
For Each Possible Cause Listed Above, Reply "Why" or "Why not" the Cause Occurred.
Corrective Action(s) Taken - List Person(s) Responsible and Target Date:
Contractor Investigation Team - Leader & Members:

Date Incident Reported:	Honeywell Location:	Honeywell Contact:	
Approval (Individual Involved/Injured):		Title:	Date:
Supervisor Approval (Print Name):		Title:	Date:
Honeywell Site Approval (Print Name):		Title:	Date:

HONEYWELL

01620 EXHIBIT 1 MOTOR VEHICLE ACCIDENT REPORT

Report #: _____

DATE OF ACCIDENT _____ DAY OF WEEK _____ TIME _____

LOCATION OF ACCIDENT _____

ACCIDENT INVOLVED: Employees, contractors, visitors, Vehicle vs. Vehicle, Vehicle vs. Property, Vehicle vs. Pedestrian

VEHICLE NO. 1

VEHICLE NO. 2 (or Pedestrian Info.)

_____	DRIVER'S NAME	_____
_____	STREET ADDRESS	_____
_____	CITY AND STATE	_____
_____	DRIVERS LICENSE NO.	_____
_____	PHONE NO. OR EXT.	_____
_____	OWNER'S NAME	_____
_____	STREET ADDRESS	_____
_____	CITY AND STATE	_____
_____	PHONE NUMBER	_____
_____	VEHICLE TYPE	_____
_____	MAKE, MODEL, YEAR	_____
_____	LICENSE PLATE	_____
_____	VEHICLE DAMAGE	_____
_____	PASSENGERS	_____
_____	VEHICLE REMOVED TO (auth.)	_____

INJURED (type, where taken): _____

POLICE DEPARTMENT/REPORT #: _____

WEATHER: _____

ROAD CONDITION: _____

ESTIMATED SPEED OF VEHICLE 1: _____ **VEHICLE 2:** _____

VEHICLE DEFECTS RELATING TO ACCIDENTS (Brakes, Lights, Tires, Steering)

VEHICLE 1: _____ **VEHICLE 2:** _____

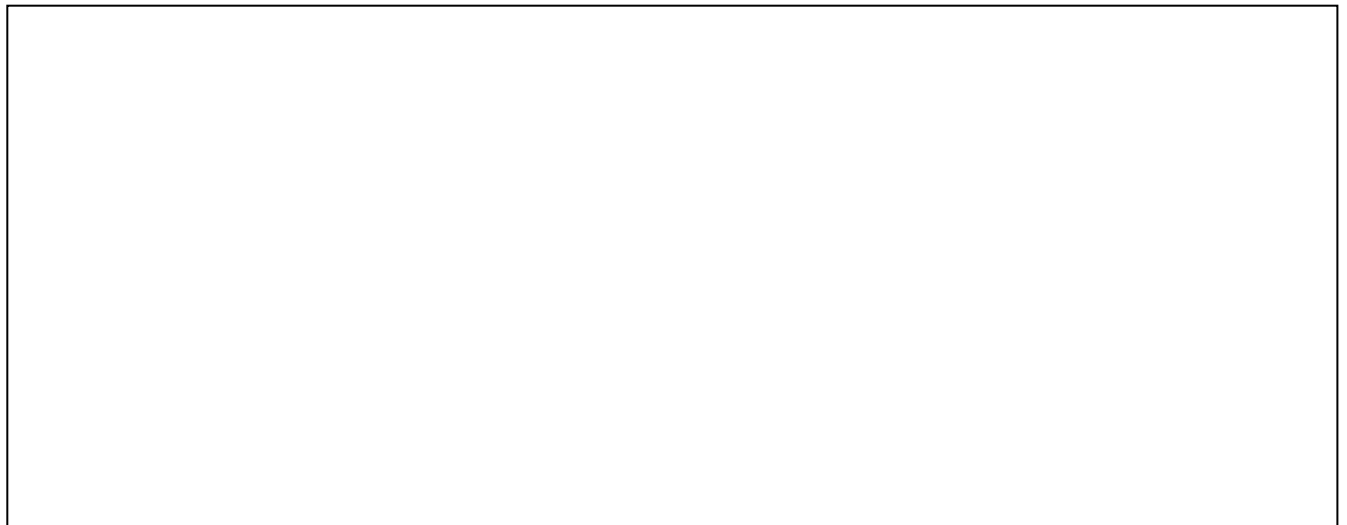
STATEMENT DRIVER VEHICLE 1: _____

STATEMENT DRIVER VEHICLE 2: _____

INVESTIGATOR'S COMMENTS: _____

PHOTOGRAPHS TAKEN?: _____

DIAGRAM:



INVESTIGATOR'S SIGNATURE: _____

DATE: _____

SUPERVISOR'S SIGNATURE: _____

DATE: _____

ATTACHMENT F RISK REGISTER

Tonawanda Coke Site 109 & 110
Risk Register
2020

		PROBABILITY			
SEVERITY	Ca	F	H	H	M
	Cr	E	H	H	M
	M	H	M	M	L
	N	M	L	L	L
		F	L	O	S
					U

		PROBABILITY			
SEVERITY	Ca	F	H	H	M
	Cr	E	H	H	M
	M	H	M	M	L
	N	M	L	L	L
		F	L	O	S
					U

Activity	HOC Confirmation	Hazard Identification	At Risk	Pre-Risk Mgt Evaluation Matrix			Pre-Risk Mgt Treatment	Risk Management & Control -- Safety & Health		Risk Management & Control -- Environmental			Responsible Person	Cost Contingency	Post-Risk Mgt Evaluation Matrix			Residual Risk Action	PM or Office Manager Approval	Post-Risk Mgt Treatment (Residual Risk)
				Probability	Severity	RAC (Pre-Risk)		Engineering/ Administrative Controls	PPE	Waste Management	Engineering/ Administrative Controls	Site Condition Controls			Probability	Severity	RAC (Post-Risk)			
General Field Work	Yes	Injuries, Cold Stress Injuries, Biological Hazards,	Site personnel	Likely	Critical	HIGH	Reduce	Activity Hazard Analysis, Procedures	Personal Flotation Device, Leather Work Gloves	Avoidance	Procedures, Regulatory Requirements,	Spill Kit on Site	Field Team Leader	Covered in Budget	Seldom	Critical	MODERATE	NA		Accept
Fish Sampling	Yes	Dropping, Slips/Trips/Falls, Drowning, Cuts/Punctures/Bites/Muscle Strains/Blunt force injury, Carp Fence/Plant Enclosures	Site personnel	Likely	Marginal	MODERATE	Reduce	Activity Hazard Analysis, Procedures	Level D - Modified, Personal Flotation Device, Leather Work Gloves	Avoidance, Disposal	Permits, Procedures, Regulatory Requirements, Training/education, Checklists/audits, Instructions	Spill Kit on Site	Field Team Leader	Covered in Budget	Likely	Marginal	MODERATE	NA		Accept
Sediment and Water Sampling	Yes	Dropping, Slips/Trips/Falls, Drowning, Cuts/Scrapes, Strains, Preservative Burns	Site personnel	Occasional	Marginal	MODERATE	Reduce	Activity Hazard Analysis, Procedures	Level D - Modified, Personal Flotation Device, Work Gloves	Avoidance, Disposal	Permits, Procedures, Regulatory Requirements, Training/education, Checklists/audits, Instructions	Spill Kit on Site	Field Team Leader	Covered in Budget	Seldom	Marginal	LOW	NA		Accept

ATTACHMENT G LEGAL COMPLIANCE REGISTER

Attachment H
Tonawanda Coke Legal Compliance Registry
Content Revision Date: 4/6/2018

Item #	Description / identity of relevant SH&E risk	Identity / citation of related legal compliance obligation	How does one gain access to the text of this legal compliance obligation?	Remarks
1	General Safety & Health	<ul style="list-style-type: none"> US OSHA 29 CFR 1926.20 US ACE EM 385-1-1 01.A 	<ul style="list-style-type: none"> www.osha.gov www.usace.army.mil/SafetyandOccupationalHealth.aspx 	
2	Safety Training	<ul style="list-style-type: none"> US OSHA 29 CFR 1926.21 US ACE EM 385-1-1 01.B.01 	<ul style="list-style-type: none"> www.osha.gov www.usace.army.mil/SafetyandOccupationalHealth.aspx 	
3	First Aid and Medical	<ul style="list-style-type: none"> US OSHA 29 CFR 1926.23 US OSHA 29 CFR 1926.50 US ACE EM 385-1-1 03.A 	<ul style="list-style-type: none"> www.osha.gov www.usace.army.mil/SafetyandOccupationalHealth.aspx 	
4	Fire Protection and Prevention	<ul style="list-style-type: none"> US OSHA 29 CFR 1926.24 US OSHA 29 CFR 1926.150-155 US OSHA 29 CFR 1926.352 US ACE EM 385-1-1 09.A 	<ul style="list-style-type: none"> www.osha.gov www.usace.army.mil/SafetyandOccupationalHealth.aspx 	
5	Housekeeping	<ul style="list-style-type: none"> US OSHA 29 CFR 1926.25 US ACE EM 385-1-1 14.C 	<ul style="list-style-type: none"> www.osha.gov www.usace.army.mil/SafetyandOccupationalHealth.aspx 	
6	Sanitation	<ul style="list-style-type: none"> US OSHA 29 CFR 1926.27 US OSHA 29 CFR 1926.51 US ACE EM 385-1-1 02.A 	<ul style="list-style-type: none"> www.osha.gov www.usace.army.mil/SafetyandOccupationalHealth.aspx 	
7	Personal Protective Equipment	<ul style="list-style-type: none"> US OSHA 29 CFR 1926.28 US OSHA 29 CFR 1926.95-98 US OSHA 29 CFR 1926.100-107 US ACE EM 385-1-1 05.A 	<ul style="list-style-type: none"> www.osha.gov www.usace.army.mil/SafetyandOccupationalHealth.aspx 	
8	Emergency Employee Action Plans	<ul style="list-style-type: none"> US OSHA 29 CFR 1926.35 US ACE EM 385-1-1 01.E 	<ul style="list-style-type: none"> www.osha.gov www.usace.army.mil/SafetyandOccupationalHealth.aspx 	
9	Noise Exposure	<ul style="list-style-type: none"> US OSHA 29 CFR 1910.95 US OSHA 29 CFR 1926.52 US ACE EM 385-1-1 05.C 	<ul style="list-style-type: none"> www.osha.gov www.usace.army.mil/SafetyandOccupationalHealth.aspx 	
10	Gases, Vapors, Dusts and Mists	<ul style="list-style-type: none"> US OSHA 29 CFR 1926.55 	<ul style="list-style-type: none"> www.osha.gov 	
11	Hazard Communication	<ul style="list-style-type: none"> US OSHA 29 CFR 1926.59 US ACE EM 385-1-1 1.B.06 	<ul style="list-style-type: none"> www.osha.gov www.usace.army.mil/SafetyandOccupationalHealth.aspx 	
12	Hazardous Waste Operations and Emergency Response	<ul style="list-style-type: none"> US OSHA 29 CFR 1910.120 US OSHA 29 CFR 1926.65 US ACE EM 385-1-1 28.A 	<ul style="list-style-type: none"> www.osha.gov www.usace.army.mil/SafetyandOccupationalHealth.aspx 	
13	Accident prevention signs and tags	<ul style="list-style-type: none"> US OSHA 29 CFR 1926.200 US ACE EM 385-1-1 08.A 	<ul style="list-style-type: none"> www.osha.gov www.usace.army.mil/SafetyandOccupationalHealth.aspx 	
14	Signaling	<ul style="list-style-type: none"> US OSHA 29 CFR 1926.201 US ACE EM 385-1-1 08.B 	<ul style="list-style-type: none"> www.osha.gov www.usace.army.mil/SafetyandOccupationalHealth.aspx 	
15	Barricades	<ul style="list-style-type: none"> US OSHA 29 CFR 1926.202 	<ul style="list-style-type: none"> www.osha.gov 	
16	Material Storage	<ul style="list-style-type: none"> US OSHA 29 CFR 1926.250 US ACE EM 385-1-1 14.B 	<ul style="list-style-type: none"> www.osha.gov www.usace.army.mil/SafetyandOccupationalHealth.aspx 	
17	Waste Disposal	<ul style="list-style-type: none"> US OSHA 29 CFR 1926.252 US ACE EM 385-1-1 14.D 	<ul style="list-style-type: none"> www.osha.gov www.usace.army.mil/SafetyandOccupationalHealth.aspx 	
18	Tools	<ul style="list-style-type: none"> US OSHA 29 CFR 1926.300-307 	<ul style="list-style-type: none"> www.osha.gov 	

		<ul style="list-style-type: none"> US ACE EM 385-1-1 13.A 	<ul style="list-style-type: none"> www.usace.army.mil/SafetyandOccupationalHealth.aspx 	
19	Motor Vehicles, Mechanized Equipment	<ul style="list-style-type: none"> US OSHA 29 CFR 1926.600-603 US ACE EM 385-1-1 18.A 	<ul style="list-style-type: none"> www.osha.gov www.usace.army.mil/SafetyandOccupationalHealth.aspx 	
20	Site Clearing	<ul style="list-style-type: none"> US OSHA 29 CFR 1926.604 US ACE EM 385-1-1 31.A 	<ul style="list-style-type: none"> www.osha.gov www.usace.army.mil/SafetyandOccupationalHealth.aspx 	
21	Excavations	<ul style="list-style-type: none"> US OSHA 29 CFR 1926.650-652 US ACE EM 385-1-1 25.A 	<ul style="list-style-type: none"> www.osha.gov www.usace.army.mil/SafetyandOccupationalHealth.aspx 	
22	Internal Traffic Control	<ul style="list-style-type: none"> US ACE EM 385-1-1 8.D 	<ul style="list-style-type: none"> www.usace.army.mil/SafetyandOccupationalHealth.aspx 	
23	Traffic Movement Restriction Times	<ul style="list-style-type: none"> US ACE EM 385-1-1 8.C 	<ul style="list-style-type: none"> www.usace.army.mil/SafetyandOccupationalHealth.aspx 	
25	Boating	<ul style="list-style-type: none"> OSH Act of 1970 SEC. 5. Duties 	<ul style="list-style-type: none"> www.osha.gov 	

ATTACHMENT H TRAINING MATRIX

Employee Name / Employee Title / Employee Function	Required Compliance / Risk Control / Risk Management Training	Required Licenses / Designations of Authority / Competencies / Qualifications / Certifications	Frequency of Required Refresher Training / Assessment of Continuing Competency
Field Team Leaders/Construction Manager	Basic orientation	ESHARP/PSHEP	On initial assignment, reviewed annually
	First Aid / CPR / AED	Designated provider of first aid / CPR provider	Every 2 years (with bloodborne pathogens training)
	PPE: Hardhats, Gloves, Eye Protection, Safety Boots	ESHARP/PSHEP	On initial assignment; upon changes to PPE use
	Parsons Fleet Driver Training		Training is required when personnel are required to operate a Parsons Owned or Leased vehicle on public roadways
Field Technicians	Basic orientation	ESHARP/PSHEP	On initial assignment, reviewed annually
	PPE: Hardhats, Gloves, Eye Protection, Safety Boots	ESHARP/PSHEP	On initial assignment; upon changes to PPE use
	Parsons Fleet Driver Training		Training is required when personnel are required to operate a Parsons Owned or Leased vehicle on public roadways

Current Training Certificates Database: P:\H&S_18\Training Certificates

ATTACHMENT I COVID-19 PREVENTION PROCEDURES

1. Purpose

This document provides guidance to reduce the potential for contracting or spreading Coronavirus Disease 2019 (COVID-19).

2. Procedure

- 2.1. Parsons Corporate Response Management Team (CRMT) actively monitors the outbreak and impacts the COVID-19 may have on our employees and customers.
- 2.2. Project Managers are asked to refer to Parsons internal COVID-19 Crisis Responses site and Company News Group updates for the latest directives on travel, working/returning to work and other relevant documents/resources. Project Managers shall modify this procedure as updates are made to internal guidance.
- 2.3. Managers are encouraged to collaborate with customers, subcontractors, and partners on crisis guidelines and contingency/preparedness plans. Our customers, subcontractors, and partners may provide different guidelines to their employees, ultimately impacting Parsons employees. In cases where local site guidelines are stricter, the strictest will apply.
- 2.4. The potential exposure to COVID-19 will be incorporated into each project's risk register, risk planning meetings and mitigation documents, as appropriate.
- 2.5. Exposure mitigations will be based on the hierarchy of controls with PPE serving as the last line of protection.
 - 2.5.1. **Elimination:** We must eliminate all non-critical path work until further notice.
 - 2.5.2. **Administrative Control:** We must ensure that our people are effectively isolated from COVID-19 exposure when possible utilizing social distancing and perimeter barricading. Symptomatic employees must not be allowed to enter the work zone with no exceptions.
 - 2.5.3. **Administrative control:** All employees must be required to frequently wash and disinfect their hands per CDC guidelines. This will require dedicated staffing to reinforce this control among all work groups in all work zones.
 - 2.5.4. **Administrative control:** All common areas, breakrooms, restrooms, and working surfaces used by Parsons employees must be cleaned and disinfected per CDC guidelines. Each project should establish their own sanitation schedule based upon usage but no less than daily.
 - 2.5.5. **Administrative Control:** All onsite workers must complete COVID-19 awareness training before being allowed to work on site.
 - 2.5.6. **Administrative Control:** Breaks and lunches can be staggered in order to minimize employee contact and interaction. Site specific guidelines must implemented to ensure that guidelines related to social distancing, handwashing and sanitation are adhered to.



2.5.7. **PPE:** Where social distancing guidelines, general hygiene and surface sanitation practices cannot be adhered to then appropriate respiratory protection must be provided and worn. Additionally, workers and worksite visitors must always wear medical grade gloves. All OSHA requirements related to the use of respiratory protection training (e.g. training, fit testing, medical screening, etc.) must be followed.

2.6. For additional information, please refer to the Centers for Disease Control - Interim Guidance for Businesses and Employers (<https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-business-response.html>).

3. Personal Hygiene

- 3.1. Frequently wash your hands with soap and water for at least 20 seconds and always before/after eating and arriving/departing the site.
- 3.2. If soap and running water are not available, use an alcohol-based hand rub that contains at least 60% alcohol.
- 3.3. Avoid touching your eyes, nose, or mouth with unwashed hand.
- 3.4. Use respiratory etiquette, including covering coughs and sneezes. Wash hands or use hand sanitizer after each time you cough or sneeze.
- 3.5. Minimize contact among employees, contractors, and other stakeholders by replacing face-to-face meetings with virtual communications and implementing telework if feasible.
- 3.6. Utilize disinfectants from the EPA list (<https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>) by wiping down surfaces you touch prior to starting work and routinely throughout the day, including shared vehicles as appropriate.
- 3.7. Clean and disinfect all supplies (pens, clipboards, etc.), tablets, cellphones, reusable equipment (meters, pumps, etc.), and non-disposable PPE (hardhats, safety glasses, earmuffs) at the end of each day. Avoid using other employee's phones and personal work items, when possible.
- 3.8. Practice social distancing –stay 6' away from other people. Avoid handshakes.
- 3.9. Do not come to work if you are sick or exhibiting any symptoms of COVID-19. Refer to internal COVID-19 site for additional guidance on returning to work.
- 3.10. If another person on site does come into work or to the site sick, isolate them, and send them home, if Parsons is the controlling employer. If Parsons is not the controlling employer, isolate employees from the person, and inform the controlling employer accordingly.
- 3.11. For additional guidance on hygiene and hand washing best practices, please refer to the Centers for Disease Control COVID—19 How to Protect Yourself (<https://www.cdc.gov/coronavirus/2019-ncov/prepare/prevention.html>).

4. Field Trailer Cleaning/Sanitation

The following steps should be taken if site employees are utilizing common areas for meetings and breaks.

- 4.1. Each Parsons managed location must designate responsible person(s) for cleaning all common areas within a field trailer. This includes tables, doorknobs, light switches, countertops, handles, desks, phones, keyboards, toilets, faucets, and sinks.
- 4.2. If Parsons employees have work areas in a shared field trailer controlled by others, obtain information from controlling employer on sanitation practices.
- 4.3. To clean common areas, use disinfectants found on the EPA list.
- 4.4. Labels contain instructions for safe and effective use of the product including precautions taken when applying the product, such as wearing gloves (Personal Protective Equipment) and using good ventilation during use of the product. Gloves should be discarded after each cleaning and disinfection.
- 4.5. Provide disposable disinfecting wipes for staff to use on commonly used surfaces (for example, keyboards, desks, etc.), which can be wiped down by staff at their own workstations. Throw disinfecting wipes away after one use.
- 4.6. Have hand sanitizer available at common areas for employee use. Post the World Health Organization Hand Rubbing poster (https://www.who.int/gpsc/5may/How_To_HandRub_Poster.pdf) near shared sanitizers.

5. Screening Employees – Pandemic Conditions

Parsons may encounter Customer requests or higher risk field locations (e.g. craft projects, multi-employer) that require additional steps to support the separation of symptomatic employees from the healthy population. The objective is to reduce risk and potential COVID-19 exposures to those entering the facility and/or field location.

- 5.1. Self-declaration questionnaires (See Attachment I-3) can be used as a means to pre-screen employees prior to accessing a locations point of entry. **Note:** Project Managers may need to update this questionnaire as local conditions and requirements change (e.g., updates to Customer quarantine requirements). Any changes to the self-declaration questionnaire must be cleared by Parsons Legal. Employees are encouraged to self-monitor their body temperature at home prior to completing the self-declaration questionnaire when feasible.
- 5.2. Onsite temperature screenings are permitted under the following conditions:
 - 5.2.1. The agent conducting the screening has a health service background with the requisite training, equipment, and knowledge necessary to effectively assess worker suitability to enter the work zone. For Parsons controlled sites, this will require contracting through a local health service provider.
 - 5.2.2. A visible barricade has been established around the perimeter of all Parsons work areas to ensure that no “non-cleared” personnel enter these work zones at any time. Cleared personnel are those who have been assessed as asymptomatic for COVID-19 infection by an agent who has been expressly trained to recognize and test persons for symptoms.

- 5.2.3. All workers must be assessed and cleared prior to entering these work zones.
- 5.2.4. Workers must line up a minimum of 6 ft. apart in advance of these work zones prior to being assessed.

6. Training

- 6.1. COVID-19 awareness training is included on the project training matrix. Subcontractors must train their own employees.
- 6.2. At a minimum, the following information and training is provided:
 - 6.2.1. Sources of exposure to the COVID-19
 - 6.2.2. The hazards associated with that exposure, and appropriate workplace protocols in place to prevent or reduce the likelihood of exposure
 - 6.2.3. Information regarding where employees can go to obtain more knowledgeProject Managers can utilize Attachment I-1 COVID-19 Factsheet to assist with employee awareness training.
- 6.3. Supervisors must brief employees on any applicable updates to internal COVID-19 guidance during daily huddles/toolbox meetings before beginning work.
- 6.4. Using an acceptable training form, the records custodian maintains a record of all training or instruction given to employees.

7. Responsibilities

- 7.1. **Corporate SH&E:** Responsible for developing and maintaining this procedure and conducting periodic reviews and updates to ensure alignment and integration with related or referenced policies and procedure; support and guidance to help ensure the success of this procedure; and auditing its effectiveness.
- 7.2. **Project Manager (PM):** Ultimately responsible for delivering the project and assigning roles and responsibilities to discipline managers and the Project Management Team; implementing and enforcing this procedure, and designating a records custodian for the project.
- 7.3. **Records Custodian:** Responsible for documenting and maintaining employee training.
- 7.4. **Subcontractor:** Complies with all Parsons' requirements. Submit subcontractor COVID-19 preparedness documentation. Trains subcontractor employees.

8. Exceptions

- 8.1. The Project Manager may request or require a more stringent process if required by the contract or is beneficial to the project.

9. Appendices

- 9.1. COVID-19 Factsheet
- 9.2. Business Travel COVID-19 Pandemic
- 9.3. COVID 19 Self-declaration Form

Revision History

Revision	Changes	Approver	Approval Date
0	Original Issue	Barker, John	3/20/2020
1	Added Section 2.5 and Section 5. Added Attachments I-2 and I-3	Barker, John	3/31/2020



Coronavirus Disease 2019 (COVID-19)

What is Coronavirus disease 2019?

Coronavirus disease 2019 (COVID-19) is a respiratory illness that can spread from person to person. The virus that causes COVID-19 is a novel coronavirus that was first identified during an investigation into an outbreak in Wuhan, China.

Can I get COVID-19?

Yes. COVID-19 is spreading from person to person in many parts of the world. Risk of infection from the virus that causes COVID-19 is higher for people who are close contacts of someone known to have COVID-19, for example healthcare workers, or household members. Other people at higher risk for infection are those who live in or have recently been in an area with ongoing spread of COVID-19.

How does COVID-19 spread?

The virus is thought to spread mainly between people who are in close contact with one another (within about 6 feet) through respiratory droplets produced when an infected person coughs or sneezes. It also may be possible that a person can get COVID-19 by touching a surface or object that has the virus on it and then touching their own mouth, nose, or possibly their eyes, but this is not thought to be the main way the virus spreads.

What are the symptoms of COVID-19?

Patients with COVID-19 have had mild to severe respiratory illness with symptoms of:

- fever
 - cough
 - shortness of breath
 - pneumonia in both lungs and other severe complications
-

People can help protect themselves from respiratory illness with everyday preventive actions.

- Avoid close contact with people who are sick.
 - Avoid touching your eyes, nose, and mouth with unwashed hands.
 - Wash your hands often with soap and water for at least 20 seconds.
 - Use an alcohol-based hand sanitizer that contains at least 60% alcohol if soap and water are not available.
 - Practice social distancing –stay 6’ away from other people. Avoid handshakes.
-

If you are sick, to keep from spreading respiratory illness to others, you should

- Stay home when you are sick.
 - Cover your cough or sneeze with a tissue, then throw the tissue in the trash.
 - Clean and disinfect frequently touched objects and surfaces.
-

What workplace guidance is available to help protect employees and prevent the spread of COVID-19?

- Employees are asked to review Parsons internal COVID-19 Crisis Response site and Company News Group updates for the latest directives on travel, working/returning to work and other relevant documents.
 - A COVID-19 Prevention Procedure has been developed to offer additional field guidance covering personal hygiene practices, cleaning/sanitation, training and other relevant information.
-

Are there additional resources to learn more about COVID-19?

- Centers for Disease Control - Interim Guidance for Businesses and Employers (<https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-business-response.html>).
 - For hygiene and hand washing best practices, Centers for Disease Control COVID—19 How to Protect Yourself. (<https://www.cdc.gov/coronavirus/2019-ncov/prepare/prevention.html>).
 - World Health Organization Hand Rubbing poster (https://www.who.int/gpsc/5may/How_To_HandRub_Poster.pdf)
 - EPA list of disinfectants (<https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>)
-

ATTACHMENT I-2

BUSINESS TRAVEL COVID-19 PANDEMIC

Parsons Corporate Response Management Team (CRMT) is actively monitoring the outbreak caused by COVID-19 (coronavirus). Updates are being announced in the [Company News Workplace group](#) regularly as conditions change. This Attachment is intended to provide managers with additional information to help manage the crisis during business travel activities.

TRAVEL

All employees are advised to postpone all non-essential business travel, domestic or international, until further notice. This includes non-essential attendance at meetings, conferences, and events.

Essential Travel is defined as:

- Travel to and from client meetings when it is not feasible to conduct the meeting virtually or postpone the meeting.
- Travel required to prevent immediate impacts to the health and safety of the employee and family.
- Travel, that if postponed or cancelled, would cause material impacts to the financial, operational, business development, safety, reputational, legal or compliance status of Parsons.
- When in doubt about what is essential, contact your leadership team.

In general, COVID-19 is believed to be most commonly transmitted via person-to-person contact. There's certainly the chance of contracting the virus through contact with contaminated surfaces, but [according to the CDC](#), this is "not thought to be the main way the virus spreads."

There are several great resources on the [CDC](#) and [WHO](#) websites about precautions we can take to stay healthy and limit exposure to COVID-19. Traveling employees are encouraged to take preventative actions to help stop the spread of germs:

- Wash hands frequently using soap and water.
- Use alcohol-based hand sanitizer frequently as recommended
- **Avoid touching your eyes, nose, and mouth** with an unwashed hand
- Wearing masks: Are you sick? If so, wearing a mask will protect others. If not, wearing a mask may or may not protect you. Masks are much more effective when placed on an infected person
- Practice social distancing when possible
- Avoid areas of known infection or interactions with known infected

Control Measures are provided in the table below to reduce the likelihood of infection during essential business travel.

Table 1: Protection Against COVID-19 During Business Related Travel

ACTIVITY	HAZARD	CONTROL
Airline Travel	<p>Transmission Through Person to Person Contact</p> <ul style="list-style-type: none"> Between people who are in close contact with one another (within about 6 feet). Through respiratory droplets produced when an infected person coughs or sneezes. Contact with Contaminated Surfaces and Objects 	<p>Airline travel is permitted if considered essential (see definition above)</p> <p>Employees are encouraged to wash their hands after passing through the security checkpoint and before eating or drinking</p> <p>Avoid touching your eyes, nose or mouth with unwashed hands</p> <p>Travel with disinfecting wipes if possible and clean frequently touched surfaces (tray table, armrest, and seatback display)</p> <p>If carrying hand sanitizer, apply before takeoff and after disinfecting surfaces</p> <p>Avoid aisle seats as you are exposed to more passengers during the flight.</p>
Staying in Hotels	<p>Transmission Through Person to Person Contact</p> <ul style="list-style-type: none"> Between people who are in close contact with one another (within about 6 feet). Through respiratory droplets produced when an infected person coughs or sneezes. Contact with Contaminated Surfaces and Objects 	<p>Top tier and other hotel chains have established COVID-19 response plans for protecting guests. Employees should not stay in hotels or hotel chains in which a COVID-19 response plan has not been published</p> <p>Employees are encouraged to wash their hands immediately upon entering the room</p> <p>Travel with disinfecting wipes if possible and clean frequently touched surfaces in room (remote control, light switches, bedside lamp switches, the alarm clock, the phone, the bathroom sink)</p> <p>Remove the comforter to avoid potential contact with lingering bodily fluids that can harbor germs</p> <p>Employees are asked to practice social distancing when possible and should discuss accommodation options (e.g. kitchenette) with their manager prior to booking.</p>
Carpooling (Parsons Vehicles)	<p>Transmission Through Person to Person Contact</p> <ul style="list-style-type: none"> Between people who are in close contact with one 	<p>Carpooling in Parsons vehicles is permitted if travel is considered essential (see definition above).</p> <p>Carpooling or ridesharing with strangers or non-essential passengers <i>in Parsons vehicles</i> is prohibited.</p>

ACTIVITY	HAZARD	CONTROL
Carpooling (Parsons Vehicles)	<p>another (within about 6 feet).</p> <ul style="list-style-type: none"> Through respiratory droplets produced when an infected person coughs or sneezes. Contact with Contaminated Surfaces and Objects 	<p>Don't carpool if you or other passengers are symptomatic (fever, cough, or shortness of breath) or have been in close proximity to someone who has contracted the virus within the last 14 days.</p> <p><u>Regularly clean and disinfect your vehicle:</u></p> <ul style="list-style-type: none"> The steering wheel is constantly touched. They should be wiped down with a disinfectant wipe or spray daily. Don't forget the exterior and interior door handles, your gear shifter, the climate control buttons and radio knobs or buttons, the rearview mirror, and your center console including the cupholders. Look for specific wipes available made for cleaning your car's leather. Use microfiber cloths to wipe down touchscreens. <p><u>Things to keep in your vehicle:</u></p> <ul style="list-style-type: none"> Box of tissues along with a small trash bag to gather the used tissues. Empty it daily. Hand sanitizer: According to the Centers for Disease Control, use a hand sanitizer that contains at least 60% alcohol. Sanitary wipes or spray
Traveling to Remote Locations	<p>Transmission Through Person to Person Contact</p> <ul style="list-style-type: none"> Between people who are in close contact with one another (within about 6 feet). Through respiratory droplets produced when an infected person coughs or sneezes. Contact with Contaminated Surfaces and Objects 	<p>Work in remote locations is permitted if travel is considered essential (see definition above). Employees should never perform remote field activities alone</p> <p>Ensure reasonable quantities of food, water, medicines and essentials in the event of travel restrictions, quarantine or limited local supplies.</p> <p>For field work, pack adequate supplies of disinfectants, sanitizing products, trash bags, and nitrile gloves. Disinfect equipment and shared tools before and after use</p> <p>Identify nearest healthcare providers along route and at designation to assist with any medical needs or severe sickness prior to trip</p> <p>Ensure availability and/or ability to use communication devices. Contact Parsons Global Hotline: 1-667-225-6153 for business travel emergencies</p>

ATTACHMENT I-3

COVID-19 SELF-DECLARATION FORM

To prevent the spread of COVID-19 and reduce the potential risk of exposure to our employees and others, we are conducting a simple screening questionnaire. Your participation is important to help us take precautionary measures to protect you and everyone at your project location. Thank you for your time.

Name:	Contact Number:
Company/Organization:	Parsons POC:
Project Name:	City/State:

Self-Declaration

1. Have you returned from any of the Level 3 countries listed on the CDC website <https://www.cdc.gov/coronavirus/2019-ncov/travelers/after-travel-precautions.html> within the last 14 days?

Yes

No

2. Have you had close contact with or cared for someone diagnosed with COVID-19 within the last 14 days?

Yes

No

3. Have you been in close contact with anyone who has traveled within the last 14 days to one of the Level 3 countries listed on <https://www.cdc.gov/coronavirus/2019-ncov/travelers/after-travel-precautions.html> .

Yes

No

4. Have you experienced any cold or flu-like symptoms in the last 14 days (including fever, cough, sore throat, respiratory illness, difficulty breathing)?

Yes

No

If the answer is “yes” to any of the following questions, access to the field project location is not permitted.

Signature (visitor): _____ Date: _____



COVID-19 Management Plan PSHEP Addendum Template Tonawanda Coke Sites 109 and 110

Purpose

This document provides guidance to reduce the potential for contracting or spreading Coronavirus Disease 2019 (COVID-19).

Document Version

This document was prepared consistent with Parsons requirements. Below is the version history for the COVID-19 Management Plan developed for the **Tonawanda Coke Sites 109 and 110**.

Revision 0: Original version, issued May 6, 2020.

Project Location and Description

Parsons, in its contracted role with Honeywell International Inc., will be conducting Remedial Investigation (RI) activities at Site 108 of the Tonawanda Coke Site, located at 3875 River Road, Tonawanda, NY. The RI scope of work includes excavation of test pits, surface soil and subsurface soil sampling, installation of groundwater monitoring wells, groundwater sampling, and surveying. Work is anticipated to take place late summer through fall of 2020.

Project Team

Multiple contractors will be on-site to implement and/or oversee each task. **Contractors have not been selected yet; once contractors are selected, key personnel and contact information will be populated below.**

CLIENT / PROJECT :

Project Manager: **Steve Coladonato, Remediation Manager, Honeywell**
115 Tabor Road, Morris Plains, NJ 09750
Steven.Coladonato@honeywell.com
302-791-6738

Property Owners:

Riverview Innovation and Technology Park

Investigation Activities Oversight Contact: Parsons

- Project Manager: **Ed Glaza**, Edward.glaza@parsons.com, 315-552-9691
- RI Task Manager: **George Moreau**, George.H.Moreau@parsons.com, 315-491-6249

Remedial Action and/or Investigation Activities Contractor: TBD

- Project Manager: **TBD**
- Case Manager: **TBD**
- Subcontractors: **TBD**



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Local Health Department

The project site is located in **Erie County**. Contact information for the local health department is listed below.

Erie County Department of Health
95 Franklin Street, Buffalo, NY
716-858-7690

As of the date this plan was prepared, there are no local COVID-19 testing sites. As an alternative, the local health department recommends all COVID testing be coordinated through primary care physicians. In the event, a worker develops symptoms they are instructed to call their primary care provider for further instructions. **If one does not have a primary care provider, call the ECDOH COVID-19 Information Line for local testing information: 716-858-2929.**

Potential Exposure Pathways, Risks and Symptoms

COVID-19 spreads mainly between people who are in close contact with one another (within about 6 feet) through respiratory droplets produced when an infected person coughs or sneezes. COVID-19 can also be transmitted by touching a surface or object that has the virus on it and then touching one's own mouth, nose, or possibly eyes. Risk of infection for the virus that causes COVID-19 is higher for people who are close contacts of someone known to have COVID-19 and those who live in or have recently been in an area with ongoing spread of COVID-19. Patients with COVID-19 have had mild to severe respiratory illness with symptoms of fever, cough, shortness of breath, difficulty breathing, chills, repeated shaking with chills, muscle pain, headache, sore throat, and new loss of taste and smell. These symptoms may reveal themselves 2 to 14 days after exposure to the virus.

Exposure Mitigation

Exposure mitigation will be managed at the Site by first implementing administrative controls and then by using personal protective equipment (PPE) as described below. A visual reminder is included in **Attachment 1**, as well. The following administrative controls may be implemented based on risk level and client or local guidelines:

Administrative Controls:

- **Symptom identification and tracking. All project staff will be required to complete and submit the attached Screening Questionnaire and self-report any of the following symptoms:**
 - **Shortness of breath**
 - **Coughing**
 - **Fever**
- Pre-screening through external temperature and verbal acknowledgement of symptoms will be completed daily
- Anyone with signs or symptoms of COVID 19 will not be allowed to enter the site and is required to report to self-isolate and seek medical attention as needed.
- Dedicated staffing will be used by all on-site contractors and Parsons to the extent practical to reinforce this control among all work groups in all work zones.



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- Avoid unnecessary overnight travel, bring food and other supplies to reduce need to enter public businesses
- Ensure on-site personnel are effectively isolated from COVID-19 exposure when possible utilizing social distancing. Social distancing means contractors and Parsons employees are able to maintain a distance of 6 feet between people.
- Tailgate meetings will be held each morning with all on-site contractors and stakeholders to review scheduled activities and to evaluate whether tasks can be completed using social distancing. Markers (e.g., tape, cones, spray paint markings, etc.) will be placed on the ground at each designated work location six feet apart. If the task can be completed safely, work may resume as planned. If social distancing can't be maintained, personal protective equipment (PPE, face coverings) is required.
- Since there is no running water at the site, contractors and Parsons employees will use an alcohol-based hand rub that contains at least 60% alcohol frequently throughout the day, but particularly after going to the bathroom, before/after eating, after blowing nose/coughing/sneezing in hands, and arriving/departing from the Site.
- Contractors and Parsons employees should avoid touching their eyes, nose, or mouth with unwashed hands.
- Avoid handshakes.
- Cough and sneeze into your elbow. If you use a tissue to blow your nose, dispose of the tissue promptly and use hand sanitizer to cleanse your hands.
- Utilize disinfectants from the EPA list (<https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>) by wiping down surfaces you touch prior to starting work and routinely throughout the day, including shared vehicles as appropriate.
- Clean and disinfect all supplies (pens, clipboards, etc.), tablets, cellphones, reusable equipment (meters, pumps, etc.), and non-disposable PPE (hardhats, safety glasses, earmuffs) at the end of each day. Avoid using other employee's phones and personal work items, when possible.
- Do not come to work if you are sick or exhibiting any symptoms of COVID-19. Symptomatic employees will not be allowed to enter the Site, no exceptions. If a person comes to the site sick, isolate them, and send them home.
- All on-site workers must complete COVID-19 awareness training before being allowed to work on-site.

Personal Protective Equipment (PPE):

- Where social distancing guidelines (staying 6 feet apart) cannot be adhered to or as mandated by Local Guidelines, an appropriate face covering must be worn at the Site.
- Every contractor and Parsons employee entering the site must have a face covering available for use or entry may be refused.



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Community Safety

Work is being performed on an inactive site that is closed to the public. There is very limited opportunity for contractors to cross paths with the public/community.

Site Access Control

Access to the site is limited and closed to the public. The site is fenced off and can only be accessed by passing by a security booth. Only authorized contractors and other personnel will be allowed on the site. Prior to work commencing, a control center will be established in an appropriate location on the site.

Procedure if Personnel is Diagnosed

This section details the procedures in the event a member of the project team is diagnosed with COVID-19, is suspected of having COVID-19 or has been in close proximity to someone who has contracted COVID-19.

1. If a contractor or a Parsons employee is sick/symptomatic, stay home and do not return to work until you are well.
2. If a contractor's or a Parsons employee symptoms align to COVID-19 as described in the Symptom Questionnaire, please seek medical attention for guidance.
3. Call 911 immediately, if someone develops any emergency warning signs/symptoms. Emergency symptoms may include trouble breathing, persistent pain or pressure in the chest, new confusion or inability to arouse and bluish lips or face. Notify the operator or Parsons Site Safety Officer the ill person has or may have, COVID-19. If possible, put on a cloth face covering before medical help arrives.
4. If a contractor or a Parsons employee has been in close proximity to someone who has contracted the virus, please stay home 14 days to ensure the worker is not sick/symptomatic before returning to work.

If a contractor or a Parsons employee has been diagnosed with COVID-19 and has stayed home (home isolated), this person can stop home isolation under the following conditions:

OPTION 1: If the contractor or a Parsons employee will not have a test to determine if they are still contagious, the contractor or a Parsons employee can leave home after these three things have happened: the person has had no fever for at least 72 hours (that is three full days of no fever without the use of medicine that reduces fevers) AND other symptoms have improved (for example, when the worker's cough or shortness of breath has improved) AND at least 7 days have passed since the worker's symptoms first appeared.

OPTION 2: If the contractor or a Parsons employee will be tested to determine if they are still contagious, the contractor or a Parsons employee can leave home after these three things have happened: the person no longer has a fever (without the use of medicine that reduces fevers) AND other symptoms have improved (for example, when the person's cough or shortness of breath have improved AND has received two negative tests in a row, 24 hours apart).



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In all cases, contractors or Parsons employees should follow the guidance of their healthcare provider and local health department. The decision to stop home isolation should be made in consultation with their healthcare provider and state and local health departments.

Daily Cleaning Schedules and Disinfection Procedures

Common areas for this Site are limited to port-a-johns; there will be no field trailers/office space. Common surfaces (e.g., port-a-john door handles, toilet paper roll covering, seats, etc.), community objects (pens, clipboards, field notebooks, tablets, etc.) and reusable equipment (meters, pumps, etc.) will be disinfected between users and/or at minimum once daily. Non-disposable PPE (hardhats, safety glasses, earmuffs, etc.), which are person specific will be disinfected/cleaned at the end of each day. All contractors and Parsons employees will make every effort to avoid using other personnel's phones and personal work items.

Contractors and Parsons employees will use disinfectants from the EPA list to do so (<https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>). Labels contain instructions for safe and effective use of the product including precautions taken when applying the product, such as wearing gloves and using good ventilation during use of the product. Gloves should be discarded after each cleaning and disinfection. If available, contractors and Parsons should provide their staff with disposable disinfecting wipes to use on commonly used surfaces. Throw disinfecting wipes away after one use.

Hand sanitizer should be made available at common areas for employee use (e.g., in the port-a-john, support vehicles, heavy equipment, etc.). A copy of the World Health Organization Hand Rubbing poster will be posted near shared sanitizers (see Attachment 5).

In the event there is/are suspected COVID-19 cases among site personnel, work will stop. All site personnel will gather at pre-marked spaces, 6 feet apart at the site control center. A collaborative discussion amongst all site personnel will be used to identify where the person was working, surfaces encountered, etc. The cleaning and disinfection procedures identified above will be implemented.

Training

Each company must train their own employees at length with respect to COVID-19 and provide their employees with appropriate PPE including disinfectants, hand sanitizers, face coverings, etc. Parsons in collaboration with **selected contractor(s)** will provide general COVID-19 awareness training including a review of the contents of this plan and best management practices for completing each phase of work to all contractors and Parsons employees working at the Site. Training will be documented and retained in the project HSE files.

At a minimum, the following information and training will be provided:

1. Sources of exposure to the COVID-19.
2. The hazards associated with that exposure, and appropriate workplace protocols in place to prevent or reduce the likelihood of exposure.
3. Information regarding where employees can go to obtain more knowledge.



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Supervisors must brief employees on any applicable updates to internal COVID-19 guidance during daily huddles/toolbox meetings before beginning work.

Note:

- **Additional information on COVID-19 from Parsons Crisis Management Team or is provided in the Attachments. Latest versions are posted on the Crisis Management site**

Attachments

1 – Prevent Infection (for posting)

2 – Self Declaration Questionnaire

ATTACHMENT 1

PREVENT INFECTION



Wash your hands and use hand sanitizer

Wash your hands frequently and thoroughly, for a minimum of 20 seconds.

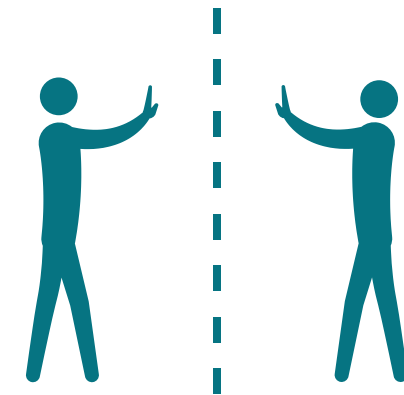
Use hand sanitizer, containing at least 60% alcohol when you are unable to wash your hands with soap and water.



Cover your cough or sneeze

Cover your mouth and nose when coughing or sneezing. Turn your head away from others, if possible, when sneezing.

Use a paper tissue or your sleeve and not your hand. Dispose of used tissues immediately.



Limit physical contact

Avoid handshakes, kisses and hugs.

Maintain at least 6 feet from all others persons when possible.



Keep clean

Regularly sanitize frequently touched and shared surfaces at home as well as at work.



Be considerate

Stay home whenever possible especially if you are experiencing symptoms.

ATTACHMENT 2

COVID-19 Self-Declaration Questionnaire

To prevent the spread of COVID-19 and reduce the potential risk of exposure to our employees and others, we are conducting a simple screening questionnaire. Your participation is important to help us take precautionary measures to protect you and everyone at your project location. Thank you for your time.

Name:	Contact Number:
Company/Organization:	Parsons POC:
Project Name:	City/State:

Self-Declaration

1. Have you returned from any of the Level 3 countries listed on the CDC website <https://www.cdc.gov/coronavirus/2019-ncov/travelers/after-travel-precautions.html> within the last 14 days? (Note as of 4/22/20: The current list recommends all non-essential international travel be avoided.)

Yes

No

2. Have you had close contact with or cared for someone diagnosed with COVID-19 within the last 14 days?

Yes

No

3. Have you been in close contact with anyone who has traveled within the last 14 days to one of the Level 3 countries listed on <https://www.cdc.gov/coronavirus/2019-ncov/travelers/after-travel-precautions.html> (Note as of 4/22/20: The current list recommends all non-essential international travel be avoided.)

Yes

No

4. Have you experienced any cold or flu-like symptoms in the last 14 days (including fever, cough, sore throat, respiratory illness, difficulty breathing)?

Yes

No

If the answer is "yes" to any of these questions, access to the field project location is not permitted.

Signature (visitor): _____ Date: _____