

**Final  
Site-Specific Safety and Health Plan Attachment  
Site Investigation at Artillery and Mortar Impact Areas South  
of Bains Gap Road, Parcels 138Q-X, 139Q-X, 140Q-X, 141Q-X,  
and 142Q-X**

**Fort McClellan  
Calhoun County, Alabama  
EPA ID No. AL7 210 020 562**

**Prepared for:**

**U.S. Army Corps of Engineers, Mobile District  
109 St. Joseph Street  
Mobile, Alabama 36602**

**Prepared by:**

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**Task Order CK10  
Contract No. DACA21-96-D-0018  
IT Project No. 796887**

**January 2001**

**Revision 1**

This Site-Specific Safety and Health Plan must be used in conjunction with the Installation-Wide Safety and Health Plan, Fort McClellan, Alabama.

## **Site-Specific Safety and Health Plan Attachment Approval Fort McClellan, Calhoun County, Alabama**

I have read and approve this site-specific safety and health plan attachment for the site investigation of Artillery and Mortar Impact Areas South of Bains Gap Road at Fort McClellan, Alabama, with respect to project hazards, regulatory requirements, and IT Corporation procedures.

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Jeanne Yacoub, PE  
Project Manager

Date

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Bill Hetrick, CIH  
Health & Safety Manager

Date

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Jeff Tarr  
Site Coordinator

Date

## **Acknowledgements**

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The final approved version of this site-specific safety and health plan (SSHP) attachment for the site investigation of Artillery and Mortar Impact Areas South of Bains Gap Road at Fort McClellan, Alabama, has been provided to the site coordinator. I acknowledge my responsibility to provide the site coordinator with the equipment, materials, and qualified personnel to implement fully all safety requirements in this SSHP attachment. I will formally review this plan with the health and safety staff every 6 months until project completion.

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Project Manager

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Date

I acknowledge receipt of this SSHP attachment from the project manager, and that it is my responsibility to explain its contents to all site personnel and cause these requirements to be fully implemented. Any change in conditions, scope of work, or other change that might affect worker safety requires me to notify the project manager and the health and safety manager.

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Site Coordinator

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Date



# Fort McClellan Gate Hours

Baltzell Gate	Baltzell Road. Open 24 hours daily, 7 days a week.
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# Fort McClellan Project Emergency Contacts

Fire Department (on post).....	911
Fire Department (off post) .....	(256) 237-3541
Ambulance (off post) .....	911
Regional Medical Center .....	(256) 235-5121
Military Police (SSG Busch) .....	(256) 848-5680, 848-4824
DOD Guard Force (Mr. Bolton) .....	(256) 848-5680, 848-4732
Anniston Police Department.....	(256) 238-1800
Chemical Agent Emergencies.....	(256) 895-1598
(Ken Barnett, CEHNC).....	cell phone (205) 310-0604
UXO Emergencies .....	(256) 895-1598
(Ken Barnett, CEHNC).....	cell phone (205) 610-0604
UXO Nonemergencies/Reporting Only (Ronald Levy) .....	(256) 848-3758
Baltzell Gate Guard Shack (Staffed 1600-0700 hours, Mon-Sun) .....	(256) 848-5693, 848-3821
National Response Center & Terrorist Hotline.....	(800) 424-8802
Poison Control Center.....	(800) 462-0800
EPA Region IV .....	(404) 562-8725
Ronald Levy, Chief, FTMC Environmental Management .....	(256) 848-3758
Ellis Pope, U.S. Army Corps of Engineers.....	(334) 690-3077
Jeanne Yacoub, IT Project Manager.....	(770) 663-1429
Bill Hetrick, IT H&S Manager .....	(865) 690-3211, pager (888) 655-9529
Mike Moore, Fort McClellan Safety Officer .....	(256) 848-5433
Dr. Jerry Burke, IT Occupational Physician.....	(800) 350-4511

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## ***List of Acronyms***

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See Attachment 1, List of Abbreviations and Acronyms of the site-specific field sampling plan attachment contained in this binder.

## **1.0 Site Work Plan Summary**

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**Project Objective.** The objective of this investigation at Fort McClellan (FTMC), Calhoun County, Alabama is to collect and analyze samples at the Artillery and Mortar Impact Areas South of Bains Gap Road.

### **Project Tasks**

- Survey work area.
- Conduct a surface and near-surface unexploded ordnance (UXO) survey over all areas to be included in the supplemental sampling effort for the purpose of UXO avoidance.
- Provide downhole UXO support for all intrusive drilling activity to determine buried downhole hazards for the purpose of UXO avoidance.
- Collect surface soil samples, subsurface soil samples, surface water, seep water, and sediment samples.

**Personnel Requirements.** Up to 15 employees. See Figure 1-1 for an organization chart.

Note: All personnel on this site shall have received training, informational programs, and medical surveillance as outlined in the installation-wide safety and health plan (SHP) for site investigations at FTMC, and be familiar with the requirements of this site-specific SHP. This site-specific SHP must be used in conjunction with the SHP, FTMC, Alabama.

## **2.0 Site Characterization and Analysis**

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### **2.1 Anticipated Hazards**

The activity hazard analysis in Chapter 5.0 contains project-specific practices utilized to reduce or eliminate anticipated site hazards. The activity hazard analysis indicates specific chemical and physical hazards that may be present and encountered during each task from on-site operations. Below each task is a list of hazards and specific actions that will be taken to control the respective hazards. These control measures may include work practice controls, engineering controls, and/or use of appropriate personal protective equipment (PPE). Site control with the use of specific work zones (support zone, contamination reduction zone, and exclusion zone) is addressed in Section 7.0 of Appendix A of the March 2000 IT installation-wide sampling and analysis plan.

Range descriptions and history are included in Section 2.0 of the work plan for the site investigation of Artillery and Mortar Impact Areas South of Bains Gap Road.

The possibility of UXO exists at the Artillery and Mortar Impact Areas South of Bains Gap Road; therefore, UXO surface sweeps and downhole surveys of soil borings will be required to support field activities at the Artillery and Mortar Impact Areas South of Bains Gap Road. The surface sweeps and downhole surveys will be conducted to identify anomalies for the purpose of UXO avoidance.

Table 2-1 contains the toxicological and physiological properties of chemicals anticipated or to be used at the site investigation of Artillery and Mortar Impact Areas South of Bains Gap Road. The contaminants of concern at the area are lead and nitroexplosives.

### **2.2 General Site Information**

**Duration of Planned Employee Activity.** Employee activity duration is 1 month.

**Pathways for Hazardous Substance Dispersion.** Possible pathways for hazardous substances in the area are surface water, groundwater, sediment, and soils.

### 3.0 Personal Protective Equipment

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The work activities will begin in the following levels of protection. Also, a completed description of Level D, Modified Level D, and Level C PPE is provided.

Task	Initial Level of PPE
Staging equipment	Level D
Install monitoring wells	Modified Level D*
Collecting samples	Modified Level D*

\*Initial level will be raised to Level C or higher if air monitoring results for volatile organic hydrocarbons in the worker's breathing zone are greater than action levels.

**Level D.** The minimal level of protection that will be required of IT Corporation personnel at the site will be Level D. The following equipment will be used for Level D protection:

- Coveralls or work clothing
- Leather work gloves (when necessary)
- Steel-toed safety boots
- Safety glasses
- Hard hat
- Hearing protection (when working near/adjacent to operating equipment).

**Modified Level D.** The following equipment will be used for Level D-Modified protection:

- Permeable Tyvek, Kleenguard, or its equivalent
- Latex boot covers
- Nitrile, heavy work, or latex gloves
- Steel-toed safety boots
- Safety glasses
- Hard hat
- Hearing protection (when working near/adjacent to operating equipment).

Note: In addition to modifying Level D PPE, the operator of high-pressure water jetting equipment shall wear metatarsal guards for the legs and feet and a face shield.

Note: UXO personnel should not wear hard hats and steel-toed shoes when engaged in ordnance operations unless a significant overhead hazard exists. Where overhead hazards exist, a chin strap will be worn with hard hats to prevent accidental falling of hard hat.

**Level C.** Level C protection will not be used unless air-monitoring data indicate the need for upgrade; however, the equipment shall be readily available on site. The following equipment will be used for Level C protection:

- X National Institute of Occupational Safety and Health-approved full-face, air-purifying respirators equipped with organic vapor/acid gas/P100 cartridge
- X Hooded Tyvek, taped at gloves, boots, and respirator
- X Nitrile gloves (outer)
- X Latex or lightweight nitrile gloves (inner)
- X Neoprene steel-toed boots or polyvinyl chloride overbooties/steel-toed safety boots
- X Hard hat
- X Hearing protection (when working near/adjacent to operating equipment).

Note: In addition to Level C PPE, the operator of high-pressure water jetting equipment shall wear metatarsal guards for the legs and feet and a face shield.

Note: UXO personnel should not wear hard hats and steel-toed shoes when engaged in ordnance operations unless a significant overhead hazard exists. Where overhead hazards exist, a chin strap will be worn with hard hats to prevent accidental falling of hard hat.

## 4.0 Site Monitoring

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The environmental contaminants of concern resulting from Artillery and Mortar Impact Areas South of Bains Gap Road operations are lead and TNT. Table 4-1 contains action levels for site monitoring at the sites.

**Chemical.** Monitoring will be performed by the site safety and health officer during the performance of ground intrusive operations. A calibrated photoionization detector (i.e., Photovac 2020 photoionization detector or equivalent) organic vapor analyzer will be utilized to monitor the sampling locations and breathing zones to determine if any organic material may be present that would necessitate upgrading of protection level. Table 4-2 contains the air monitoring frequency and location for site monitoring at the work sites.

**Unexploded Ordnance.** UXO safety will be achieved by employing UXO specialists to ensure that field personnel do not come into contact with UXO. In areas where UXO is suspected to exist, the UXO specialists will perform the following UXO avoidance operations.

- X **Area UXO Surveys Using Magnetometers.** During this operation, UXO on the surface will be detected and marked for avoidance during field operations. Metal objects just below the surface (within 2 feet) will also be marked to indicate the potential hazard.
- X **Downhole UXO Surveys.** UXO specialists will perform downhole magnetometer surveys to detect metal objects in the path of the boring apparatus until undisturbed soils are reached. The boring location will be moved if subsurface metal objects are detected.

If UXO is encountered, personnel will contact the site manager and UXO specialist immediately. Personnel will evacuate the immediate area and secure it.

## **5.0 Activity Hazard Analysis**

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The attached activity hazard analysis (Table 5-1) is provided for the following activities:

- X Setup of equipment and general field activities
- X Land survey
- X Soil, surface water, seep water, and sediment sampling.

All injuries and illnesses must be immediately reported to the site manager or the site safety and health officer, who will then notify off-site personnel and organizations as necessary.

If hospital care must be provided, the victim shall be treated at the Alabama Northeast Regional Medical Center. Directions to the hospital are provided in Figure 5-1.