

SECTION 4

TRAINING

This section describes training and qualification requirements for project personnel. Site personnel are grouped into three general categories: supervisors, field team members, and visitors. With respect to training requirements, the PHSM will implement safety and health standards across the project in collaboration with the UXOSO. Table 4.1 lists the training requirements for various project personnel.

4.1 INITIAL TRAINING

All field personnel must have received training complying with those requirements specified by the USACE in Engineering Manual (EM) 385-1-1 and 29 CFR 1910.120. Copies of certificates of completion, as required, for Hazardous Waste Operations and Emergency Response (HAZWOPER) initial 40-hour and refresher courses, physicians statement, first aid, and CPR training, as applicable, will be maintained by the SUXOS for review.

The SUXOS/SM, as the individual responsible for supervising personnel engaged in site work, will have at least eight additional hours of supervisory training. This specialized training includes the employer's safety and health program and the associated employee training program, PPE program, and health hazard monitoring procedures and techniques.

The UXOSO will have completed the 10-hour OSHA Construction Safety class or equivalent training as specified in EM 385-1-1, paragraph 01.A.17. This requirement must be met by the UXOSO at least once every three years.

All team personnel who have completed the 40-hour HAZWOPER training are qualified as emergency responders in accordance with 29 CFR 1910.120/1926.65 (e) (3) (iv). Site-specific emergency response procedures will be reviewed with all site personnel as a part of site indoctrination. The emergency response plan and contingency plans are provided in Section 15 of this APP/SSHP.

**TABLE 4.1
TRAINING REQUIREMENTS**

Training Content	Duration (If specified)	Frequency (If specified)	Personnel Categories (see Section 3.0)		
			Supervisors & UXOSO	Field Team	Visitors
Health and Safety for Hazardous Waste Operations and Emergency Response – 29 CFR 1910.120	40-Hours	Once	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Health and Safety for Hazardous Waste Operations and Emergency Response (Refresher) - 29 CFR 1910.120	8-Hours	Annually	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Supervised Field Experience	3-Days	Once	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Supervisor’s Health and Safety for Hazardous Waste Operations and Emergency Response – 29 CFR 1910.120	8-Hours	Once	<input checked="" type="checkbox"/>		
Construction safety training or equivalent training IAW EM 385-1-1, para. 01.A.17	10-Hours	Every 3 years	<input checked="" type="checkbox"/> a/		
Site-Specific Training (see Section 4.2 for training contents)	-	Once	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Hazard Communication, Hazards of Materials Used/Encountered Emphasis on Chemical Agents & Industrial Chemicals	-	Once	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
First Aid and CPR (Minimum of 2 Trained Personnel On Site) - Equivalent to American Red Cross Training	-	Every 3 Years for First Aid; Every year for CPR	<input checked="" type="checkbox"/> b/	<input checked="" type="checkbox"/> 2	
Blood-borne Pathogen – 29 CFR 1915.1030 Protective Equipment, Containment and Disposal of Waste	-	Annually	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Visitor Training - Activities & Hazards, Boundaries of Work Area and Entry/Exit, Emergency Evacuation & Assembly Points, PPE	-	Per Visit			<input checked="" type="checkbox"/>
Tailgate Safety Briefings - Potential Hazards & Risks, Encounters with Hazardous Materials to Date, Daily Activities	-	Daily, Prior to Operations	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
MEC Recognition Training				<input checked="" type="checkbox"/>	

a/ UXOSO is the only person required to have this training.
b/ A minimum of 2 trained personnel onsite. Any of the personnel categories may have workers trained in first aid/CPR.

4.2 SITE-SPECIFIC TRAINING

Site-specific training will be provided for the field team members who are expected to work on site. Training will be conducted prior to the beginning of field activities and as needed thereafter. The UXOSO will conduct initial site-specific training prior to job start-up to ensure that site personnel have a thorough understanding of the APP/SSHP, standard operating procedures (SOPs), and the potential physical, chemical, and biological hazards of the site. Site-specific health and safety training includes the following topics:

- Site history and background;
- Organization, duties, and responsibilities,
- Personnel responsibilities for safety and health;
- MEC recognition;
- Review of the APP/SSHP and AHAs;
- SOPs applicable to this project;
- Hazard communication,
- Site control measures;
- Fire prevention measures;
- Donning and doffing of PPE;
- Hearing conservation;
- Heat or cold stress prevention, treatment, and monitoring;
- Proper use of equipment;
- Biological hazards including snakes, plants, and insect-borne diseases;
- Other physical hazards such as slips, trips, and falls; noise; electrocution; being struck by something; and being caught in or between equipment;
- Personal cleanliness and restrictions on eating, drinking, and smoking; and,
- Review of emergency procedures and facilities, including universal precautions.

Site personnel will also be instructed in the use of the buddy system, which is a method of organizing work groups so that someone is always available to:

- Provide their buddy with assistance in an emergency;

- Observe the buddy for signs of physical exposure;
- Periodically check the integrity of the buddy's PPE ; and
- Notify emergency response personnel of what happened to the buddy if and when an emergency occurs.

All site personnel will be made aware of the project emergency assistance network, the most probable route of evacuation from the site in the event of an emergency, and other emergency procedures included in this APP/SSHP or the work plan.

Upon the completion of site-specific training, all site personnel will be required to sign forms stating that they have received site-specific training and that they have read, understood, agreed with, and will abide by the health and safety procedures outlined in the SSHP. Attachment C of this APP/SSHP contains a sample Plan Acceptance Form.

4.3 HAZARD COMMUNICATIONS

Hazard communication training in accordance with 29 CFR 1920.1200, CFR 1926.59, and EM 385-1-1 will be presented during the initial training. Training will include, but not be limited to, all hazards or potential hazards associated with site activities and any hazardous chemical materials brought on site. Copies of Material Safety Data Sheets (MSDS) for chemicals that may be used during site operations will be maintained on the site by the UXOSO and available for review during work hours. If new chemicals are brought on site, site personnel will review the additional MSDSs at tailgate safety meetings. With the exception of gasoline, oil, lubricants, and paint, hazardous materials are not anticipated to be brought on site in the execution of this project.

4.4 FIRST AID, CPR, AND BLOOD-BORNE PATHOGENS TRAINING

Personnel assigned to conduct field work for this project do not conduct first aid or CPR procedures as a primary job function. However, in accordance with EM-385-1-1, at least two field team members trained and currently certified in CPR and first aid will be present on the site during all field work, for emergency response only. Indoctrination to the blood-borne pathogens standard (29 CFR 1910.1030) will be provided to employees either during their first aid training or during the initial site-specific training.

Acting in the capacity of a designated emergency first aid provider is not mandatory, and anyone who is uncomfortable with the possibility of being so designated should notify the UXOSO.

4.5 VISITOR TRAINING

Visitors arriving on site will be given a site-specific visitor safety briefing by the UXOSO. If the visitor has business relating to the site, the visitor training will include a discussion of operational hazards and activities, emergency evacuation, assembly points, and required PPE.

4.6 TAILGATE SAFETY MEETINGS

All personnel working at the project site must attend the daily tailgate safety meeting. This meeting, conducted by the UXOSO, will cover such topics as specific health and safety issues, site activities for that day, changes in site conditions, topics covered in the initial site-specific training as they apply to daily activities, PPE, emergency procedures, weather conditions, physical hazards, and biological hazards. Issues addressed in the daily tailgate meeting will be documented on a log that will be signed by all the attendees and retained by the UXOSO. A copy of the Safety Meeting Attendance Log can be found in Appendix C of the APP/SSHP. Any subcontractors on the site must follow similar meeting procedures and/or participate in the daily ITSI/Parsons safety meetings.

4.7 TRAINING DOCUMENTATION

Documentation of training requirements is the responsibility of each employer. Confirmation in the form of certificates verifying compliance with 29 CFR 1910.120 (e)(3), (e)(4) (as applicable), and (e)(8) must be submitted to the UXOSO before the individual employee enters the work site. The training to be documented, as applicable, includes 40-hour HAZWOPER training; 8-hour refresher; supervisor training; 10-hour OSHA Construction Safety Training or equivalent (for the UXOSO); first aid and/or CPR (for designated personnel); and a current physician's statement. UXO personnel shall be graduates of the Naval School Explosive Ordnance Disposal (NAVSCHOLED) or a DoD-certified equivalent course. Documentation of all workers' current training credentials will be kept on site by the UXOSO.

Re-certification or refresher training for the cited mandatory training shall follow the following schedule (subject to any changes in regulatory guidelines):

- Eight-hour refresher training shall be performed annually for employees who completed the initial 40-hour course;
- Hazard communication training shall be performed annually at a minimum, and is required on a site-specific project basis;
- CPR training shall be renewed annually;
- First aid training shall be renewed every three years;
- Personnel who are designated first aid and CPR responders shall also have completed blood-borne pathogen training annually; and
- OSHA 10-hour Construction Safety Training shall be renewed every 3 years.

4.8 SAFETY AND HEALTH INSPECTIONS

4.8.1 Inspections

The UXOSO will conduct safety inspections daily to determine if operations are being performed in accordance with the APP/SSHP and USACE requirements and regulations.

Inspection findings will be recorded in the safety log. The UXOSO is responsible for conducting daily safety inspections of work processes, site conditions, and equipment conditions and submitting them to the ITSI PM and SUXOS/SM. The UXOSO will discuss any necessary corrective actions with the SUXOS and review new procedures. Copies of these reports shall be maintained at the project locations.

The ITSI HSD, Parsons PHSM, or representative(s) shall conduct site visits and perform site safety assessments. These reports are kept on file in an offsite location. They include the number of action items noted during the visit and written confirmation of the corrective actions for each item. These responses are compiled and provided to program management for review. Deficiencies shall also be documented on the project safety and health assessment summary/deficiency tracking log. This log shall be posted on the safety and health bulletin board in areas commonly used by employees.

4.8.2 External Inspections/Certifications

The ITSI/Parsons team does not anticipate the use of outside sources to provide safety inspections.

4.9 EQUIPMENT

As required, safety equipment will comply with appropriate regulations of the Occupational Safety and Health Administration (OSHA), National Institute for Occupational Safety and Health (NIOSH), American National Standards Institute (ANSI), American Society for Testing and Materials (ASTM), United States Coast Guard (USCG), or other recognized certification organizations.

SECTION 5

PERSONAL PROTECTIVE EQUIPMENT

This APP/SSHP, in conjunction with ITSI Safety Policies and Procedures, serves as the written certification for use of PPE. The ITSI HSD has evaluated the scope of work and site-specific conditions for this project, and has established initial protection levels for the site work activities based on the anticipated levels of site contaminants, physical hazards, and scope of work, as specified in this section.

The minimum PPE requirements outlined below, coupled with health and safety management experience, training in proper selection use and maintenance of PPE, site-specific conditions, potential environmental contaminants, and physical hazards, will dictate site-specific requirements.

Hazard and risk assessment is a continuing process to be conducted throughout the duration of the project by the UXOSO. Changes in specific PPE, or levels of PPE may be made in accordance with information obtained from actual implementation of site activities. Any significant changes in PPE will be approved by the UXOSO in consultation with the CIH and/or HSD. As a rule, levels of PPE will be reassessed if any of the following occur:

- Appearance of previously unidentified conditions, or task hazards.
- Ambient weather conditions change that impact the use of assigned PPE.
- A new task is introduced or a previously assigned and evaluated task is expanded in scope.

Commercial PPE will be used in accordance with the guidelines established by the PHSM. All selected PPE shall be used in accordance with manufacturer's recommendations and best management practices.

Although use of respirators during this project is not anticipated, any personnel using respiratory protection (if necessary) will be cleared by a physician for use of a respirator and will be fit-tested to assure they can achieve an acceptable fit. Physician clearance and results of fit testing will be documented as required.

Personnel performing field activities shall use the PPE specified in this plan as appropriate for each individual task. This APP/SSHP makes provisions for use of the Level D PPE, in accordance with the hazards level anticipated for each task or operation.

The following sections describe the PPE requirements for activities and locations on the site. Criteria for selection, upgrading, and downgrading of PPE, as discussed above, will be made by the UXOSO in consultation with the PHSM. The UXOSO will ensure that personnel are trained in the proper wear, donning, and doffing procedures for the PPE, and that PPE is properly fitted, serviceable, and maintained.

If activities are added to the scope of work after approval of this APP/SSHP, the PHSM shall identify and assess the activity hazards and relay that information to the UXOSO and USACE on site safety representative, as warranted. The PHSM will prepare an amendment to the APP/SSHP and submit the amendment for approval. The amendment will be added to the APP/SSHP and personnel will be trained in the new procedure(s) upon approval by USACE.

It is the responsibility of each individual to report to work wearing proper attire and to assemble and inspect the necessary PPE prior to using it.

5.1 TASK-SPECIFIC LEVELS OF PPE

Level D PPE is the initial level of protection for RI/FS field activities. Level D includes the following:

- Cotton coveralls or work clothing, preferably not synthetic fibers.
- Sturdy work boots or shoes, with steel toe when working around heavy equipment.
- Safety glasses with side shields or goggles when an eye hazard exists.
- Hard hat when working around heavy equipment or when an overhead hazard exists. UXO technicians will not wear a hard hat when investigating suspect MEC.
- Leather or canvas work gloves when a scrape or cut hazard exists.
- Hearing protection when working around heavy equipment, powered hand tools, or noise hazards inherent to the site location.

The following special considerations shall be observed in the selection and use of PPE:

- Steel toe and shank boots are not required during anomaly avoidance unless a serious toe hazard exists, where upon a fiber safety toe will be used;
- Safety glasses shall be selected which provide site personnel with the best protection from not only physical hazards, such as flying objects and tree branches, but that also provide adequate splash protection; and
- Project safety personnel shall continually evaluate site tasks to identify hazards, and shall provide any PPE necessary to ensure the safety and health of site personnel, regardless of the activity they perform.

5.3 PPE INSPECTION, CLEANING, MAINTENANCE, AND STORAGE

All PPE shall be inspected before being used to ensure that it is in functional order and that its structural integrity has not been compromised. Reusable PPE (such as safety glasses and hard hats) also will be inspected before being used if it has been in storage for any length of time and following any maintenance. Site personnel finding a piece of PPE that is defective will report it to the UXOSO, and the defective article will be repaired or replaced.

Any PPE stored and designated as emergency rescue equipment will be inspected when it is brought to the site or secured for the project, and periodically thereafter, to ensure that the equipment is not being adversely affected by prolonged storage. Any equipment found to be defective will be replaced immediately. Inspections will be recorded on the Safety Log.

PPE will be maintained in accordance with the manufacturer's instructions, and only by personnel who have received proper instruction in the maintenance of the PPE. PPE will be stored in such a way that the natural shape of the item is not compromised.

SECTION 6

MEDICAL SURVEILLANCE

Personnel engaged in hazardous waste operations are required to be enrolled in a medical monitoring program as specified in 29 CFR 1910.120(f). A letter signed by a physician attesting to each worker's fitness for duty must be provided to the UXOSO before the individual begins work. Copies of these letters will be kept on file at the project field site.

SECTION 7

MEDICAL SUPPORT

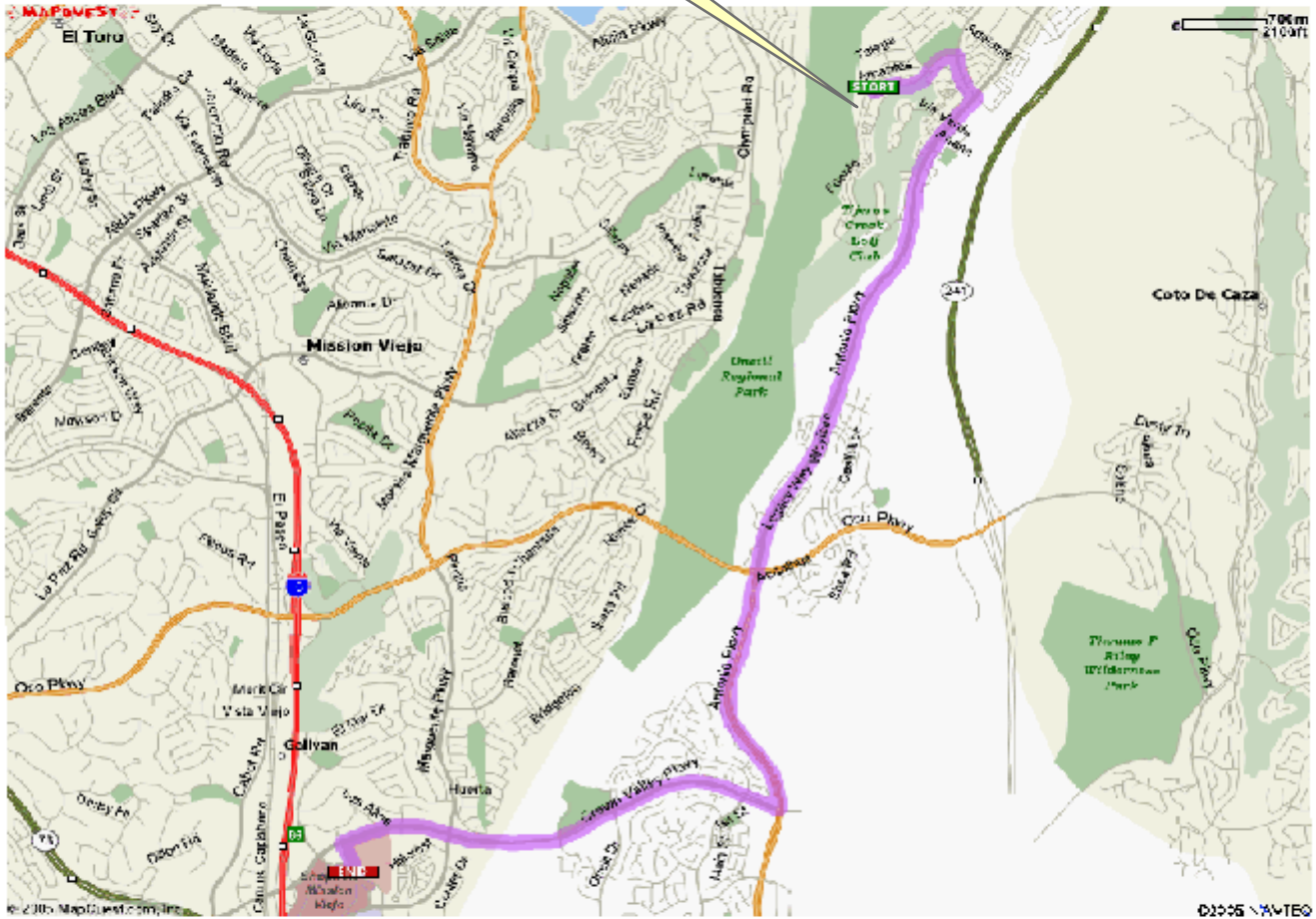
The UXOSO is designated as the first responder for medical emergencies or minor injuries. At least two employees qualified in first aid and CPR will be on site during field activities. The names and qualifications of the designated individuals will be provided to the USACE prior to the beginning of field activities.

In the event of an emergency, additional onsite medical support will be obtained from appropriate sources, such as local ambulance and/or emergency medical technician (EMT) services, 911 dispatch, or life flight.

A map with driving instructions and a list of emergency numbers will be placed in each site vehicle. This information also will be carried by all personnel with health and safety responsibilities. A map and directions to the Mission Hospital are presented on Figure 7-1.

**Mission Hospital
27700 Medical Center Drive
Mission Viejo, CA 92691
949-364-1400**

Central Park Exit



START	1: Start out going NORTHEAST on ARROYO VISTA	0.4 miles
	2: Turn RIGHT onto AVENIDA DE LAS BANDERAS .	0.2 miles
	3: Turn RIGHT onto ANTONIO PKWY .	4.1 miles
	4: Turn RIGHT onto CROWN VALLEY PKWY .	2.3 miles
	5: Turn LEFT onto MEDICAL CENTER RD .	0.1 miles
END	6: End at 27700 Medical Center Rd Mission Viejo, CA 92691-6426, US	

Total Est. Time: 12 minutes **Total Est. Distance:** 7.41 miles

Mission Hospital

27700 Medical Center Road
Mission Viejo, CA
92691
Phone: 949-364-1400



Figure 7-1
Route To Hospital

Former Trabuco Bombing Range

Innovative Technical
Solutions, Inc.

PARSONS

U.S. Army Corps
of Engineers,
Los Angeles District

SECTION 8

EXPOSURE AIR MONITORING AND AIR SAMPLING PROGRAM

No chemical warfare materiel (CWM) or items related to hazardous, toxic, and radioactive waste (HTRW) are anticipated to be found during RI/FS activities. Therefore, no air monitoring or air sampling programs will be implemented.

SECTION 9

STANDARD OPERATING SAFETY PROCEDURES, ENGINEERING CONTROLS, AND WORK PRACTICES

This section outlines general and task-specific practices that will be followed during project activities to ensure the safety of personnel and the environment.

9.1 GENERAL SAFETY REQUIREMENTS

Field team personnel must be able to recognize and understand potential hazards associated with the operations they will be performing. Personnel active in site operations must be thoroughly familiar with the programs, practices, and procedures outlined in this APP/SSHP, the SOPs found in Attachment B, and the work plan.

The following are considered standard safe work practices for all work on this project, as applicable.

- Eating, drinking, chewing tobacco, smoking, and carrying matches or lighters are prohibited
- Avoid contact with potentially contaminated substances or materials. Whenever possible, avoid kneeling or sitting on the ground. Do not place equipment on potentially contaminated surfaces.
- All field team members should be alert to all indicators of potentially dangerous situations (for example, the presence of strong, irritating, unusual, or nauseating odors).
- Field team personnel shall be familiar with:
 - Potentially harmful items (biological, chemical, physical);
 - The terrain in project work areas;
 - Locations of emergency equipment; and
 - Designated PPE and clothing for specific work assignments.
- All field team personnel will use protective equipment as specified in this APP/SSHP and the work plan.

- All field team personnel should pay specific attention to decreased performance capabilities resulting from the use of PPE, such as poor tactile skills when wearing certain types of gloves. Prior knowledge of limitations imposed by the use of such equipment will allow workers to assess the decreases in their capabilities to perform field operations in a safe manner.
- Wearing of jewelry, such as rings and loose bracelets and necklaces, is prohibited for personnel operating mechanized or electrical field equipment in order to avoid their entanglement in or interference with such machinery or equipment.
- Overhead power lines or buried cables pose a danger of shock or electrocution if workers contact or sever them during operations. The locations of these potential hazards should be ascertained before beginning site activities.
- Buddy system procedures will be enforced during site operations.
- Field team personnel will perform only those tasks that they are qualified to perform.
- Site visitors are to be escorted by qualified personnel at all times.
- Running and horseplay are prohibited in all areas of the site.

9.2 ORDNANCE SAFETY

Maximum safety in any UXO operation can be achieved through adherence to applicable safety precautions. The following precautions must be observed:

- UXO is to be avoided, and will not be touched, handled, or moved under any circumstances except by UXO Technicians when applicable.
- UXO that have been exposed to fire and detonation must be considered as extremely hazardous.
- Outer or undergarments made of wool, silk, or synthetic textiles such as rayon and nylon will not be worn while working in a UXO-contaminated environment. These materials can generate a sufficient static charge to ignite fuels or initiate explosives. Any UXO technician needing to touch a UXO shall ground themselves prior to touching it.
- The USACE Safety Representative will be notified immediately if a suspected chemical-filled UXO is encountered. Personnel will evacuate upwind and two UXO technicians will maintain line of site on the item and guard it until relieved by military EOD.
- A practice UXO is assumed to contain a live charge until it can be determined otherwise.

- Unnecessary personnel will not be present in the vicinity of UXO. Personnel exposure time will be limited. Operations shall always be based upon minimum exposure consistent with efficient operations.
- Avoid inhalation of and skin contact with smoke, fumes, and vapors associated with any explosives, smoke, or other associated materials.
- Color-coding of UXO should not be relied on for positive identification of contents. Munitions having no, incomplete, or improper color-coding have been encountered.
- Avoid the area forward of the nose of a munition until it can be determined that the item is not a shape charge ordnance. Approach only from the side.
- Land mines should be considered armed until proven otherwise. Be alert to deterioration of mines.
- Extra care shall be taken when encountering any UXO, since it may contain a white phosphorus (WP) spotting charge. Do not approach a smoking WP UXO.

SECTION 10

PUBLIC SAFETY

The following protocols will be followed to protect project personnel, site visitors, and the public during field activities.

Homeowners and property owners in the vicinity of the site will be notified, in advance, of the scheduled RI/FS field activities. All coordination and notifications will be completed by the appropriate USACE personnel, with assistance from ITSI and Parsons when and if requested. Written documentation such as rights of entry (ROE) or special use permits will be acquired by the USACE prior to the commencement of any field activities.

In the event that demolition operations are required during RI/FS, the public will be notified of the time of the demolition shot through appropriate media. Notifications will be coordinated by the USACE public affairs officer (PAO). Demolition operations will be conducted in accordance with the Demolition SOP included in Attachment B.

The public will be kept out of the work area by the use of signage and bikeway path guards during field activities. Site control measures are discussed in Section 11.0.