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HEALTH AND SAFETY PLAN SOLID WASTE MANAGEMENT UNIT 22 (SWMU 22) LEAD  
AZIDE POND NSA CRANE IN  
12/1/2012  
TETRA TECH

# Comprehensive Long-term Environmental Action Navy

CONTRACT NUMBER N62470-08-D-1001



## Health and Safety Plan

for

**SWMU 22 - Lead Azide Pond**

**Naval Support Activity Crane  
Crane, Indiana**

**Contract Task Order F279**

**December 2010**



Midwest

201 Decatur Avenue  
Building IA, Code EV  
Great Lakes, Illinois 60088

**HEALTH AND SAFETY PLAN**

**FOR**

**SWMU 22 (FORMER LEAD AZIDE POND)  
NAVAL SUPPORT ACTIVITY  
CRANE, INDIANA**

**Prepared for:**

**Naval Facilities Engineering Command Midwest  
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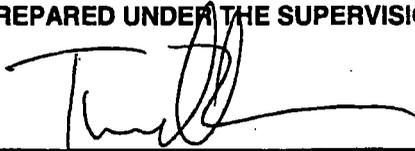
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**Prepared under:**

**Contract No. N62470-08-D-1001  
Contract Task Order F279**

**December 2010**

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## **1.0 INTRODUCTION**

The objective of this Health and Safety Plan (HASP) is to provide the safety and health requirements, practices and procedures for Tetra Tech NUS, Inc. (TtNUS) personnel at Solid Waste Management Unit (SWMU) 22 (Former Lead Azide Pond) at the Naval Support Activity Crane (NSA Crane), located in Crane, Indiana.

This HASP is to be used in conjunction with the TtNUS Health and Safety Guidance Manual. The Guidance Manual provides detailed information pertaining to hazard recognition and control, and TtNUS standard operating procedures. This HASP and the contents of the Guidance Manual were developed to comply with the requirements stipulated in 29 Code of Federal Regulations (CFR) 1910.120 (OSHA's Hazardous Waste Operations and Emergency Response Standard). Both documents must be present at the site to satisfy these requirements.

This HASP has been written to support proposed tasks and techniques associated with the scope of work as presented in Section 4.0. It has been developed using the latest available information regarding known or suspected chemical contaminants and potential physical hazards associated with the proposed work at the site. Should the proposed work site conditions and/or suspected hazards change, or if new information becomes available, this document will be modified. Changes to the HASP will be made with the approval of the TtNUS Site Safety Officer (SSO) and the TtNUS Health and Safety Manager (HSM). Requests for modifications to the HASP will be directed to the SSO who will determine whether to make the changes. The SSO will notify the Navy Remedial Project Manager (RPM), who will notify the affected personnel of changes.

### **1.1 AUTHORITY**

This work is authorized under the Comprehensive Long - Term Environmental Action Navy (CLEAN) contract, administered through the U.S. Navy Southeast, Naval Facilities Engineering Command, as defined under Contract No. N62470-08-D-1001; Contract Task Order Number F279.

### **1.2 KEY PROJECT PERSONNEL AND ORGANIZATION**

This section defines responsibilities for site safety and health for TtNUS employees engaged in onsite activities. The personnel assigned to participate in the field work have the primary responsibility for performing their work tasks in a manner that is consistent with the TtNUS Health and Safety Policy, the health and safety training that they have received, the contents of this HASP, and in an overall manner that protects their personal safety and health and that of their co-workers. The following persons are the

primary point of contact and have the primary responsibility for observing and implementing this HASP and for overall on-site health and safety.

- The TtNUS Project Manager (PM) is responsible for the overall direction and implementation of health and safety for this work.
  
- The PHSO is responsible for developing this HASP in accordance with applicable OSHA regulations. Specific responsibilities include:
  - Providing information regarding site contaminants and physical hazards associated with the site.
  - Establishing air monitoring and decontamination procedures.
  - Assigning personal protective equipment based on task and potential hazards.
  - Determining emergency response procedures and emergency contacts.
  - Stipulating training requirements and reviewing appropriate training and medical surveillance certificates.
  - Providing standard work practices to minimize potential injuries and exposures associated with hazardous waste work.
  - Modifying this HASP, as it becomes necessary.
  
- The TtNUS Field Operations Leader (FOL) is responsible for implementation of this HASP. The FOL manages field activities, executes the Work Plan, and enforces safety procedures as applicable to the Work Plan. Specifically, the FOL will:
  - Verify training and medical status of on-site personnel in relation to site activities.
  - Assist and represent TtNUS with emergency services (if needed)
  - Provide elements site-specific training for on site personnel.
  
- The TtNUS Site Safety Officer (SSO) or his/her representative supports the FOL concerning the aspects of health and safety including, but not limited to:
  - Coordinating health and safety activities
  - Selecting, applying, inspecting, and maintaining personal protective equipment
  - Establishing work zones and control points
  - Implementing air monitoring procedures
  - Implementing hazard communication, respiratory protection, and other associated safety and health programs
  - Coordinating emergency services
  - Providing elements of site-specific training

Compliance with these requirements is monitored by the TiNUS Site Safety Officer (SSO) and is coordinated through the HSM.

### **1.3 STOP WORK AUTHORITY**

All employees are empowered, authorized, and responsible to stop work at any time when an imminent and uncontrolled safety or health hazard is perceived. In a Stop Work event (immediately after the involved task has been shut down and the work area has been secured in a safe manner) the employee shall contact the Project Manager and the TiNUS Health and Safety Manager (HSM). Through observations and communication, all parties involved shall then develop, communicate, and implement corrective actions necessary and appropriate to modify the task and to resume work.

#### 1.4 SITE INFORMATION AND PERSONNEL ASSIGNMENTS

**Site Name:** Naval Support Activity Crane **Address:** Crane, Indiana

**Remedial Project Manager:** Howard Hickey **Phone Number:** (847) 688-5999

**Site Contact:** Thomas Brent **Phone Number:** (812) 854-6160

**Site Address:** 300 Highway 361 Crane, Indiana 47522-5001

**Purpose of Site Visit:** Site investigation and sampling activities

**Proposed Start-up Date:** January 2011 until completion

**Project Team:**

**TtNUS Personnel:**

Tim Evans

TBD

Matthew M. Soltis, CIH, CSP

Jennifer Carothers, PhD

TBD

**Discipline/Tasks Assigned:**

Project Manager (PM)

Field Operations Leader (FOL)

Health and Safety Manager (HSM)

Project Health and Safety Officer (PHSO)

Site Safety Officer (SSO)

Hazard Assessment (for purpose of 29 CFR 1910.132) for HASP preparation has been conducted by:

**Prepared by:** Jennifer Carothers, PhD

## 2.0 EMERGENCY ACTION PLAN

### 2.1 INTRODUCTION

This section has been developed as part of a planning effort to direct and guide field personnel in the event of an emergency. In the event of an emergency, the field team will evacuate and assemble to an area unaffected by the emergency and notify the appropriate local emergency response personnel/agencies. TtNUS personnel are not authorized to participate in any emergency response activities. Workers who are ill or who have suffered a non-serious injury may be transported by site personnel to nearby medical facilities, provided that such transport does not aggravate or further endanger the welfare of the injured/ill person. The emergency response agencies listed in this plan are capable of providing the most effective response, and as such, will be designated as the primary responders. These agencies are located within a reasonable distance from the area of site operations, which ensures adequate emergency response time. The RPM Howard Hickey and Navy Site Contact Thomas Brent will be notified if outside response agencies are contacted.

TtNUS personnel may participate in minor event response and emergency prevention activities such as:

- Initial fire-fighting support and prevention
- Initial spill control and containment measures and prevention
- Removal of personnel from emergency situations
- Provision of initial medical support for injury/illness requiring only first-aid level support
- Provision of site control and security measures as necessary

### 2.2 EMERGENCY PLANNING

Through the initial hazard/risk assessment effort, emergencies resulting from chemical, physical, or fire hazards are the types of emergencies which could be encountered during site activities. To minimize or eliminate the potential for these emergency situations, pre-emergency planning activities will include the following (which are the responsibility of the SSO and/or the FOL):

- Coordinating with local Emergency Response personnel to ensure that TtNUS emergency action activities are compatible with existing emergency response procedures.
- Base Fire Protection and Emergency Services will be notified of scheduled events and activities. This is most imperative in situations where their services may be required.

- Because the nearest hospital/medical center is over 4 minutes away, a CPR/First Aid trained personnel must be on-site during the times work is being conducted.
- Establishing and maintaining information at the project staging area (support zone) for easy access in the event of an emergency. This information will include the following:
  - Chemical Inventory (of chemicals used onsite), with Material Safety Data Sheets.
  - Onsite personnel medical records (Medical Data Sheets).
  - A log book identifying personnel onsite each day.
  - Hospital route maps with directions (these should also be placed in each site vehicle).
  - Emergency Notification - phone numbers.

The TtNUS FOL will be responsible for the following tasks:

- Identifying a chain of command for emergency action.
- Educating site workers to the hazards and control measures associated with planned activities at the site, and providing early recognition and prevention, where possible.
- Periodically performing practice drills to ensure site workers are familiar with incidental response measures.
- Providing the necessary equipment to safely accomplish identified tasks.

## **2.3 EMERGENCY RECOGNITION AND PREVENTION**

### **2.3.1 Recognition**

Emergency situations that may be encountered during site activities will generally be recognized by visual observation. Visual observation will also play a role in detecting potential exposure events to some chemical hazards. To adequately recognize chemical exposures, site personnel must have a clear knowledge of signs and symptoms of exposure associated with the principle site contaminants of concern as presented in this HASP. Tasks to be performed at the site, potential hazards associated with those tasks and the recommended control methods are discussed in detail in Sections 5.0 and 6.0. Additionally, early recognition of hazards will be supported by daily site surveys to eliminate any situation predisposed to an emergency. The FOL and/or the SSO will be responsible for performing surveys of work areas prior to initiating site operations and periodically while operations are being conducted. Survey findings are documented by the FOL and/or the SSO in the Site Health and Safety logbook, however, site personnel will be responsible for reporting hazardous situations. Where potential hazards

exist, TtNUS will initiate control measures to prevent adverse effects to human health and the environment.

The above actions will provide early recognition for potential emergency situations, and allow TtNUS to instigate necessary control measures. However, if the FOL and the SSO determine that control measures are not sufficient to eliminate the hazard, TtNUS will withdraw from the site and notify the appropriate response agencies.

### **2.3.2- Prevention**

TtNUS and subcontractor personnel will minimize the potential for emergencies by following the Health and Safety Guidance Manual and ensuring compliance with the HASP and applicable OSHA regulations. Daily site surveys of work areas, prior to the commencement of that day's activities, by the FOL and/or the SSO will also assist in prevention of illness/injuries when hazards are recognized early and control measures initiated.

## **2.4 EVACUATION ROUTES, PROCEDURES, AND PLACES OF REFUGE**

An evacuation will be initiated whenever recommended hazard controls are insufficient to protect the health, safety or welfare of site workers. Specific examples of conditions that may initiate an evacuation include, but are not limited to the following: severe weather conditions; fire or explosion; monitoring instrumentation readings which indicate levels of contamination are greater than instituted action levels; and evidence of personnel overexposure to potential site contaminants.

In the event of an emergency requiring evacuation, personnel will immediately stop activities and report to the designated safe place of refuge unless doing so would pose additional risks. When evacuation to the primary place of refuge is not possible, personnel will proceed to a designated alternate location and remain until further notification from the TtNUS FOL. Safe places of refuge will be identified prior to the commencement of site activities by the SSO and will be conveyed to personnel as part of the pre-activities training session. This information will be reiterated during daily safety meetings. Whenever possible, the safe place of refuge will also serve as the telephone communications point for that area. During an evacuation, personnel will remain at the refuge location until directed otherwise by the TtNUS FOL or the Facility's On-site Incident Commander of the Emergency Response Team. The FOL or the SSO will perform a head count at this location to account for and to confirm the location of site personnel. Emergency response personnel will be immediately notified of any unaccounted personnel. The SSO will document the names of personnel onsite (on a daily basis) in the site Health and Safety Logbook. This information will be utilized to perform the head count in the event of an emergency.

Evacuation procedures will be discussed during the pre-activities training session, prior to the initiation of project tasks. Evacuation routes from the site and safe places of refuge are dependent upon the location at which work is being performed and the circumstances under which an evacuation is required. Additionally, site location and meteorological conditions (i.e., wind speed and direction) may dictate evacuation routes. As a result, assembly points will be selected and communicated to the workers relative to the site location where work is being performed. Evacuation should always take place in an upwind direction from the site.

## **2.5 EMERGENCY CONTACTS**

Prior to initiating field activities, personnel will be thoroughly briefed on the emergency procedures to be followed in the event of an accident. Table 2-1 provides a list of emergency contacts and their associated telephone numbers. This table must be posted where it is readily available to site personnel. Facility maps should also be posted showing potential evacuation routes and designated meeting areas.

As soon as possible, Navy RPM and Navy Site Contact will be informed of any incident or accident that requires medical attention.

**TABLE 2-1  
EMERGENCY CONTACTS  
CRANE, INDIANA**

CONTACT	TELEPHONE
Base Emergency Numbers* (Fire Department, Base Security, Ambulance) <ul style="list-style-type: none"> <li>• If dialing from an on-base phone:</li> <li>• If dialing from cell or off-base phone:</li> </ul>	854-3300 or 854-1333  9-1-1
Base Environmental Office	(812) 854-3114
Bedford Ambulance	(812) 279-6545
Bloomington Hospital (Bloomington, Indiana)	(812) 336-9515
Bedford Medical Center (Bedford, Indiana)	(812) 275-1200
Indiana Utility One Call	811
Poison Control Center	(800) 222-1222
National Response Center	(800) 424-8802
Base Contact, Thomas Brent	(812) 854-6160
Project Manager, Tim Evans	(412) 921-7281
TtNUS Field Operations Leader, TBD	TBD
TtNUS Site Safety Officer, TBD	TBD
TtNUS Office, Cincinnati	(513) 251-0200
CLEAN Health and Safety Manager, Matthew M. Soltis, CIH, CSP	(412) 921-8912
TtNUS Project Safety Officer, Jennifer Carothers, PhD	(412) 921-8083

**\*NOTE:** On-base extensions 3300 and 1333 are the primary emergency phone numbers. From an NSA Crane phone, on Base extensions must be preceded by "854". Off-base numbers can only be reached by dialing "991" first. Furthermore, the emergencies involving site activities should subsequently be reported to the Environmental Protection Department (x -3114/1132/6160).

## 2.6 EMERGENCY ROUTE TO HOSPITAL

### Directions to the Bloomington Hospital:

601 West Second Street

Bloomington, IN 47402

812.353.5252

[webmaster@bloomingtonhospital.org](mailto:webmaster@bloomingtonhospital.org)

Turn right out of SWMU 22 onto HWY 45. Veer right right at the intersectin of HWY 5 and HWY 45 to stay on HWY 45. Exit NSA Crane on H-45 through the Bloomington Gate. Follow Highway 45 North to Bloomington at Highway 45 and Highway 37. Continue going straight over the overpass (Bloomfield Road). Follow Bloomfield Road North; this road turns into 2nd Street. Follow 2nd Street, hospital will be on the right (601 West 2nd Street). The map below shows the route from the Bloomington Gate (A) to the Bloomington Hospital (B).

**FIGURE 2-1  
MAP TO  
BLOOMINGTON HOSPITAL ROUTE MAP (BLOOMINGTON GATE)**

**\*\*Note: The Bloomington Gate is open 24 hours.**

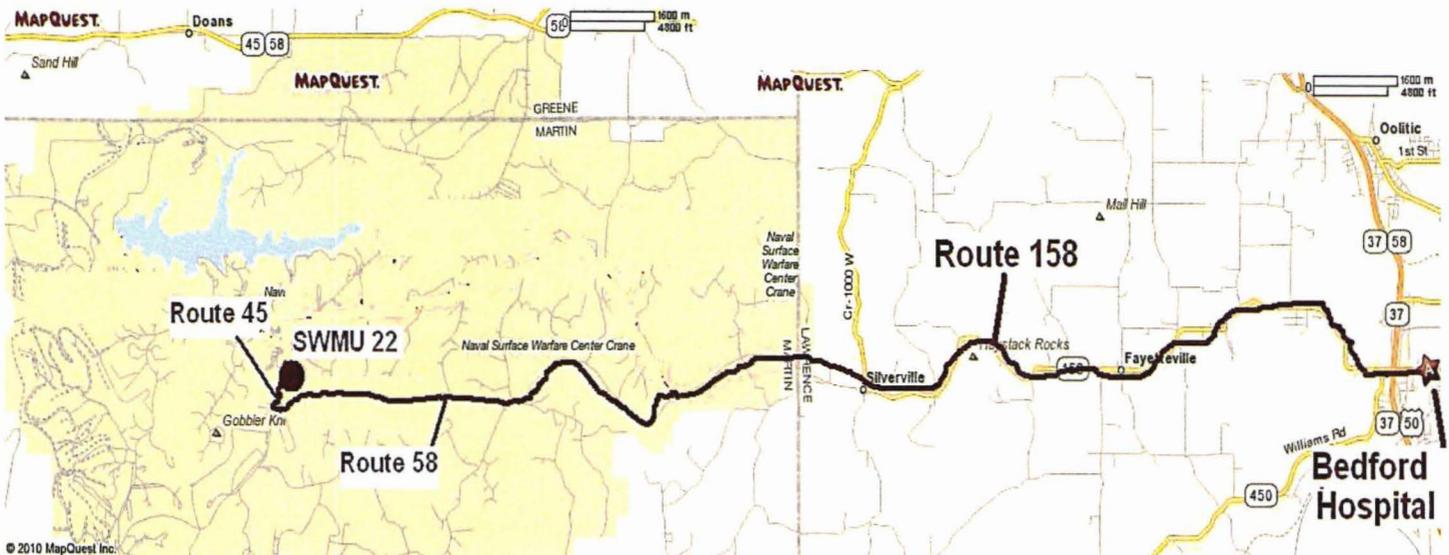


**Directions to Bedford Medical Center:\***

2900 16th Street  
Bedford, Indiana 47421

Turn left out of SWMU 22 onto HWY 45 going South. Turn left onto HWY 58. Follow HWY 58 all the way out of the base – stay straight to go onto State Highway 158. Head West on State Highway 158. State Highway 158 becomes 16th Street upon entering the City of Bedford. The medical center is on the right shortly after Plaza Drive.

**FIGURE 2-2  
MAP TO  
BEDFORD MEDICAL CENTER ROUTE MAP (BEDFORD GATE)**  
\*Note: The Bedford Gate is open only from 0600 - 0830 and 1500 - 1800 hours.



**\*NOTE:** The Bedford Gate is open only from 0600 - 0830 and 1500 - 1800 hours, whereas the Bloomington Gate is open 24 hours. A map indicating the travel route from the site to the hospitals are included as Figure 2-2.

Any pertinent information regarding allergies to medications or other special conditions will be provided to medical services personnel. This information is listed on Medical Data Sheets filed onsite. If an exposure to hazardous materials has occurred, provide hazard information from Table 6-1 to medical service personnel.

## **2.7 EMERGENCY ALERTING AND ACTION/RESPONSE PROCEDURES**

TtNUS personnel will be working in close proximity to each other at NSA Crane. As a result, hand signals, voice commands, and line of site communication will be sufficient to alert site personnel of an emergency. When project tasks are performed simultaneously on different sites, vehicle horns will be used to communicate emergency situations.

If an emergency on Base warranting evacuation occurs, the following procedures are to be initiated:

- Initiate the evacuation via hand signals, voice commands, or line of site communication
- Report to the designated refuge point where the FOL will account for site personnel
- Once non-essential personnel are evacuated, appropriate response procedures will be enacted to control the situation.
- Describe to the FOL (FOL will serve as the Incident Coordinator) pertinent incident details.

In the event that site personnel cannot mitigate the hazardous situation, the FOL and SSO will enact emergency notification procedures to secure additional assistance in the following manner:

Call the emergency contacts listed in Table 2-1 and report the incident. Give the emergency operator the location of the emergency, the type of emergency, the number of injured, and a brief description of the incident. Stay on the phone and follow the instructions given by the operator. The operator will then notify and dispatch the proper emergency response agencies.

- On Base, call 854-3300 or 854-1333 and other appropriate emergency contacts (Table 2-1) and report the emergency. Give the emergency operator the location of the emergency, the type of emergency, the number of injured, and a brief description of what occurred. Stay on the phone and follow the instructions given by the operator. The operator will then notify and dispatch the proper emergency response agencies.

## **2.8 PPE AND EMERGENCY EQUIPMENT**

A first-aid kit, eye wash units (or bottles of disposable eyewash solution) and fire extinguishers (strategically placed) will be maintained onsite and shall be immediately available for use in the event of an emergency. This equipment will be located in the field office as well as in each site vehicle. At least one first aid kit supplied with equipment to protect against bloodborne pathogens will also be available on site.

## 2.9 DECONTAMINATION PROCEDURES / EMERGENCY MEDICAL TREATMENT

During any site evacuation, decontamination procedures will be performed only if doing so does not further jeopardize the welfare of site workers. Decontamination will be postponed if the incident warrants immediate evacuation. However, it is unlikely that an evacuation would occur which would require workers to evacuate the site without first performing the necessary decontamination procedures.

TtNUS personnel will perform rescue operations from emergency situations and may provide initial medical support for injury/illnesses requiring only "Basic First-Aid" level support, and only within the limits of training obtained by site personnel. Basic First-Aid is considered treatment that can be rendered by a trained first aid provider at the injury location and not requiring follow-up treatment or examination by a physician (for example; minor cuts, bruises, stings, scrapes, and burns).

Personnel identified within the field crew with bloodborne pathogen and first-aid training will be the only personnel permitted to offer first-aid assistance. In addition, due to the fact that the nearest hospital/medical center is over 4 minutes away, a CPR/First Aid trained personnel must be on-site during the times work is being conducted. Medical attention above First-Aid level support will require assistance from the designated emergency response agencies. Attachment I provides the procedure to follow when reporting an injury/illness, and the form to be used for this purpose. **If the emergency involves personnel exposures to chemicals, follow the steps provided in Figure 2-3.**

Any pertinent information regarding allergies to medications or other special conditions will be provided to medical services personnel. This information is listed on Medical Data Sheets filed onsite (See Attachment II). If an exposure to hazardous materials has occurred, provide hazard information from Table 6-1 to medical service personnel.

**FIGURE 2-3**  
**POTENTIAL EXPOSURE PROTOCOL**

The purpose of this protocol is to provide guidance for the medical management of injury situations.

In the event of a personnel injury or accident:

- Rescue, when necessary, employing proper equipment and methods.
- Give attention to emergency health problems -- breathing, cardiac function, bleeding, and shock.
- Transfer the victim to a medical facility designated in this HASP by suitable and appropriate conveyance (i.e. ambulance for serious events)
- Obtain as much exposure history as possible (a Potential Exposure report is attached).
- If the injured person is a Tetra Tech NUS employee, call the medical facility and advise them that the patient(s) is/are being sent and that they can anticipate a call from the WorkCare physician. WorkCare will contact the medical facility and request specific testing which may be appropriate. WorkCare physicians will monitor the care of the victim. Site officers and personnel should not attempt to get this information, as this activity leads to confusion and misunderstanding.
- Call WorkCare at 1-800-455-6155 and enter Extension 109, being prepared to provide:
  - Any known information about the nature of the injury.
  - As much of the exposure history as was feasible to determine in the time allowed.
  - Name and phone number of the medical facility to which the victim(s) has/have been taken.
  - Name(s) of the involved Tetra Tech NUS, Inc. employee(s).
  - Name and phone number of an informed site officer who will be responsible for further investigations.
  - Fax appropriate information to WorkCare at (714) 456-2154.
  - Contact Corporate Health and Safety Department (Matt Soltis) and Human Resources Department (Marilyn Duffy) at (412) 921-7090.

As data is gathered and the scenario becomes more clearly defined, this information should be forwarded to WorkCare.

WorkCare will compile the results of data and provide a summary report of the incident. A copy of this report will be placed in each victim's medical file in addition to being distributed to appropriately designated company officials.

Each involved worker will receive a letter describing the incident but deleting any personal or individual comments. A personalized letter describing the individual findings/results will accompany this generalized summary. A copy of the personal letter will be filed in the continuing medical file maintained by WorkCare.

**FIGURE 2-3 (continued)  
WORKCARE  
POTENTIAL EXPOSURE REPORT**

Name: \_\_\_\_\_ Date of Exposure: \_\_\_\_\_  
 Social Security No.: \_\_\_\_\_ Age: \_\_\_\_\_ Sex: \_\_\_\_\_  
 Client Contact: \_\_\_\_\_ Phone No.: \_\_\_\_\_  
 Company Name: \_\_\_\_\_

**I. Exposing Agent**  
 Name of Product or Chemicals (if known): \_\_\_\_\_

Characteristics (if the name is not known)  
 Solid            Liquid            Gas            Fume            Mist            Vapor

**II. Dose Determinants**  
 What was individual doing? \_\_\_\_\_  
 How long did individual work in area before signs/symptoms developed? \_\_\_\_\_  
 Was protective gear being used? If yes, what was the PPE? \_\_\_\_\_  
 Was their skin contact? \_\_\_\_\_  
 Was the exposing agent inhaled? \_\_\_\_\_  
 Were other persons exposed? If yes, did they experience symptoms? \_\_\_\_\_

**III. Signs and Symptoms** (check off appropriate symptoms)

**Immediately With Exposure:**

Burning of eyes, nose, or throat	Chest Tightness / Pressure
Tearing	Nausea / Vomiting
Headache	Dizziness
Cough	Weakness
Shortness of Breath	

**Delayed Symptoms:**

Weakness	Loss of Appetite
Nausea / Vomiting	Abdominal Pain
Shortness of Breath	Headache
Cough	Numbness / Tingling

**IV. Present Status of Symptoms** (check off appropriate symptoms)

Burning of eyes, nose, or throat	Nausea / Vomiting
Tearing	Dizziness
Headache	Weakness
Cough	Loss of Appetite
Shortness of Breath	Abdominal Pain
Chest Tightness / Pressure	Numbness / Tingling
Cyanosis	

Have symptoms: (please check off appropriate response and give duration of symptoms)  
 Improved: \_\_\_\_\_ Worsened: \_\_\_\_\_ Remained Unchanged: \_\_\_\_\_

**V. Treatment of Symptoms** (check off appropriate response)  
 None: \_\_\_\_\_ Self-Medicating: \_\_\_\_\_ Physician Treated: \_\_\_\_\_

## **2.10 INJURY/ILLNESS REPORTING**

If any TtNUS personnel are injured or develop an illness as a result of working on site, the TtNUS "Incident Report Form" (Attachment I) must be followed. Following this procedure is necessary for documenting of the information obtained at the time of the incident.

Any pertinent information regarding allergies to medications or other special conditions will be provided to medical services personnel. This information is listed on Medical Data Sheets filed onsite. If an exposure to hazardous materials has occurred, provide information on the chemical, physical, and toxicological properties of the subject chemical(s) to medical service personnel.

If needed and once completed, the appropriate personnel on the incident report form (Attachment I) should be notified and their signatures obtained. Once signed, this form should be stored on site and filed. This form contains information relating to employee health and must be used in a manner that protects the confidentiality of the employee to the extent possible.

## **3.0 SITE BACKGROUND**

### **3.1 SITE HISTORY**

NSA Crane is located in Crane, Indiana approximately 75 miles southwest of Indianapolis and 71 miles northwest of Louisville, Kentucky. The facility encompasses approximately 100 square miles (64,463 acres) in Daviess, Greene, Lawrence, and Martin Counties. It is located in a rural, sparsely populated area. The acreage surrounding the base is either wooded or farmed land. The facility, originally called Naval Ammunition Depot (NAD) Burns City, was opened in 1941 to serve as an inland ammunition production and storage center. Today NSA Crane's mission is to "provide quality and responsive engineering, technical and material support to the Fleet for combat subsystems, equipment and components, microelectronic technology, microwave components, electronic warfare, acoustic sensors tests, engineering pyrotechnics, small arms, electronic module test and system command." Under the Single Service Management Program, a segment of the Center's mission is to provide support (including environmental protection) to the Crane Army Ammunition Activity (CAAA). The Army is tasked with the production and renovation of conventional ammunition and related items, the performance of manufacturing, engineering, and product quality assurance to support production; and the storage, shipment, demilitarization, and disposal of conventional ammunition and related components. Because of the nature of the Army's operations, CAAA contributes significant financial support for the environmental program through an Inter-Service Support Agreement.

### **3.2 SWMU 22**

SWMU 22 is located along Highway H-45 in the north-central area of NSA Crane, about a mile and a half south of Lake Greenwood. SWMU 22 sits at an elevation around 760 feet mean sea level (msl). The east and south sides of the Site slope gently down to an elevation around 650 feet msl. The area surrounding SWMU 22 is forested.

The nearest surface water drainage, a headwater to Turkey Creek, is located approximately 550 feet east of the Site. The headwater of Turkey Creek flows into Turkey Creek proper approximately 1-1/2 miles south of the Site.

NSA Crane is in the unglaciated Crawford upland physiographic province of southern Indiana. The Crawford upland physiographic province is a rugged dissected plateau bordered on the west by the Wabash lowland and on the east by the Mitchell plain. Bedrock geology is mapped as Pennsylvanian and Mississippian sandstones, limestones, and shales overlain by Quaternary age deposits. Groundwater flow in the area generally mimics topography and is assumed to flow south and west to the

headwaters of Turkey Creek. Depth to groundwater is unknown; based on other sites in the area with known groundwater depths, it is expected to be less than 20 feet below ground surface (bgs). It was observed during a site visit in September 2009 that bedrock is exposed in various areas of SWMU 22.

The nearest residences are approximately 5 miles northwest of the Site in the village of Crane, which is located just west of NSA Crane.

## 4.0 SCOPE OF WORK

This section describes the project tasks that will be performed at NSA Crane – SWMU 32. The planned activities involved in this effort are presented in detail in the Sampling and Analysis Plan developed for the project. If new tasks are to be performed at the site this section will be modified accordingly.

Specific tasks to be conducted at SWMU 32 include the following:

- Mobilization/Demobilization
- Multimedia sampling
  - Sediment sampling using a trowel, in the top 6 inches of the sediment surface.
  - Surface water sampling via direct filling of bottles from the surface water body. The sampling will be in mainly in small drainages, but a couple will be from a stream that may be 2-3 feet deep and up to 10 feet across.
  - Surface and subsurface soil sampling via hand augers or DPT rig
- Investigation-Derived Waste (IDW) Management
- Decontamination

For more detailed description of the associated tasks refer to the individual Work Plans. If additional tasks are determined to be necessary, this HASP will need to be amended and a hazard evaluation of the additional tasks performed.

## **5.0 IDENTIFYING AND COMMUNICATING TASK-SPECIFIC HAZARDS AND GENERAL SAFE WORK PRACTICES**

The purpose of this section is to identify the anticipated hazards and appropriate hazard prevention/hazard control measures that are to be observed for each planned task or operation. These topics have been summarized for each planned task through the use of task-specific Safe Work Permits (SWPs), which are to be reviewed in the field by the SSO with the task participants prior to initiating any task. Additionally, potential hazard and hazard control matters that are relevant but are not necessarily task-specific are addressed in the following portions of this section.

Section 6.0 presents additional information on hazard anticipation, recognition, and control relevant to the planned field activities.

### **5.1 GENERAL SAFE WORK PRACTICES**

In addition to the task-specific work practices and restrictions identified in the SWPs attached to this HASP, the following general safe work practices are to be followed when conducting work on-site.

- Eating, drinking, chewing gum or tobacco, taking medication, or smoking in contaminated or potentially contaminated areas or where the possibility for the transfer of contamination exists is prohibited.
- Wash hands and face thoroughly upon leaving a contaminated or suspected contaminated area.
- The use of waterless hand cleaning products is acceptable if followed by actual hand-washing as soon as practicable upon exiting the site.
- Avoid contact with potentially contaminated substances including puddles, pools, mud, or other such areas.
- Avoid, kneeling on the ground or leaning or sitting on equipment.
- Keep monitoring equipment away from potentially contaminated surfaces.
- Plan and mark entrance, exit, and emergency evacuation routes.

- Rehearse unfamiliar operations prior to implementation.
- Buddies should maintain visual contact with each other and with other on-site team members by remaining in close proximity to assist each other in case of emergency.
- Establish appropriate safety zones including support, contamination reduction, and exclusion zones.
- Minimize the number of personnel and equipment in contaminated areas (such as the exclusion zone). Non-essential vehicles and equipment should remain within the support zone.
- Establish appropriate decontamination procedures for leaving the site.
- Immediately report injuries, illnesses, and unsafe conditions, practices, and equipment to the SSO.
- Observe co-workers for signs of toxic exposure and heat or cold stress.
- Inform co-workers of potential symptoms of illness, such as headaches, dizziness, nausea, or blurred vision.

## **5.2 DPT SAFE WORK PRACTICES**

The following Safe Work Practices are to be followed when working in or around the DPT rig operations.

- Identify underground utilities and buried structures before commencing any DPT rig operations. Follow the TtNUS Utility Locating and Excavation Clearance Standard Operating Procedure.
- DPT rigs will be inspected by the SSO or designee, prior to the acceptance of the equipment at the site and prior to the use of the equipment.
- Repairs or deficiencies identified will be corrected prior to use.
- Use the Equipment Inspection Checklist for DPT rigs provided in Attachment III after the initial inspection and release for use on site, additional inspections will be performed at least at the beginning of every 5 or 10-day shift, or following any repairs or significant maintenance activities.
- Ensure that the machine guarding is in place and properly adjusted.

- Block the DPT rig wheels and use levelers to prevent inadvertent movement.
- The work area around the point of operation will be cleared to the extent possible to remove any trip hazards near or surrounding operating equipment.
- Establish an equipment staging and laydown plan to keep the work area clear of clutter and slips, trips, and fall hazards.
- Minimize contact to the extent possible with contaminated tools and environmental media.
- Potentially contaminated tools will be placed on polyethylene sheeting for storage and wrapped for transport to the centrally located equipment decontamination area
- Support functions (sampling and screening stations) will be maintained a minimum distance from the DPT rig of the height of the mast plus five feet, but not less than 25 feet around the rig.
- Only qualified operators and knowledgeable ground crew personnel will participate in the operation of the DPT rig.
- During maintenance, use only manufacturer provided/approved equipment (i.e. auger flight connectors, etc.)
- In order to minimize contact with potentially contaminated tooling and media and to minimize lifting hazards, multiple personnel should be used to move auger flights and other heavy tooling.
- Only personnel absolutely essential to the work activity will be allowed in the exclusion zone.
- Equipment used within the exclusion zone will undergo a complete decontamination and evaluation by the FOL and/or the SSO to determine cleanliness prior to moving to the next location, exiting the site, or prior to down time for maintenance.
- Motorized equipment will be fueled prior to the commencement of the day's activities.
- When not in use, the DPT rig will be shutdown, and emergency brakes set and wheels will be chocked to prevent movement.

- Investigative areas will be restored to equal or better condition than original to remove any contamination brought to the surface and to remove any physical hazards.
- In situations where these hazards cannot be immediately removed, the area will be barricaded to limit access.

### **5.3 HAND AUGERING SAFE WORK PRACTICES**

Operating a hand auger can be physically demanding depending on factors such as the conditions of the soil, the conditions of the auger tooling, and the physical capabilities of the operator(s). Potential injuries include muscle strains, tendon or ligament sprains, or back or other soft-tissue injuries, as well as bruises, abrasions or cuts from handling or operating the hand auger tooling. Other potential injuries from physical threats during this task include foot injuries, eye injuries, and injuries from unintentional contact with underground utilities.

As part of the site-specific training, site personnel shall be advised of the hazards associated with working this equipment. Prior to beginning any soil-disturbance activities, the FOL/SSO shall be responsible for assuring that the intended location is clear of any underground utilities by following the TtNUS Utility Locating And Excavation Clearance SOP attached to this HASP.

Additional safety measures used to prevent injury during hand augering include:

- Assuring that only persons who are confident that they can physically perform this activity without injuring themselves participate in operating a hand auger
- Performing simple stretches prior to beginning the task
- Ensuring that the hand auger tooling is maintained in effective working order
- Avoiding injury by stopping if strong resistance is encountered (such as if impassable rocky conditions are encountered)
- Getting assistance if needed; and wearing appropriate PPE (work gloves, steel toe shoes, and safety impact eye protection)

## 6.0 HAZARD ASSESSMENT AND CONTROLS

This section provides reference information regarding the chemical and physical hazards which may be associated with activities that are to be conducted as part of the scope of work.

### 6.1 CHEMICAL HAZARDS

Based on historical information, the predominant chemical substances assumed to be encountered at this site are lead and RDX. Table 6-1 shows the Chemicals of Potential Concern (COPCs) and their maximum concentrations previously detected on the site.

**TABLE 6-1  
COPCs MAXIMUM CONCENTRATIONS  
PREVIOUSLY DETECTED**

Contaminant of Concern	Highest Concentration Previously Detected
RDX	4.4 mg/l in surface water
Lead	12,900 mg/kg in sediment

Table Notes:

- TWA<sub>8</sub>: Average air concentration over an 8-hour work period that is not to be exceeded

#### 6.1.1 Lead

Lead poisoning usually does not cause symptoms until the level of lead in your blood is very high. Most lead poisoning comes from low levels of exposure over a long period of time. The major organ systems affected are the central nervous system, digestive tract, and the renal system (urinary tract).

General physical symptoms (usually seen when lead poisoning levels are severe):

- Stomachaches, cramping, constipation, or diarrhea
- Nausea, vomiting
- Persistent, unexplained fatigue
- Headache
- Muscle weakness

### 6.1.2 RDX

RDX is a chemical used mainly in explosives, fireworks, detonators and rodenticides. RDX at room temperature, is very stable. It burns rather than explodes and detonates only with a detonator, being unaffected even by small arms fire.

The symptoms of RDX poisoning include:

- Eye irritation
- Eye redness
- Eye pain
- Skin irritation
- Tremor
- Vomiting
- Insomnia
- Weakness
- Dizziness
- Headache
- Nausea
- Convulsions
- Unconsciousness

### 6.1.3 Potential Routes of Exposure

**Inhalation:** Based on the data from previous investigations at this worksite and that fact that most of the sampling is being conducted in water or wet areas therefore minimizing dust generation, worker exposure to airborne concentrations that could represent a health concern is not considered likely. It is also important to keep in mind that the planned work area is outdoors, with ample natural ventilation that will reduce any airborne particulates through dilution and dispersion.

As a result of this, it is very unlikely that workers participating in these activities will encounter any airborne concentrations of the above COPCs that would represent an occupational exposure concern. Examples of onsite practices that are to be observed that will protect workers from exposure via inhalation include:

- Proper PPE use and hygiene care

**Ingestion and Skin Contact:** Potential exposure concerns to these Contaminants of Concern (COC) may also occur through ingesting or coming into direct skin contact with contaminated soils. However, the likelihood of worker exposure concerns through these two routes is also considered very unlikely, provided that workers follow good personal hygiene and standard good sample collection/sample handling practices, and wear appropriate PPE as specified in this HASP. Examples of onsite practices that are to be observed that will protect workers from exposure via ingestion or skin contact include the following:

- No hand-to-mouth activities on site (eating, drinking, smoking, etc.)
- Washing hands upon leaving the work area and prior to performing any hand to mouth activities
- Wearing proper gloves whenever handling potentially-contaminated media, including soils, hand tools, and sample containers.

## **6.2 PHYSICAL HAZARDS**

The following is a list of physical hazards that may be encountered at the site or may be present during the performance of site activities.

- Slip, trips, and falls
- Contact with underground utilities (electric lines, gas lines, water lines, etc.)
- Strain/muscle pulls from heavy lifting
- Ambient temperature extremes (heat/cold stress)
- Pinch/compression points
- Vehicular and equipment traffic
- Inclement weather
- Heavy equipment hazards (pinch/compression points, rotating equipment, etc.).
- Noise in excess of 85 decibels (dBA)
- Natural hazards (snakes, ticks, poisonous plants, etc.)
- Water hazards

These hazards are discussed further below, and are presented relative to each task in the task-specific Safe Work Permits.

### **6.2.1 Slips, Trips, and Falls**

During various site activities there is a potential for slip, trip, and fall hazards associated with wet, steep, or unstable work surfaces. To minimize hazards of this nature, personnel required to work in and along areas prone to these types of hazards will be required to exercise caution, and use appropriate

precautions (restrict access, guardrails, life lines and/or safety harnesses) and other means suitable for the task at hand. Site activities will be performed using the buddy system.

#### **6.2.2 Contact with Underground Utilities**

Underground utilities such as pressurized lines, water lines, telephone lines, buried utility lines, and high voltage power lines are known to be present throughout the facility. The TtNUS Project Manager (PM) and FOL will work with the subcontractor and the Navy to have the utilities marked in the area before beginning underground sampling. A digging permit will be obtained from NSA Crane prior to intrusive underground investigations. Please refer to the Standard Operating Procedure (SOP) for Utility Clearance in the TtNUS HSGM Section 7.0 for more information.

#### **6.2.3 Strain/Muscle Pulls from Heavy Lifting**

During execution of planned activities there is some potential for strains, sprains, and/or muscle pulls due to the physical demands and nature of this site work. To avoid injury during lifting tasks personnel are to lift with the force of the load carried by their legs and not their backs. When lifting or handling heavy material or equipment use an appropriate number of personnel. Keep the work area free from ground clutter to avoid unnecessary twisting or sudden movements while handling loads.

#### **6.2.4 Ambient temperature extremes (heat/cold stress)**

Because of the geographical location of the planned work, the likely seasonal weather conditions that will exist during the planned schedule, and the physical exertion that can be anticipated with some of the planned tasks, it will be necessary for the field team to be aware of the signs and symptoms and the measures appropriate to prevent heat or cold stress. This is addressed in detail in section 4.0 of the TtNUS Health and Safety Guidance Manual, which the SSO is responsible for reviewing and implementing as appropriate on this project.

#### **6.2.5 Pinch/Compression Points**

Handling of tools, machinery, and other equipment on site may expose personnel to pinch/compression point hazards during normal work activities. Where applicable, equipment will have intact and functional guarding to prevent personnel contact with hazards. Personnel will exercise caution when working around pinch/compression points, using additional tools or devices (e.g., pinch bars) to assist in completing activities.

**6.2.6 Inclement Weather**

Project tasks under this Scope of Work will be performed outdoors. As a result, inclement weather may be encountered. In the event that adverse weather (electrical storms, tornadoes, etc.) conditions arise, the FOL and/or the SSO will be responsible for temporarily suspending or terminating activities until hazardous conditions no longer exist.

**6.2.7 Heavy Equipment Hazards (Pinch/compression points, rotating equipment, etc.)**

Often the hazards associated with drilling operations are the most dangerous to be encountered during site activities. The SSO will thoroughly discuss safe drilling procedures during the pre-activities training session.

**6.2.8 Noise in excess of 85 dBA**

Some sampling procedures/heavy equipment operation causes noise in excess of 85 decibels. When sampling at the drilling equipment or utilizing heavy equipment that causes noise, use hearing protection. The use of hearing protection outside of 25 feet from the heavy equipment should be incorporated under the following condition: If you have to raise your voice to talk to someone who is within 2 feet of your location, hearing protection must be worn.

**6.2.9 Flying Projectiles**

The use of some heavy equipment and power washers carry a risk of flying projectiles. Use eye and face protective equipment when operating such equipment. The other personnel must be restricted from the area.

**6.3 NATURAL HAZARDS**

Insect/animal bites and stings, poisonous plants, inclement weather, and other natural hazards must be considered given the location of activities to be conducted. In general, avoidance of areas of known infestation or nesting will be the preferred exposure control. Use of additional PPE with joints (ankles and wrists) taped, such as long pants tucked into boots or coveralls, is also recommended. Specific discussion on principle hazards of concern follows:

**6.3.1 Insect/Animal Bites and Stings**

Ticks, insect/animal bites, and stings are difficult to control given the climate and environmental setting of NSA Crane. However, in an effort to minimize this hazard the following control measures will be enacted where possible.

- Commercially available bug sprays and repellents will be used whenever possible. Commercially available repellants may be used providing these components are not part of the analyte listing. Products such as DEET should not be applied directly to the skin due to potential irritation. This product, when permitted for use, should be applied over clothing articles.
- Loose fitting light colored clothing with long sleeves, where possible should be worn. This will also aid in insect control by providing a barrier between the field person and the insects and to provide easy recognition of crawling insects against the lighter background. Pant legs should be secured to the work-boots using duct tape to prevent access by ticks. Mosquito nets are also recommended for use when commercially available repellents are not permitted.
- Clothing/limited body checks for ticks and other crawling insects should be conducted upon exiting heavily vegetated areas. Workers should perform a more detailed check of themselves when showering in the evening. Ticks prefer moist areas of the body (arm-pits, genitals, etc.) and will migrate to those locations.
- The FOL/SSO will preview the access routes and work areas in an effort to identify physical hazards including nesting areas in and around the work sites. These areas will be flagged and communicated to the site personnel.
- The FOL/SSO must determine if site personnel (through their Medical Data Sheets), suffer allergic reactions to bee and other insect stings and bites. When personnel are on-site who are predisposed to these conditions, the FOL/SSO will take the appropriate measures to secure physician directed antidotes.

It is important that any allergies be reported on the Medical Data Sheets and to the SSO.

### **Tick and Mosquito Transmitted Illnesses and Diseases**

Ticks and mosquitoes have been identified in the transmission of diseases including Lyme's disease and malaria. Warm months (Spring through early Fall) are the most predominant time for this hazard. However, due to the climate and environmental setting of NSA Crane, this hazard may occur year round. Information concerning transmitted Lyme's Disease including recognition, evaluation, tick removal, and control is provided in Section 4.0 of the Health and Safety Guidance Manual.

Malaria may occur when a mosquito or other infected insect sucks blood from an infected person, and the insect becomes the carrier to infect other hosts. The parasite reproduces within the mosquito, and is then

is passed on to another person through the biting action. Acute symptoms include chills accompanied by fever and general flu like symptoms. This generally terminates in a sweating stage. These symptoms may recur every 48 to 72 hours.

Conditions such as this should not be taken for granted and should be reported to the SSO immediately.

### **Snakes and Other Wild Animal Encounters**

Indigenous animals including snakes (poisonous and non-poisonous varieties), raccoons, and other animals native to the region may have to be contended with. These animals may be encountered if work locations encroach on nesting or territories claimed by these animals.

To avoid the obvious hazards conveyed as part of a direct encounter, the following actions will be taken to minimize impact on the field crews and/or operations.

- FOL/SSO will preview access routes and work locations for nesting areas or signs of animal activities (tracks, foraging areas, etc.). The identified suspect areas will be communicated to the field crews. To the extent possible, suspected nesting/habitat areas are to be avoided. Otherwise, snake chaps will be required as a precaution.

### **6.3.2 Poisonous Plants**

Various plants that can cause allergic reactions may be encountered during fieldwork. These include, but may not be limited to, poison ivy, poison oak, and poison sumac. Contact of field personnel with previous plants may occur when clearing vegetation for access to work areas, or through movement through these plants. An irritating, allergic reaction can occur when direct contact is achieved between the plant and the bare skin of a field person, or the plant and some piece of equipment or clothing article that then later comes in contact with the bare skin of a field person. Oils are transferred from the plant to exposed skin, clothing, or piece of equipment. The degree of the irritating, allergic reaction can vary significantly from one person to the next.

Protective measures to control and minimize the effects of this hazard may include, but not limited to, the following:

- Identify plants for field personnel.
  - Poison Ivy - Characterized by climbing vines, three leaf configuration ovate to elliptical in shape, deep green leaves with a reddish tint, greenish flowers, and white berries.

- Poison Sumac - Characterized as a tall bush of the sumac family bearing compound leaves (7 to 13 entire leaflets), branched from a central axis, drooping, with auxiliary clusters of white fruit.

**NOTE:** These white fruits and berries may exist only during pubescent stages.

- Poison oak - Characterized as similar to poison ivy consisting of a shrub, stems erect, 0.3 to 2.0 meters (1 to 13 feet) tall, leaflets consist of broad thick lobes coarsely serrated configuration, denser at the base, less so than the top.
- Protective measures may include wearing disposable garments such as Tyvek when clearing brush. These may be carefully removed and disposed of along with any oils accumulated from the plants.
- Personal Hygiene - The oils obtained from the plants will only elicit an allergic response when the person's bare skin layer is contacted. This can be aggravated through skin pores open when perspiring, or through breaks in the skin such as cuts, nicks, scratches, etc... This can also be accomplished when using excessively hot water for cleaning the skin, which also causes pores to open. Prior to break time, lunchtime, etc. personnel should wash with cool water and soap to remove as much of the oils as possible. In heavily vegetated areas of these plants, additional measures including barrier creams and blocks may be used to prevent the oils from accessing and penetrating the skin.

These plants present an airborne sensitization hazard when burned. This is not to occur as part of this scope of work and therefore will not be addressed.

#### **6.4 WATER HAZARDS**

Planned activities involve locations that are near bodies of water. To avoid potential hazards associated with working near water (drowning), the field team may need to employ lifelines (tie-off procedure), safety harnesses, when within 4 feet of the waters edge, if deemed necessary by the FOL based on the depth of the stream/body of water. Due to the obvious hazards associated with working near waters edge during inclement weather, all field activities may be temporarily suspended or terminated at the discretion and direction of the FOL or SSO.

#### **U.S.C.G. Flotation Device Types**

Use the following information to determine the proper type of U.S.C.G. PFD.

**Off Shore Life Jacket (type I, 22lbs buoyancy)**

Type I life jacket is the best choice for rough or open waters. This type will float you the best and is favorable if rescue may be long in coming. This type will turn an unconscious person upright in the water. Though is bulky it does have a highly visible color for easier detection.

**Near Shore Buoyant Vest (Type II, 15.5lbs buoyancy)**

Type II is a good choice for calmer waters. It will turn most unconscious persons face-up in the water. Though it is less bulky than Type I, it is not intended for long hours in calm or rough water.

**Flotation Aid (Type III, 15.5lbs buoyancy)**

Type III is probably the most comfortable device offering more freedom of movement, such as water skiing or fishing, but is not intended for rough water. Also, an unconscious person may end up face-down in the water.

**Throwable Devices (Type IV)**

Throwable devices are intended for calm waters with heavy boat traffic where help is always close. It is not intended for unconscious persons or non-swimmers or long hours in the water. They are good backups for the other devices.

## **7.0 AIR MONITORING**

Due to the chemical characteristics of the COPCs at this site and the fact that the sampling is being done near wet areas and outdoors with ample dispersion, no direct reading instruments will be used during these field activities.

## **8.0 TRAINING/MEDICAL SURVEILLANCE REQUIREMENTS**

### **8.1 INTRODUCTORY/REFRESHER/SUPERVISORY TRAINING**

This section is included to specify health and safety training and medical surveillance requirements for TtNUS personnel participating in on site activities. TtNUS personnel must complete 40 hours of introductory hazardous waste site training prior to performing work at NSA Crane. TtNUS personnel who have had introductory training more than 12 months prior to site work must have completed 8 hours of refresher training within the past 12 months before being cleared for site work. In addition, 8-hour supervisory training in accordance with 29 CFR 1910.120(e)(4) will be required for site supervisory personnel.

Documentation of TtNUS introductory, supervisory, and refresher training as well as site-specific training will be maintained at the site. Copies of certificates or other official documentation will be used to fulfill this requirement.

### **8.2 SITE-SPECIFIC TRAINING**

TtNUS SSO will provide site-specific training to TtNUS employees who will perform work on this project. Figure 8-1 will be used to document the provision and content of the project-specific and associated training. Site personnel will be required to sign this form prior to commencement of site activities. This training documentation will identify personnel who through record review and attendance of the site-specific training are cleared for participation in site activities. This document shall be maintained at the site to identify and maintain an active list of trained and cleared site personnel.

The TtNUS SSO will also conduct a pre-activities training session prior to initiating site work. This will consist of a brief meeting at the beginning of each day to discuss operations planned for that day, and a review of the appropriate Safe Work Permits with the planned task participants. A short meeting may also be held at the end of the day to discuss the operations completed and any problems encountered.

### **8.3 MEDICAL SURVEILLANCE**

TtNUS personnel participating in project field activities will have had a physical examination meeting the requirements of TtNUS's medical surveillance program. Documentation for medical clearances will be maintained in the TtNUS Pittsburgh office and made available, as necessary, and will be documented using Figure 8-1 for every employee participating in onsite work activities at this site.



## 9.0 SITE CONTROL

This section outlines the means to delineate work zones and use these work zones in conjunction with decontamination procedures to prevent the spread of contaminants into previously unaffected areas. It is anticipated that a three-zone approach will be used during work at this site. This approach will be comprised of an exclusion zone, a contamination reduction zone, and a support zone. It is also anticipated that this approach will control access to site work areas, restricting access by the general public, minimizing the potential for the spread of contaminants, and protecting individuals who are not cleared to enter work areas.

### 9.1 EXCLUSION ZONE

The exclusion zone will be considered those areas of active operations plus an established safety zone depending on the task. The following represent the exclusion zone boundaries for the following identified tasks:

- Surface soil, sediment and groundwater sampling – 5 feet surrounding the sample collection points
- Decontamination – 5 feet surrounding the point of operation
- DPT drilling – 25 feet surrounding the point of operation

Exclusion zones will be delineated using barrier tape, cones and/or drive poles, and postings to inform and direct facility site personnel and visitors, as necessary.

A pre-startup site visit will be conducted to identify proposed subsurface investigation locations, conduct utility clearances, and provide notices concerning scheduled activities.

Subsurface activities will proceed only when utility clearance has been obtained. In the event that a utility is struck during a subsurface investigative activity, the emergency numbers provided in Section 2.0, Table 2-1, will be notified.

### 9.2 CONTAMINATION REDUCTION ZONE

The contamination reduction zone (CRZ) will be a buffer area between the exclusion zone and any area of the site where contamination is not suspected. This area will also serve as a focal point in supporting exclusion zone activities. This area will be marked using barrier tape, cones, and postings to inform and direct facility personnel. Decontamination will be conducted at a central location. Equipment potentially contaminated will be bagged and taken to that location for decontamination.

### **9.3 SUPPORT ZONE**

The support zone for this project will include a staging area where site vehicles will be parked, equipment will be unloaded, and where food and drink containers will be maintained. The support zones will be established at areas of the site where away from potential exposure to site contaminants during normal working conditions or foreseeable emergencies.

### **9.4 SAFE WORK PERMITS**

Work conducted in support of this project will be performed using Safe Work Permits (SWPs) to guide and direct field crews on a task by task basis. An example of the SWP to be used is provided in Figure 9-1. Partially completed SWPs for the work to be performed are included as Attachment IV of this HASP. These permits were completed to the extent possible as part of the development of this HASP. It is the SSO's responsibility to finalize and complete the blank portions of the SWPs based on current, existing conditions the day the task is to be performed, and then review that completed permit with the task participants as part of a pre-task tail gate briefing session. This will ensure that site-specific considerations and changing conditions are appropriately incorporated into the SWP, provide the SSO with a structured format for conducting the tail gate sessions, as well will also give personnel an opportunity to ask questions and make suggestions. The SWPs require the signature of the FOL or SSO.

### **9.5 SITE VISITORS**

Site visitors for the purpose of this document are identified as representing the following groups of individuals:

- Personnel invited to observe or participate in operations by TtNUS
- Regulatory personnel (i.e., DoD, EPA, OSHA)
- Authorized Navy Personnel
- Other authorized visitors

Non-TtNUS personnel working on this project are required to gain initial access to the base by coordinating with the TtNUS FOL or designee and following established base access procedures.

Site visitors will be escorted and restricted from approaching any work areas where they could potentially be exposed to hazardous chemicals. If a visitor has authorization from the client and from the TtNUS Project Manager to approach our work areas, the FOL must assure that the visitor first provides documentation indicating that he/she/they have successfully completed the necessary OSHA introductory

training, receive site-specific training from the SSO, and that they have been physically cleared to work on hazardous waste sites.

#### **9.6 SITE SECURITY**

Site security will be accomplished using TtNUS field personnel. TtNUS will retain complete control over active operational areas. As this activity takes place at a Navy facility open to public access, the first line of security will take place using exclusive zone barriers, site work permits, and any existing barriers at the sites to restrict the general public. The second line of security will take place at the work site referring interested parties to the Base Contact. The Base Contact will serve as a focal point for base personnel, interested parties, and serve as the final line of security and the primary enforcement contact.

#### **9.7 BUDDY SYSTEM**

Personnel engaged in on site activities will practice the "buddy system" to ensure the safety of personnel involved in this operation.

#### **9.8 MATERIAL SAFETY DATA SHEET (MSDS) REQUIREMENTS**

TtNUS and subcontractor personnel will provide MSDSs for chemicals brought on site. The contents of these documents will be reviewed by the SSO with the user(s) of the chemical substances prior to any actual use or application of the substances on site. A chemical inventory of the chemicals used on site will be developed using the Health and Safety Guidance Manual. The MSDSs will then be maintained in a central location (i.e., temporary office) and will be available for anyone to review upon request.

#### **9.9 COMMUNICATION**

As personnel will be working in proximity to one another during field activities, a supported means of communication between field crew members will not be necessary.

External communication will be accomplished by using the cell phone. Workers should enter the emergency and important phone numbers from Table 2-1 into their cell phones prior to beginning work.

**FIGURE 9-1  
SAFE WORK PERMIT**

Permit No. \_\_\_\_\_ Date: \_\_\_\_\_ Time: From \_\_\_\_\_ to \_\_\_\_\_

**I. Work limited to the following (description, area, equipment used):** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**II. Primary Hazards:** Potential hazards associated with this task: \_\_\_\_\_  
 \_\_\_\_\_

**III. Field Crew:** \_\_\_\_\_

**IV. On-site Inspection conducted**  Yes  No Initials of Inspector \_\_\_\_\_ TtNUS  
**Equipment Inspection required**  Yes  No Initials of Inspector \_\_\_\_\_ TtNUS

**V. Protective equipment required**  Level D  Level B   
 Level C  Level A   
 Modifications/Exceptions: \_\_\_\_\_

**Respiratory equipment required**  
 Yes  Specify on the reverse  
 No

VI. Chemicals of Concern	Hazard Monitoring	Action Level(s)	Response Measures
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

**Primary Route(s) of Exposure/Hazard:** \_\_\_\_\_  
 \_\_\_\_\_

(Note to FOL and/or SSO: Each item in Sections VII, VIII, and IX must be checked Yes, No, or NA)

**VII. Additional Safety Equipment/Procedures**

Hard-hat.....	<input type="checkbox"/> Yes <input type="checkbox"/> No	Hearing Protection (Plugs/Muffs).....	<input type="checkbox"/> Yes <input type="checkbox"/> No
Safety Glasses .....	<input type="checkbox"/> Yes <input type="checkbox"/> No	Safety belt/harness .....	<input type="checkbox"/> Yes <input type="checkbox"/> No
Chemical/splash goggles .....	<input type="checkbox"/> Yes <input type="checkbox"/> No	Radio/Cellular Phone .....	<input type="checkbox"/> Yes <input type="checkbox"/> No
Splash Shield .....	<input type="checkbox"/> Yes <input type="checkbox"/> No	Barricades.....	<input type="checkbox"/> Yes <input type="checkbox"/> No
Splash suits/coveralls .....	<input type="checkbox"/> Yes <input type="checkbox"/> No	Gloves (Type - ) .....	<input type="checkbox"/> Yes <input type="checkbox"/> No
Impermeable apron.....	<input type="checkbox"/> Yes <input type="checkbox"/> No	Work/rest regimen .....	<input type="checkbox"/> Yes <input type="checkbox"/> No
Safety toe Work shoes or boots.....	<input type="checkbox"/> Yes <input type="checkbox"/> No	Chemical Resistant Boot Covers .....	<input type="checkbox"/> Yes <input type="checkbox"/> No
High Visibility vest .....	<input type="checkbox"/> Yes <input type="checkbox"/> No	Tape up/use insect repellent .....	<input type="checkbox"/> Yes <input type="checkbox"/> No
First Aid Kit .....	<input type="checkbox"/> Yes <input type="checkbox"/> No	Fire Extinguisher .....	<input type="checkbox"/> Yes <input type="checkbox"/> No
Safety Shower/Eyewash .....	<input type="checkbox"/> Yes <input type="checkbox"/> No	Other.....	<input type="checkbox"/> Yes <input type="checkbox"/> No

Modifications/Exceptions: \_\_\_\_\_

**VIII. Site Preparation**

Utility Locating and Excavation Clearance completed.....	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Vehicle and Foot Traffic Routes Established/Traffic Control Barricades/Signs in Place .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Physical Hazards Identified and Isolated (Splash and containment barriers).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Emergency Equipment Staged (Spill control, fire extinguishers, first aid kits, etc) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**IX. Additional Permits required** (Hot work, confined space entry, excavation etc.).....  Yes  No  
 If yes, SSO to complete or contact Health Sciences, Pittsburgh Office (412)921-7090

**X. Special instructions, precautions:** \_\_\_\_\_  
 \_\_\_\_\_

Permit Issued by: \_\_\_\_\_ Permit Accepted by: \_\_\_\_\_

## **10.0 SPILL CONTAINMENT PROGRAM**

### **10.1 SCOPE AND APPLICATION**

It is not anticipated that quantities of bulk potentially hazardous materials (greater than 55-gallons) will be handled during some of the site activities conducted as part of the scope of work (including IDW). It is also not anticipated that spillage of these materials would constitute a significant danger to human health or the environment. Further, it is possible that as the job progresses disposable PPE and other non-reusable items will be generated. As needed, 55 -gallon drums will be used to contain waste waters, IDW, and other unwanted items generated during investigatory activities.

It is not anticipated that significant volumes of solid or semi-solid IDW (i.e., soil, sediment, etc.) will be generated during field activities, including installation of temporary groundwater monitoring wells or collection of subsurface samples using DPT.

If gross contamination is encountered (e.g., any non-soil contaminated material such as free product or soil with FID readings greater than 100 parts per million [ppm]), then intrusive activities will cease. Any grossly contaminated material that is brought to the surface will not be returned to the excavation but will be segregated from other excavated soil and placed on a plastic liner. The grossly contaminated material will be securely staged until arrangements are made for proper off-site disposal.

If IDW is generated, the material will be handled in accordance with SOP-10 (Management of Investigation-Derived Waste) located in the TtNUS HSGM. Used personal protective equipment (PPE) and other IDW such as DPT plastic sleeves will be bagged and disposed of as regular trash in an appropriate facility waste container.

### **10.2 POTENTIAL SPILL AREAS**

Potential spill areas will be monitored in an ongoing attempt to prevent and control further potential contamination of the environment. Currently, there are various areas vulnerable to this hazard including the areas used for central staging and decontamination activities. Additionally, areas designated for handling, loading, and unloading of potentially contaminated soils, waters, and debris present limited potential for leaks or spills. It is anticipated that the IDW generated as a result of this scope of work will be disposed of on-site.

### **10.3 PERSONNEL TRAINING AND SPILL PREVENTION**

Personnel will be instructed in the procedures for incipient spill prevention, containment, and collection of hazardous materials in the site-specific training. The FOL and the SSO will serve as the Spill Response Coordinators for this operation, should the need arise.

### **10.4 SPILL PREVENTION AND CONTAINMENT EQUIPMENT**

The following represents the types of equipment that may be maintained at the staging area for the purpose of supporting this Spill Prevention/Containment Program.

- Sand, clean fill, vermiculite, or other noncombustible absorbent (oil-dry);
- Drums (55-gallon U.S. Department of Transportation DOT 1A1 or 1A2)
- Shovels, rakes, and brooms
- Labels

### **10.5 SPILL CONTROL PLAN**

This section describes the procedures the TtNUS field crew members will employ upon the detection of a spill or leak.

- Notify the SSO or FOL immediately upon detection of a leak or spill. Activate emergency alerting procedures for that area to remove non-essential personnel.
- Employ the personal protective equipment stored at the staging area. Take immediate actions to stop the leak or spill by plugging or patching the container or raising the leak to the highest point in the vessel. Spread the absorbent material in the area of the spill, covering it completely.
- Transfer the material to a new vessel; collect and containerize the absorbent material. Label the new container appropriately. Await analyses for treatment and disposal options.
- Re-containerize spills, including 2-inch of top cover impacted by the spill. Await test results for treatment or disposal options.

It is not anticipated that a spill will occur that the field crew cannot handle. Should this occur, notification of the appropriate Emergency Response agencies will be carried out by the FOL or SSO in accordance with the procedures discussed in Section 2.0 of this HASP.

## 11.0 CONFINED-SPACE ENTRY

It is not anticipated, under the proposed scope of work, that confined space and permit-required confined space activities will be conducted. **Therefore, personnel under the provisions of this HASP are not allowed, under any circumstances, to enter confined spaces.** A confined space is defined as an area which has one or more of the following characteristics:

- Is large enough and so configured that an employee can bodily enter and perform assigned work.
- Has limited or restricted means for entry or exit (for example, tanks, manholes, sewers, vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry).
- Is not designed for continuous employee occupancy.

Additionally, a Permit-Required Confined Space must also have one or more of the following characteristics:

- Contains or has a potential to contain a hazardous atmosphere.
- Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly caving walls or by a floor that slopes downward and tapers to a smaller cross-section.
- Contains any other recognized, serious, safety or health hazard.

For further information on confined space, consult the Health and Safety Guidance Manual or call the PHSO. If confined space operations are to be performed as part of the scope of work, detailed procedures and training requirements will have to be addressed.

## 12.0 MATERIALS AND DOCUMENTATION

The TtNUS FOL shall ensure the following materials/documents are taken to the project site and used when required.

- A complete copy of this HASP
- Health and Safety Guidance Manual
- Incident Reports
- Medical Data Sheets
- Material Safety Data Sheets for chemicals brought on site, including decontamination solutions, fuels, sample preservatives, calibration gases, etc.
- A full-size OSHA Job Safety and Health Poster (Attachment V)
- Training/Medical Surveillance Documentation Form
- First-Aid Supply Usage Form
- Emergency Reference Form
- Directions to the Hospital

### 12.1 MATERIALS TO BE POSTED AT THE SITE

The following documentation is to be posted or maintained at the site for quick reference purposes. In situations where posting these documents is not feasible (such as no office trailer), these documents should be separated and immediately accessible.

- **Chemical Inventory Listing (posted)** - This list represents the chemicals brought on-site, including decontamination solutions, sample preservations, fuel, etc. This list should be posted in a central area.
- **MSDSs (maintained)** - The MSDSs should also be in a central area accessible to the site personnel. These documents should match the listings on the chemical inventory list for the substances employed on-site. It is acceptable to have these documents within a central folder and the chemical inventory as the table of contents.
- **The OSHA Job Safety & Health Protection Poster (posted)** - This poster should be conspicuously posted in places where notices to employees are normally posted, as directed by 29 CFR 1903.2 (a)(1). Each FOL shall ensure that this poster is not defaced, altered, or covered by other material. The law also states that reproductions or facsimiles of the poster shall be at least 8½ by 14 inches with 10 point type.

- **Site Clearance (maintained)** - This list is found within the training section of the HASP (Figure 8-1). This list identifies the site personnel, dates of training (including site-specific training), and medical surveillance. The list indicates not only clearance, but also status. If personnel do not meet these requirements, they do not enter the site while site personnel are engaged in activities.
- **Emergency Phone Numbers and Directions to the Hospital(s) (posted)** - This list of numbers and directions will be maintained at the phone communications points and in each site vehicle.
- **Medical Data Sheets/Cards (maintained)** - Medical Data Sheets will be filled out by on-site personnel and filed in a central location. The Medical Data Sheet will accompany any injury or illness requiring medical attention to the medical facility.
- **Personnel Monitoring (maintained)** - The results generated through personnel sampling (levels of airborne toxins, noise levels, etc.) will be posted to inform individuals of the results of that effort.
- **Placards and Labels (maintained)** - Where chemical inventories have been separated because of quantities and incompatibilities, these areas will be conspicuously marked using DOT placards and acceptable [Hazard Communication 29 CFR 1910.1200(f)] labels.

The purpose of maintaining or posting this information, as stated above, is to allow site personnel quick access. Variations concerning location and methods of presentation are acceptable providing the objective is accomplished.

### 13.0 ACRONYMS / ABBREVIATIONS

ACGIH	American Conference of Governmental and Industrial Hygienists
BG	Background
BZ	Breathing Zone
CAAA	Crane Army Ammunition Activity
CFR	Code of Federal Regulations
CIH	Certified Industrial Hygienist
CLEAN	Comprehensive Long-Term Environmental Action Navy
COC	Contaminants of Concern
CPR	Cardio Pulmonary Resuscitation
CSP	Certified Safety Professional
CTO	Contract Task Order
dBA	decibels
DoD	Department of Defense
DOT	Department of Transportation
FOL	Field Operations Leader
HASP	Health and Safety Plan
HAZWOPER	Hazardous Waste Operations and Emergency Response
HSM	Health and Safety Manager
IDW	Investigation Derived Waste
mg/m <sup>3</sup>	milligrams per cubic meter
N/A	Not Available
NSA	Naval Support Activity
NIOSH	National Institute for Occupational Safety and Health
OELs	Occupational Exposure Limits
OSHA	Occupational Safety and Health Administration (U.S. Department of Labor)
PEL	Personal Exposure Limit
PHSO	Project Health and Safety Officer
PM	Project Manager
PPE	Personal Protective Equipment
RPM	Remedial Project Manager
SOP	Standard Operating Procedure
SSO	Site Safety Officer
STEL	Short term exposure limit
SWP	Safe Work Permits
TBD	To be determined

TLV	Threshold Limit Values
TWA	Time Weighted Average
SWMU	Solid Waste Management Unit
TtNUS	Tetra Tech NUS, Inc.

**ATTACHMENT I**  
**INCIDENT REPORT FORM**



TETRA TECH, INC.

Safety Excellence

tetra tech, inc.  
INCIDENT REPORT

Report Date	Report Prepared By	Incident Report Number

**INSTRUCTIONS:**

All incidents (including those involving subcontractors under direct supervision of Tetra Tech personnel) must be documented on the IR Form.

Complete any additional parts to this form as indicated below for the type of incident selected.

TYPE OF INCIDENT (Check all that apply)	Additional Form(s) Required for this type of incident
Near Miss (No losses, but could have resulted in injury, illness, or damage)	<input type="checkbox"/> Complete IR Form Only
Injury or Illness	<input type="checkbox"/> Complete Form IR-A; Injury or Illness
Property or Equipment Damage, Fire, Spill or Release	<input type="checkbox"/> Complete Form IR-B; Damage, Fire, Spill or Release
Motor Vehicle	<input type="checkbox"/> Complete Form IR-C; Motor Vehicle

**INFORMATION ABOUT THE INCIDENT**

**Description of Incident**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

<b>Date of Incident</b>	<b>Time of Incident</b>
_____	_____ AM <input type="checkbox"/> PM <input type="checkbox"/> OR Cannot be determined <input type="checkbox"/>

<b>Weather conditions at the time of the incident</b>	<b>Was there adequate lighting?</b>
_____	_____ Yes <input type="checkbox"/> No <input type="checkbox"/>

**Location of Incident**

\_\_\_\_\_

Was location of incident within the employer's work environment? Yes  No

<b>Street Address</b>	<b>City, State, Zip Code and Country</b>
_____	_____

<b>Project Name</b>	<b>Client:</b>
_____	_____

<b>TtNUS Supervisor or Project Manager</b>	<b>Was supervisor on the scene?</b>
_____	Yes <input type="checkbox"/> No <input type="checkbox"/>

**WITNESS INFORMATION (attach additional sheets if necessary)**

<b>Name</b>	<b>Company</b>
_____	_____

<b>Street Address</b>	<b>City, State and Zip Code</b>
_____	_____

**Telephone Number(s)**

\_\_\_\_\_



**CORRECTIVE ACTIONS**

Corrective action(s) immediately taken by unit reporting the incident:

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

Corrective action(s) still to be taken (by whom and when):

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

**ROOT CAUSE ANALYSIS LEVEL REQUIRED**

Root Cause Analysis Level Required: Level - 1  Level - 2  None

**Root Cause Analysis Level Definitions**

<b>Level - 1</b>	<p><b>Definition:</b> A Level 1 RCA is conducted by an individual(s) with experience or training in root cause analysis techniques and will conduct or direct documentation reviews, site investigation, witness and affected employee interviews, and identify corrective actions. Activating a Level 1 RCA and identifying RCA team members will be at the discretion of the Corporate Administration office.</p> <p>The following events may trigger a Level 1 RCA:</p> <ul style="list-style-type: none"> <li>▪ Work related fatality</li> <li>▪ Hospitalization of one or more employee where injuries result in total or partial permanent disability</li> <li>▪ Property damage in excess of \$75,000</li> <li>▪ When requested by senior management</li> </ul>
<b>Level - 2</b>	<p><b>Definition:</b> A Level 2 RCA is self performed within the operating unit by supervisory personnel with assistance of the operating unit HSR. Level 2 RCA will utilize the 5 Why RCA methodology and document the findings on the tools provided.</p> <p>The following events will require a Level 2 RCA:</p> <ul style="list-style-type: none"> <li>▪ OSHA recordable lost time incident</li> <li>▪ Near miss incident that could have triggered a Level 1 RCA</li> <li>▪ When requested by senior management</li> </ul>

Complete the Root Cause Analysis Worksheet and Corrective Action form. Identify a corrective action(s) for each root cause identified within each area of inquiry.

**NOTIFICATIONS**

Title	Printed Name	Signature	Telephone Number	Date
Project Manager or Supervisor				
Site Safety Coordinator or Office H&S Representative				
Operating Unit H&S Representative				
Other: _____				

The signatures provided above indicate that appropriate personnel have been notified of the incident.

**INSTRUCTIONS:**

Complete all sections below for incidents involving injury or illness.  
Do NOT leave any blanks.  
Attach this form to the IR FORM completed for this incident.

Incident Report Number: (From the IR Form)

**EMPLOYEE INFORMATION**

**Company Affiliation**

Tetra Tech Employee?  TetraTech subcontractor employee (directly supervised by TtNUS personnel)?

Full Name

Company (if not TtNUS employee)

Street Address, City, State and Zip Code

Address Type

Home address (for TtNUS employees)

Business address (for subcontractors)

**Telephone Numbers**

Work: \_\_\_\_\_

Home: \_\_\_\_\_

Cell: \_\_\_\_\_

Occupation (regular job title)

Department

Was the individual performing regular job duties?

Yes  No

Time individual began work

\_\_\_\_\_ AM  PM  OR Cannot be determined

**Safety equipment**

Provided? Yes  No

Used? Yes  No  If no, explain why

- Type(s) provided:
- Hard hat
  - Protective clothing
  - Gloves
  - High visibility vest
  - Eye protection
  - Fall protection
  - Safety shoes
  - Machine guarding
  - Respirator
  - Other (list)

**NOTIFICATIONS**

Name of TtNUS employee to whom the injury or illness was first reported

Was H&S notified within one hour of injury or illness?

Yes  No

Date of report

H&S Personnel Notified

Time of report

Time of Report

If subcontractor injury, did subcontractor's firm perform their own incident investigation?

Yes  No  If yes, request a copy of their completed investigation form/report and attach it to this report.

### INJURY / ILLNESS DETAILS

**What was the individual doing just before the incident occurred?** Describe the activity as well as the tools, equipment, or material the individual was using. Be specific. Examples: "Climbing a ladder while carrying roofing materials"; "Spraying chlorine from a hand sprayer"; "Daily computer key-entry"

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**What Happened?** Describe how the injury occurred. Examples: "When ladder slipped on wet floor and worker fell 20 feet"; "Worker was sprayed with chlorine when gasket broke during replacement"; "Worker developed soreness in wrist over time"

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**Describe the object or substance that directly harmed the individual:** Examples: "Concrete floor"; "Chlorine"; "Radial Arm Saw". If this question does not apply to the incident, write "Not Applicable".

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### MEDICAL CARE PROVIDED

Was first aid provided at the site: Yes  No  If yes, describe the type of first aid administered and by whom?

---

Was treatment provided away from the site: Yes  No  If yes, provide the information below.

<b>Name of physician or health care professional</b>	<b>Facility Name</b>
<b>Street Address, City State and Zip Code</b>	<b>Type of Care?</b>
	Was individual treated in emergency room? Yes <input type="checkbox"/> No <input type="checkbox"/>
	Was individual hospitalized overnight as an in-patient? Yes <input type="checkbox"/> No <input type="checkbox"/>
<b>Telephone Number</b>	Did the individual die? Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, date: _____
	Will a worker's compensation claim be filed? Yes <input type="checkbox"/> No <input type="checkbox"/>

**NOTE: Attach any police reports or related diagrams to this report.**

### SIGNATURES

I have reviewed this report and agree that all the supplied information is accurate

<b>Affected individual (print)</b>	<b>Affected individual (signature)</b>	<b>Telephone Number</b>	<b>Date</b>

This form contains information relating to employee health and must be used in a manner that protects the confidentiality of the employee to the extent possible while the information is being used for occupational safety and health purposes.

**INSTRUCTIONS:**

Complete all sections below for incidents involving property/equipment damage, fire, spill or release.  
Do NOT leave any blanks.  
Attach this form to the IR FORM completed for this incident.

Incident Report Number: (From the IR Form)

**TYPE OF INCIDENT: (Check all that apply)**

Property Damage

Equipment Damage

Fire or Explosion

Spill or Release

**INCIDENT DETAILS**

Results of Incident: Fully describe damages, losses, etc.

Response Actions Taken:

Responding Agency(s) (i.e. police, fire department, etc.)

Agency(s) Contact Name(s)

**DAMAGED ITEMS (List all damaged items, extent of damage and estimated repair cost)**

Item:	Extent of damage:	Estimated repair cost

**SPILLS / RELEASES (Provide information for spilled/released materials)**

Substance	Estimated quantity and duration	Specify Reportable Quantity (RQ)
		Exceeded? Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/>

**FIRES / EXPLOSIONS (Provide information related to fires/explosions)**

Fire fighting equipment used? Yes  No  If yes, type of equipment: \_\_\_\_\_

**NOTIFICATIONS**

Required notifications	Name of person notified	By whom	Date / Time
Client: _____ Yes <input type="checkbox"/> No <input type="checkbox"/>			
Agency: _____ Yes <input type="checkbox"/> No <input type="checkbox"/>			
Other: _____ Yes <input type="checkbox"/> No <input type="checkbox"/>			

Who is responsible for reporting incident to outside agency(s)? TtNUS  Client  Other  Name: \_\_\_\_\_

Was an additional written report on this incident generated? Yes  No  If yes, place in project file.

### INSTRUCTIONS:

Complete all sections below for incidents involving motor vehicle accidents. Do NOT leave any blanks.  
Attach this form to the IR FORM completed for this incident.

Incident Report Number: (From the IR Form)			
INCIDENT DETAILS			
Name of road, street, highway or location where accident occurred		Name of intersecting road, street or highway if applicable	
County	City	State	
Did police respond to the accident?		Did ambulance respond to the accident?	
Yes <input type="checkbox"/> No <input type="checkbox"/>		Yes <input type="checkbox"/> No <input type="checkbox"/>	
Name and location of responding police department		Ambulance company name and location	
Officer's name/badge #			
Did police complete an incident report? Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, police report number: _____ Request a copy of completed investigation report and attach to this form.			
VEHICLE INFORMATION			
How many vehicles were involved in the accident? _____ (Attach additional sheets as applicable for accidents involving more than 2 vehicles.)			
Vehicle Number 1 – Tetra Tech Vehicle		Vehicle Number 2 – Other Vehicle	
Vehicle Owner / Contact Information		Vehicle Owner / Contact Information	
Color		Color	
Make		Make	
Model		Model	
Year		Year	
License Plate #		License Plate #	
Identification #		Identification #	
Describe damage to vehicle number 1		Describe damage to vehicle number 2	
Insurance Company Name and Address		Insurance Company Name and Address	
Agent Name		Agent Name	
Agent Phone No.		Agent Phone No.	
Policy Number		Policy Number	

### DRIVER INFORMATION

Vehicle Number 1 – Tetra Tech Vehicle		Vehicle Number 2 – Other Vehicle	
Driver's Name		Driver's Name	
Driver's Address		Driver's Address	
Phone Number		Phone Number	
Date of Birth		Date of Birth	
Driver's License #		Driver's License #	
Licensing State		Licensing State	
Gender	Male <input type="checkbox"/> Female <input type="checkbox"/>	Gender	Male <input type="checkbox"/> Female <input type="checkbox"/>
Was traffic citation issued to Tetra Tech driver? Yes <input type="checkbox"/> No <input type="checkbox"/>		Was traffic citation issued to driver of other vehicle? Yes <input type="checkbox"/> No <input type="checkbox"/>	
Citation #		Citation #	
Citation Description		Citation Description	

### PASSENGERS IN VEHICLES (NON-INJURED)

List all non-injured passengers (excluding driver) in each vehicle.  
 Driver information is captured in the preceding section.  
 Information related to persons injured in the accident (non-TtNUS employees) is captured in the section below on this form.  
 Injured TtNUS employee information is captured on FORM IR-A.

Vehicle Number 1 – Tetra Tech Vehicle		Vehicle Number 2 – Other Vehicle	
How many passengers (excluding driver) in the vehicle? ____		How many passengers (excluding driver) in the vehicle? ____	
Non-Injured Passenger Name and Address		Non-Injured Passenger Name and Address	
Non-Injured Passenger Name and Address		Non-Injured Passenger Name and Address	
Non-Injured Passenger Name and Address		Non-Injured Passenger Name and Address	

### INJURIES TO NON-TETRATECH EMPLOYEES

Name of injured person 1				Address of injured person 1		
Age	Gender	Car No.	Location in Car	Seat Belt Used?	Ejected from car?	Injury or Fatality?
	Male <input type="checkbox"/> Female <input type="checkbox"/>			Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Injured <input type="checkbox"/> Died <input type="checkbox"/>
Name of injured person 2				Address of injured person 2		
Age	Gender	Car No.	Location in Car	Seat Belt Used?	Ejected from car?	Injury or Fatality?
	Male <input type="checkbox"/> Female <input type="checkbox"/>			Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Injured <input type="checkbox"/> Died <input type="checkbox"/>

### OTHER PROPERTY DAMAGE

Describe damage to property other than motor vehicles	
Property Owner's Name	Property Owner's Address

COMPLETE AND SUBMIT DIAGRAM DEPICTING WHAT HAPPENED

A large, empty rectangular box with a thin black border, intended for drawing a diagram. The box occupies most of the page below the instruction header.

**ATTACHMENT II**  
**MEDICAL DATA SHEET**

## MEDICAL DATA SHEET

This Medical Data Sheet must be completed by on-site personnel and kept in the command post during the conduct of site operations. This data sheet will accompany any personnel when medical assistance is needed or if transport to hospital facilities is required.

Project \_\_\_\_\_

Name \_\_\_\_\_ Home Telephone \_\_\_\_\_

Address \_\_\_\_\_

Age \_\_\_\_\_ Height \_\_\_\_\_ Weight \_\_\_\_\_

Person to notify in the event of an emergency: Name: \_\_\_\_\_

Phone: \_\_\_\_\_

Drug or other Allergies: \_\_\_\_\_

Particular Sensitivities : \_\_\_\_\_

Do You Wear Contacts? \_\_\_\_\_

What medications are you presently using? \_\_\_\_\_

Name, Address, and Phone Number of personal physician: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

---

### **Note: Health Insurance Portability and Accountability Act (HIPAA) Requirements**

HIPAA took effect April 14, 2003. Loosely interpreted, HIPAA regulates the disclosure of Protected Health Information (PHI) by the entity collecting that information. PHI is any information about health status (such as that you may report on this Medical Data Sheet), provision of health care, or other information. HIPAA also requires TtNUS to ensure the confidentiality of PHI. This Act can affect the ability of the Medical Data Sheet to contain and convey information you would want a Doctor to know if you were incapacitated. So before you complete the Medical Data Sheet understand that this form will not be maintained in a secure location. It will be maintained in a file box or binder accessible to other members of the field crew so that the can accompany an injured party to the hospital.

DO NOT include information that you do not wish others to know, only information that may be pertinent in an emergency situation or treatment.

---

\_\_\_\_\_

Name (Print clearly)

\_\_\_\_\_

Signature

\_\_\_\_\_

Date

**ATTACHMENT III**  
**DPT EQUIPMENT INSPECTION**  
**CHECKLIST**

### Equipment Inspection Checklist for Drill Rigs

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

Unit/Serial No#: \_\_\_\_\_

Inspection Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Time: \_\_\_\_ : \_\_\_\_

Equipment Type: \_\_\_\_\_  
(e.g., Drill Rigs Hollow Stem, Mud Rotary, Direct Push, HDD)

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

Project No#: \_\_\_\_\_

Yes	No	NA	Requirement	Comments
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>Emergency Stop Devices</b> <ul style="list-style-type: none"> <li>• Emergency Stop Devices (At points of operation)</li> <li>• Have all emergency shut offs identified been communicated to the field crew?</li> <li>• Has a person been designated as the Emergency Stop Device Operator?</li> </ul>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>Highway Use</b> <ul style="list-style-type: none"> <li>• Cab, mirrors, safety glass?</li> <li>• Turn signals, lights, brake lights, etc. (front/rear) for equipment approved for highway use?</li> <li>• Seat Belts?</li> <li>• Is the equipment equipped with audible back-up alarms and back-up lights?</li> <li>• Horn and gauges</li> <li>• Brake condition (dynamic, park, etc.)</li> <li>• Tires (Tread) or tracks</li> <li>• Windshield wipers</li> <li>• Exhaust system</li> <li>• Steering (standard and emergency)</li> <li>• Wheel Chocks?</li> <li>• Are tools and material secured to prevent movement during transport? Especially those within the cab?</li> <li>• Are there flammables or solvents or other prohibited substances stored within the cab?</li> <li>• Are tools or debris in the cab that may adversely influence operation of the vehicle (in and around brakes, clutch, gas pedals)</li> </ul>	

Yes	No	NA	Requirement	Comments
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<b>Fluid Levels:</b> <ul style="list-style-type: none"> <li>• Engine oil</li> <li>• Transmission fluid</li> <li>• Brake fluid</li> <li>• Cooling system fluid</li> <li>• Hoses and belts</li> <li>• Hydraulic oil</li> </ul>	
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<b>High Pressure Hydraulic Lines</b> <ul style="list-style-type: none"> <li>• Obvious damage</li> <li>• Operator protected from accidental release</li> <li>• Coupling devices, connectors, retention cables/pins are in good condition and in place</li> </ul>	
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<b>Mast Condition</b> <ul style="list-style-type: none"> <li>• Structural components/tubing</li> <li>• Connection points</li> <li>• Pins</li> <li>• Welds</li> <li>• Outriggers</li> <li>• Operational</li> <li>• Plumb (when raised)</li> </ul>	
<input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<b>Hooks</b> <ul style="list-style-type: none"> <li>• Are the hooks equipped with Safety Latches?</li> <li>• Does it appear that the hook is showing signs of wear in excess of 10% original dimension?</li> <li>• Is there a bend or twist exceeding 10% from the plane of an unbent hook?</li> <li>• Increase in throat opening exceeding 15% from new condition</li> <li>• Excessive nicks and/or gouges</li> <li>• Clips</li> <li>• Number of U-Type (Crosby) Clips  (cable size 5/16 – 5/8 = 3 clips minimum)  (cable size 3/4 – 1 inch = 4 clips minimum)  (cable size 1 1/8 – 1 3/8 inch = 5 clips minimum)</li> </ul>	



Yes	No	NA	Requirement	Comments
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<b>PPE Required for Drill Rig Exclusion Zone</b> <ul style="list-style-type: none"> <li>• Hardhat</li> <li>• Safety glasses</li> <li>• Work gloves</li> <li>• Chemical resistant gloves _____</li> <li>• Safety toed Work Boots</li> <li>• Chemical resistant Boot Covers</li> <li>• Apron</li> <li>• Coveralls Tyvek, Saranex, cotton)</li> </ul>	
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<b>Other Hazards</b> <ul style="list-style-type: none"> <li>• Excessive Noise Levels? _____ dBA</li> <li>• Chemical hazards (Drilling supplies - Sand, bentonite, grout, fuel, etc.) <ul style="list-style-type: none"> <li>- MSDSs available?</li> </ul> </li> <li>• Will On-site fueling occur <ul style="list-style-type: none"> <li>- Safety cans available?</li> <li>- Fire extinguisher (Type/Rating - _____ )</li> </ul> </li> </ul>	

Approved for Use     Yes     No     See Comments

\_\_\_\_\_  
Site Health and Safety Officer

\_\_\_\_\_  
Operator

**ATTACHMENT IV**  
**SAFE WORK PERMITS**

**SAFE WORK PERMIT  
MOBILIZATION AND DEMOBILIZATION ACTIVITIES  
NSA CRANE – SWMU 22**

Permit No. \_\_\_\_\_ Date: \_\_\_\_\_ Time: From \_\_\_\_\_ to \_\_\_\_\_

I. **Work limited to the following (description, area, equipment used):** Mobilization and demobilization activities

II. **Primary Hazards:** Lifting; slips, trips and falls; vehicular and foot traffic; insect/animal bites and stings; poisonous plants; inclement weather.

III. **Field Crew:** \_\_\_\_\_

IV. **On-site Inspection conducted**  Yes  No Initials of Inspector \_\_\_\_\_ TtNUS  
**Equipment Inspection required**  Yes  No Initials of Inspector \_\_\_\_\_ TtNUS

V. **Protective equipment required** **Respiratory equipment required**  
 Level D  Level B  Yes  Specify on the reverse  
 Level C  Level A  No

Modifications/Exceptions: Minimum requirement include sleeved shirt and long pants, or coveralls, safety glasses and safety footwear. Hard hats and hearing protection will be worn when working near operating equipment.

VI. <b>Chemicals of Concern</b>	Hazard Monitoring	Action Level(s)	Response Measures
<u>None anticipated</u>	<u>None</u>	<u>None</u>	<u>None</u>

Primary Route(s) of Exposure/Hazard: NA

(Note to FOL and/or SSO: Each item in Sections VII, VIII, and IX must be checked Yes, No, or NA)

VII. **Additional Safety Equipment/Procedures**

Hard-hat..... <input type="checkbox"/> Yes <input type="checkbox"/> No	Hearing Protection (Plugs/Muffs)..... <input type="checkbox"/> Yes <input type="checkbox"/> No
Safety Glasses ..... <input type="checkbox"/> Yes <input type="checkbox"/> No	Safety belt/harness..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Chemical/splash goggles..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Radio/Cellular Phone..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Splash Shield..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Barricades ..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Splash suits/coveralls ..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Gloves (Type – Work)..... <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Impermeable apron ..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Work/rest regimen ..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Safety toe work shoes/boots..... <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Chemical Resistant Boot Covers ..... <input type="checkbox"/> Yes <input type="checkbox"/> No
High visibility vest ..... <input type="checkbox"/> Yes <input type="checkbox"/> No	Tape up/use insect repellent ..... <input type="checkbox"/> Yes <input type="checkbox"/> No
First Aid Kit..... <input type="checkbox"/> Yes <input type="checkbox"/> No	Fire Extinguisher..... <input type="checkbox"/> Yes <input type="checkbox"/> No
Safety Shower/Eyewash..... <input type="checkbox"/> Yes <input type="checkbox"/> No	Other ..... <input type="checkbox"/> Yes <input type="checkbox"/> No

Modifications/Exceptions: Tyvek coverall to protect against natural hazards (e.g., ticks) if working/walking through areas of high grass. Use insect repellants containing at least 10% DEET and tape up in such areas. Follow manufacturer's recommendations for proper application and reapplication. Hard hat when overhead hazards exist. Safety glasses when near eye hazards. Hearing protection when in high noise areas.

VIII. **Site Preparation**

	Yes	No	NA
Utility Locating and Excavation Clearance completed .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vehicle and Foot Traffic Routes Established/Traffic Control Barricades/Signs in Place.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Physical Hazards Identified and Isolated (Splash and containment barriers) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Emergency Equipment Staged (Spill control, fire extinguishers, first aid kits, etc).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

IX. **Additional Permits required** (Hot work, confined space entry, excavation etc.).....  Yes  No  
*If yes, SSO to complete or contact Health Sciences, Pittsburgh Office (412)921-7090*

X. **Special instructions, precautions:** Preview work locations to identify potential hazards (slips, trips, and falls, natural hazards, etc.) Review PPE needs based on activities being performed and the associated hazards. Use safe lifting procedures and obtain assistance when handling heavy or awkward objects. Suspend site activities in the event of inclement weather. Observe site workers for signs and symptoms of heat/cold stress. Use sun block (SPF > 15) to prevent sunburn if necessary.

Permit Issued by: \_\_\_\_\_ Permit Accepted by: \_\_\_\_\_

**SAFE WORK PERMIT  
MULTIMEDIA SAMPLING ACTIVITIES  
NSA CRANE – SWMU 22**

Permit No. \_\_\_\_\_ Date: \_\_\_\_\_ Time: From \_\_\_\_\_ to \_\_\_\_\_

**I. Work limited to the following (description, area, equipment used):** Surface water sampling with bottles and sediment sampling using a trowel

**II. Primary Hazards:** Slips, trips and falls; heavy equipment hazards, vehicular and foot traffic; insect/animal bites and stings; poisonous plants; inclement weather, chemical contamination, water hazards

**III. Field Crew:** \_\_\_\_\_

**IV. On-site Inspection conducted**  Yes  No Initials of Inspector \_\_\_\_\_ TtNUS  
**Equipment Inspection required**  Yes  No Initials of Inspector \_\_\_\_\_ TtNUS

**V. Protective equipment required**

Level D  Level B   
 Level C  Level A

**Respiratory equipment required**

Yes  Specify on the reverse  
 No

Modifications/Exceptions: Minimum requirement include sleeved shirt and long pants, or coveralls, safety glasses and safety footwear. USCG approved personal floatation device (PFD) or a lifeline and harness when working on or near bodies of water.

<b>VI. Chemicals of Concern</b>	<b>Hazard Monitoring /Action Level(s)</b>	<b>Response Measures</b>
<u>Lead and RDX</u>	<u>na</u>	<u>na</u>

**Primary Route(s) of Exposure/Hazard:** inhalation, dermal, ingestion

(Note to FOL and/or SSO: Each item in Sections VII, VIII, and IX must be checked Yes, No, or NA)

**VII. Additional Safety Equipment/Procedures**

Hard-hat..... <input type="checkbox"/> Yes <input type="checkbox"/> No	Hearing Protection (Plugs/Muffs)..... <input type="checkbox"/> Yes <input type="checkbox"/> No
Safety Glasses ..... <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Safety belt/harness/lifeline..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Chemical/splash goggles..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Radio/Cellular Phone..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Splash Shield..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Barricades ..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Splash suits/coveralls ..... <input type="checkbox"/> Yes <input type="checkbox"/> No	Gloves (Type – nitrile) ..... <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Impermeable apron ..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Work/rest regimen ..... <input type="checkbox"/> Yes <input type="checkbox"/> No
Safety toe work shoes/boots..... <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Chemical Resistant Boot Covers ..... <input type="checkbox"/> Yes <input type="checkbox"/> No
High visibility vest ..... <input type="checkbox"/> Yes <input type="checkbox"/> No	Tape up/use insect repellent ..... <input type="checkbox"/> Yes <input type="checkbox"/> No
First Aid Kit..... <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Fire Extinguisher..... <input type="checkbox"/> Yes <input type="checkbox"/> No
Safety Shower/Eyewash..... <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Other (PFD or lifeline)..... <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Modifications/Exceptions: Wear a hard-hat when in areas with overhead hazards. Wear hearing protection near high ambient noise areas. Tyvek coverall to protect against natural hazards (e.g., ticks) if working/walking through areas of high grass. Use insect repellants containing at least 10% DEET and tape up in such areas. Follow manufacturer's recommendations for proper application and reapplication. Wear high visibility clothing when working near traffic. If working in hot or cold extremes follow the work/rest regimen found in the HSGM. Wear boot covers in excessively muddy conditions.

<b>VIII. Site Preparation</b>	Yes	No	NA
Utility Locating and Excavation Clearance completed .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vehicle and Foot Traffic Routes Established/Traffic Control Barricades/Signs in Place .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Physical Hazards Identified and Isolated (Splash and containment barriers) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Emergency Equipment Staged (Spill control, fire extinguishers, first aid kits, etc.).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**IX. Additional Permits required** (Hot work, confined space entry, excavation etc.).....  Yes  No  
 If yes, SSO to complete or contact Health Sciences, Pittsburgh Office (412)921-7090

**X. Special instructions, precautions:** Preview work locations to identify potential hazards (slips, trips, and falls, natural hazards, etc.) Review PPE needs based on activities being performed and the associated hazards. Use safe lifting procedures and obtain assistance when handling heavy or awkward objects. Suspend site activities in the event of inclement weather. Observe site workers for signs and symptoms of heat/cold stress. Use sun block (SPF > 15) to prevent sunburn if necessary.

Permit Issued by: \_\_\_\_\_ Permit Accepted by: \_\_\_\_\_

**SAFE WORK PERMIT  
DPT ACTIVITIES  
NSA CRANE – SWMU 22**

Permit No. \_\_\_\_\_ Date: \_\_\_\_\_ Time: From \_\_\_\_\_ to \_\_\_\_\_

- I. **Work limited to the following (description, area, equipment used):** Sampling activities via DPT
- II. **Primary Hazards:** Slips, trips and falls; vehicular and foot traffic; insect/animal bites and stings; poisonous plants; inclement weather, chemical contamination, water hazards
- III. **Field Crew:** \_\_\_\_\_
- IV. **On-site Inspection conducted**  Yes  No Initials of Inspector TtNUS  
**Equipment Inspection required**  Yes  No Initials of Inspector TtNUS

- V. **Protective equipment required**  Level D  Level B   
 Level C  Level A
- Respiratory equipment required** Yes  Specify on the reverse  
No

Modifications/Exceptions: Minimum requirement include sleeved shirt and long pants, or coveralls, safety glasses and safety footwear. Hard hats and hearing protection will be worn when working near operating equipment.

- |                                 |   |                          |
|---------------------------------|---|--------------------------|
| VI. <b>Chemicals of Concern</b> | <b>Hazard Monitoring /Action Level(s)</b> | <b>Response Measures</b> |
| <u>Lead and RDX</u>             | <u>na</u>                                 | <u>na</u>                |

**Primary Route(s) of Exposure/Hazard:** inhalation, dermal, ingestion

**(Note to FOL and/or SSO: Each item in Sections VII, VIII, and IX must be checked Yes, No, or NA)**

- VII. **Additional Safety Equipment/Procedures**
- |                                  |   |                                       |  |
|----------------------------------|---|---------------------------------------|--|
| Hard-hat.....                    | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Hearing Protection (Plugs/Muffs)..... | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No            |
| Safety Glasses .....             | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Safety belt/harness/lifeline.....     | <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Chemical/splash goggles.....     | <input type="checkbox"/> Yes <input type="checkbox"/> No            | Radio/Cellular Phone.....             | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No            |
| Splash Shield.....               | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Barricades .....                      | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No            |
| Splash suits/coveralls .....     | <input type="checkbox"/> Yes <input type="checkbox"/> No            | Gloves (Type – nitrile).....          | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No            |
| Impermeable apron .....          | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Work/rest regimen .....               | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No            |
| Safety toe work shoes/boots..... | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Chemical Resistant Boot Covers .....  | <input type="checkbox"/> Yes <input type="checkbox"/> No                       |
| High visibility vest .....       | <input type="checkbox"/> Yes <input type="checkbox"/> No            | Tape up/use insect repellent .....    | <input type="checkbox"/> Yes <input type="checkbox"/> No                       |
| First Aid Kit.....               | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Fire Extinguisher.....                | <input type="checkbox"/> Yes <input type="checkbox"/> No                       |
| Safety Shower/Eyewash.....       | <input type="checkbox"/> Yes <input type="checkbox"/> No            | Other .....                           | <input type="checkbox"/> Yes <input type="checkbox"/> No                       |

Modifications/Exceptions: Minimum requirement include sleeved shirt and long pants, safety footwear, and nitrile gloves Tyvek coverall to protect against natural hazards (e.g., ticks) if working/walking through areas of high grass. Use insect repellants containing at least 10% DEET and tape up in such areas. Follow manufacturer's recommendations for proper application and reapplication. Hearing protection in high noise areas.

- VIII. **Site Preparation**
- |   |                          |                          |                          |
|---|--------------------------|--------------------------|--------------------------|
|   | Yes                      | No                       | NA                       |
| Utility Locating and Excavation Clearance completed .....                                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Vehicle and Foot Traffic Routes Established/Traffic Control Barricades/Signs in Place ..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Physical Hazards Identified and Isolated (Splash and containment barriers) .....            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Emergency Equipment Staged (Spill control, fire extinguishers, first aid kits, etc).....    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

- IX. **Additional Permits required** (Hot work, confined space entry, excavation etc.).....  Yes  No  
*If yes, SSO to complete or contact Health Sciences, Pittsburgh Office (412)921-7090*

- X. **Special instructions, precautions:** Preview work locations to identify potential hazards (slips, trips, and falls, natural hazards, etc.) Review PPE needs based on activities being performed and the associated hazards. Use safe lifting procedures and obtain assistance when handling heavy or awkward objects. Suspend site activities in the event of inclement weather. Observe site workers for signs and symptoms of heat/cold stress. Use sun block (SPF > 15) to prevent sunburn if necessary. Complete DPT Equipment Inspection Checklist prior to beginning work (Attachment VI). Utility Clearance will be performed prior to beginning work. For more information refer to the Utility Clearance SOP in Section 7.0 of the HSGM.

Permit Issued by: \_\_\_\_\_ Permit Accepted by: \_\_\_\_\_

**SAFE WORK PERMIT  
DECONTAMINATION ACTIVITIES  
NSA CRANE – SWMU 22**

Permit No. \_\_\_\_\_ Date: \_\_\_\_\_ Time: From \_\_\_\_\_ to \_\_\_\_\_

- I. **Work limited to the following (description, area, equipment used):** Decontamination activities  
 II. **Primary Hazards:** Chemical exposure, transfer of contamination, inclement weather, noise, slips/trips.

- III. **Field Crew:** \_\_\_\_\_  
 IV. **On-site Inspection conducted**  Yes  No Initials of Inspector \_\_\_\_\_ TtNUS  
**Equipment Inspection required**  Yes  No Initials of Inspector \_\_\_\_\_ TtNUS

- V. **Protective equipment required** **Respiratory equipment required**  
 Level D  Level B  Yes  Specify on the reverse  
 Level C  Level A  No   
 Modifications/Exceptions: Minimum requirement include sleeved shirt and long pants, safety glasses, safety footwear, and nitrile gloves. Impermeable aprons are preferred protection against soiling work clothes when lifting auger flights because of the need to carry close to the body. If it (impermeable apron) does not offer adequate protection, PVC rain suits or PE or PVC coated Tyvek should be employed. Chemical resistant boot covers if excessive liquids are generated or to protected footwear.

- |  |  |  |
|--|--|--|
| <b>VI. Chemicals of Concern</b><br><u>Decontamination Fluids</u>                               | <b>Hazard Monitoring/Action Level(s)</b><br><u>refer to MSDS</u> | <b>Response Measures</b><br><u>refer to MSDS</u> |
| <b>Primary Route(s) of Exposure/Hazard:</b> <u>Inhalation and direct contact and ingestion</u> |  |  |

**(Note to FOL and/or SSO: Each item in Sections VII, VIII, and IX must be checked Yes, No, or NA)**

- VII. **Additional Safety Equipment/Procedures**
- |   |   |
|---|---|
| Hard-hat..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                   | Hearing Protection (Plugs/Muffs)..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Safety Glasses ..... <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No            | Safety belt/harness..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No              |
| Chemical/splash goggles..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No    | Radio/Cellular Phone..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No             |
| Splash shield ..... <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No             | Barricades ..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                      |
| Splash suits/coveralls ..... <input type="checkbox"/> Yes <input type="checkbox"/> No               | Gloves (Type – Nitrile)..... <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No          |
| Impermeable apron ..... <input type="checkbox"/> Yes <input type="checkbox"/> No                    | Work/rest regimen ..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No               |
| Safety toe Work shoes or boots. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Chemical Resistant Boot Covers..... <input type="checkbox"/> Yes <input type="checkbox"/> No              |
| High visibility vest ..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No      | Tape up/use insect repellent ..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No    |
| First Aid Kit ..... <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No             | Fire Extinguisher..... <input type="checkbox"/> Yes <input type="checkbox"/> No                           |
| Safety Shower/Eyewash..... <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No      | Other ..... <input type="checkbox"/> Yes <input type="checkbox"/> No                                      |
- Modifications/Exceptions: Chemical resistant boot covers if excessive liquids are generated or to protect footwear. Impermeable apron may be worn to protect from overspray

- VIII. **Site Preparation**
- |   |                          |                          |                                     |
|---|--------------------------|--------------------------|-------------------------------------|
|   | Yes                      | No                       | NA                                  |
| Utility Locating and Excavation Clearance completed .....                                   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Vehicle and Foot Traffic Routes Established/Traffic Control Barricades/Signs in Place ..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| Physical Hazards Identified and Isolated (Splash and containment barriers) .....            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| Emergency Equipment Staged (Spill control, fire extinguishers, first aid kits, etc).....    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |

- IX. **Additional Permits required (Hot work, confined space entry, excavation etc.).....**  Yes  No  
*If yes, SSO to complete or contact Health Sciences, Pittsburgh Office (412)921-7090*

- X. **Special instructions, precautions:** Suspend site activities in the event of inclement weather. Employ proper lifting techniques. When/where possible use heavy equipment to move and place containers.

Permit Issued by: \_\_\_\_\_ Permit Accepted by: \_\_\_\_\_

**SAFE WORK PERMIT  
IDW MANAGEMENT  
NSA CRANE – SWMU 22**

Permit No. \_\_\_\_\_ Date: \_\_\_\_\_ Time: From \_\_\_\_\_ to \_\_\_\_\_

**SECTION I: General Job Scope**

- I. **Work limited to the following (description, area, equipment used):** IDW management activities includes containerization, staging, monitoring for leaks of IDW accumulated wastes. Wastes types include purge and decontamination wash waters.
- II. **Primary Hazards:** Lifting, pinches and compressions; flying projectiles; slips, trips, and falls and chemical contamination.
- III. **Field Crew:** \_\_\_\_\_
- IV. **On-site Inspection conducted**  Yes  No      Initials of Inspector \_\_\_\_\_ TtNUS  
**Equipment Inspection required**  Yes  No      Initials of Inspector \_\_\_\_\_ TtNUS

**SECTION II: General Safety Requirements (To be filled in by permit issuer)**

- V. **Protective equipment required**      **Respiratory equipment required**  
 Level D     Level B       Yes       See Reverse  
 Level C     Level A       No        
 Modifications/Exceptions: None anticipated

<b>VI. Chemicals of Concern</b>	<b>Hazard Monitoring /Action Level(s)</b>	<b>Response Measures</b>
<u>None anticipated</u>	<u>none</u>	<u>none</u>

**Primary Route of Exposure/Hazard:** NA

**(Note to FOL and/or SSO: Each item in Sections VII, VIII, and IX must be checked Yes or No)**

- VII. **Additional Safety Equipment/Procedures**

Hard-hat..... <input type="checkbox"/> Yes <input type="checkbox"/> No	Hearing Protection (Plugs/Muffs)... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Safety Glasses ..... <input type="checkbox"/> Yes <input type="checkbox"/> No	Safety belt/harness..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Chemical/splash goggles..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Radio/Cellular Phone..... <input type="checkbox"/> Yes <input type="checkbox"/> No
Splash Shield..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Barricades ..... <input type="checkbox"/> Yes <input type="checkbox"/> No
Splash suits/coveralls ..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Gloves (Type – Leather/Cotton) .... <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Impermeable apron ..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Work/rest regimen ..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Safety toe work shoes/boots..... <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Chemical Resistant Boot Covers <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
High visibility vest ..... <input type="checkbox"/> Yes <input type="checkbox"/> No	Tape up/use insect repellent ..... <input type="checkbox"/> Yes <input type="checkbox"/> No
First Aid Kit ..... <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Fire Extinguisher..... <input type="checkbox"/> Yes <input type="checkbox"/> No
Safety Shower/Eyewash..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Other ..... <input type="checkbox"/> Yes <input type="checkbox"/> No

**Modifications/Exceptions:** When using pneumatic/electric power to open drums – Safety glasses are required; If power equipment is employed to move drums or you are working near operating equipment hard hats will be employed. Tyvek coverall to protect against natural hazards (e.g., ticks) if working/walking through areas of high grass. Use insect repellants containing at least 10% DEET if necessary. Follow manufacturer's recommendations for proper application and reapplication. If working in areas where snakes are a threat, wear snake chaps to protect against bites. High visibility vest if near active traffic areas.

<b>VIII. Site Preparation</b>	<b>Yes</b>	<b>No</b>	<b>NA</b>
Utility Locating and Excavation Clearance completed .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Vehicle and Foot Traffic Routes Established/Traffic Control Barricades/Signs in Place .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Physical Hazards Identified and Isolated .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Emergency Equipment Staged (Spill control, fire extinguishers, first aid kits, etc).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- IX. **Additional Permits required (Hot work, confined space entry, excavation etc.).....**  Yes  No  
*If yes, SSO to complete or contact Health Sciences, Pittsburgh Office (412)921-7090*

X. **Special instructions, precautions:** Suspend site activities in the event of inclement weather. Employ proper lifting techniques. When/where possible use heavy equipment to move and place containers. When placing drums – Place the label and retention ring nut on the outside where it is readily visible. Place 4-drums to a pallet. Maintain a minimum distance of 4-feet between pallet rows. An IDW inventory shall be generated to provide the number of drums, contents, and volumes. This inventory should be provided to the facility contact. Inspect equipment prior to use.

Permit Issued by: \_\_\_\_\_ Permit Accepted by: \_\_\_\_\_

**SAFE WORK PERMIT  
GPS SURVEYING  
NSA CRANE – SWMU 32**

Permit No. \_\_\_\_\_ Date: \_\_\_\_\_ Time: From \_\_\_\_\_ to \_\_\_\_\_

**SECTION I: General Job Scope**

- I. **Work limited to the following (description, area, equipment used):** GPS surveying
- II. **Primary Hazards:** Lifting, pinches and compressions; flying projectiles; slips, trips, and falls and chemical contamination.
- IV. **Field Crew:** \_\_\_\_\_
- IV. **On-site Inspection conducted**  Yes  No Initials of Inspector \_\_\_\_\_ TtNUS
- Equipment Inspection required**  Yes  No Initials of Inspector \_\_\_\_\_ TtNUS

**SECTION II: General Safety Requirements (To be filled in by permit issuer)**

- V. **Protective equipment required** **Respiratory equipment required**
- Level D  Level B  Yes  See Reverse
- Level C  Level A  No
- Modifications/Exceptions: None anticipated

<b>VI. Chemicals of Concern</b>	<b>Hazard Monitoring /Action Level(s)</b>	<b>Response Measures</b>
<u>None anticipated</u>	<u>none</u>	<u>none</u>

**Primary Route of Exposure/Hazard:** NA

**(Note to FOL and/or SSO: Each item in Sections VII, VIII, and IX must be checked Yes or No)**

- VII. Additional Safety Equipment/Procedures**
- |  |   |
|--|---|
| Hard-hat..... <input type="checkbox"/> Yes <input type="checkbox"/> No                               | Hearing Protection (Plugs/Muffs)... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Safety Glasses ..... <input type="checkbox"/> Yes <input type="checkbox"/> No                        | Safety belt/harness..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No            |
| Chemical/splash goggles..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No     | Radio/Cellular Phone..... <input type="checkbox"/> Yes <input type="checkbox"/> No                      |
| Splash Shield..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No               | Barricades ..... <input type="checkbox"/> Yes <input type="checkbox"/> No                               |
| Splash suits/coveralls ..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No     | Gloves (Type – Leather/Cotton) .... <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| Impermeable apron ..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No          | Work/rest regimen ..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No             |
| Safety toe work shoes/boots..... <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Chemical Resistant Boot Covers <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No      |
| High visibility vest ..... <input type="checkbox"/> Yes <input type="checkbox"/> No                  | Tape up/use insect repellent ..... <input type="checkbox"/> Yes <input type="checkbox"/> No             |
| First Aid Kit..... <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No               | Fire Extinguisher..... <input type="checkbox"/> Yes <input type="checkbox"/> No                         |
| Safety Shower/Eyewash..... <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No       | Other ..... <input type="checkbox"/> Yes <input type="checkbox"/> No                                    |

**Modifications/Exceptions:** Tyvek coverall to protect against natural hazards (e.g., ticks) if working/walking through areas of high grass. Use insect repellants containing at least 10% DEET if necessary. Follow manufacturer's recommendations for proper application and reapplication. If working in areas where snakes are a threat, wear snake chaps to protect against bites. High visibility vest if near active traffic areas.

- VIII. Site Preparation**
- |  |                          |                          |                                     |
|--|--------------------------|--------------------------|-------------------------------------|
| Utility Locating and Excavation Clearance completed .....                                  | Yes                      | No                       | NA                                  |
| Vehicle and Foot Traffic Routes Established/Traffic Control Barricades/Signs in Place..... | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Physical Hazards Identified and Isolated .....   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| Emergency Equipment Staged (Spill control, fire extinguishers, first aid kits, etc.).....  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |

- IX. **Additional Permits required (Hot work, confined space entry, excavation etc.).....**  Yes  No  
*If yes, SSO to complete or contact Health Sciences, Pittsburgh Office (412)921-7090*

X. **Special instructions, precautions:** Suspend site activities in the event of inclement weather.

Permit Issued by: \_\_\_\_\_ Permit Accepted by: \_\_\_\_\_

**ATTACHMENT V**  
**OSHA POSTER**

# Job Safety and Health

## It's the law!

# OSHA

Occupational Safety  
and Health Administration  
U.S. Department of Labor

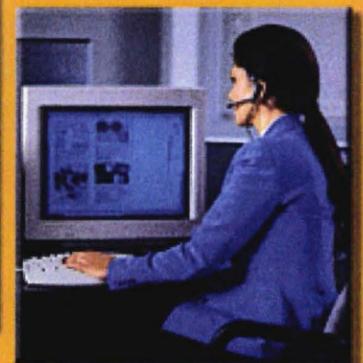
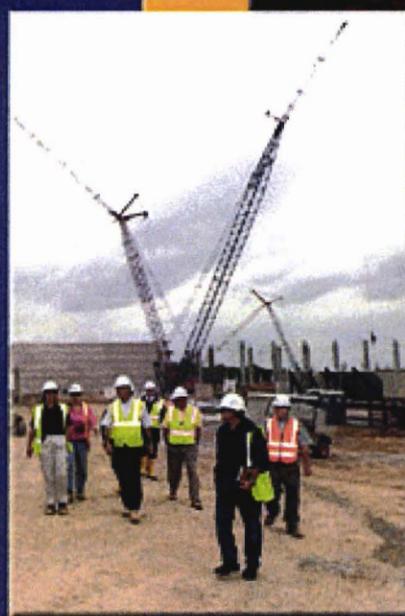
### EMPLOYEES:

- You have the right to notify your employer or OSHA about workplace hazards. You may ask OSHA to keep your name confidential.
- You have the right to request an OSHA inspection if you believe that there are unsafe and unhealthful conditions in your workplace. You or your representative may participate in that inspection.
- You can file a complaint with OSHA within 30 days of retaliation or discrimination by your employer for making safety and health complaints or for exercising your rights under the *OSH Act*.
- You have the right to see OSHA citations issued to your employer. Your employer must post the citations at or near the place of the alleged violations.
- Your employer must correct workplace hazards by the date indicated on the citation and must certify that these hazards have been reduced or eliminated.
- You have the right to copies of your medical records and records of your exposures to toxic and harmful substances or conditions.
- Your employer must post this notice in your workplace.
- You must comply with all occupational safety and health standards issued under the *OSH Act* that apply to your own actions and conduct on the job.

### EMPLOYERS:

- You must furnish your employees a place of employment free from recognized hazards.
- You must comply with the occupational safety and health standards issued under the *OSH Act*.

This free poster available from OSHA –  
The Best Resource for Safety and Health



Free assistance in identifying and correcting hazards or complying with standards is available to employers, without citation or penalty, through OSHA-supported consultation programs in each state.

1-800-321-OSHA  
www.osha.gov

OSHA 3185-12-06R