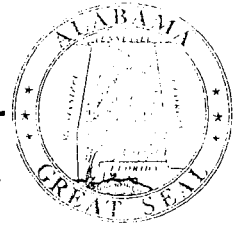


# ADEM



## ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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JAMES W. WARR  
DIRECTOR

September 10, 2004

BOB RILEY  
GOVERNOR

### MEMORANDUM

To: File

From: Jim Grassiano 

Re: **Alabama Department of Environmental Management (ADEM) Field Visit to the Northern Charlie Area: Review of Munitions and Explosives of Concern (MEC) Road Clearance Activities Being Performed by the Army**

Facsimiles: (334)

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On July 2, 2004, Jim Grassiano received a phone call from a confidential informant that unexploded ordnance items were being handled in an unsafe and unethical manner at Fort McClellan. Over the ensuing weeks, several additional correspondences occurred between Mr. Grassiano and the informant, eventually leading to the identification of the specific area in question, located in the northern Charlie area. At this location, a specific concern was reported that Unexploded Ordnance (UXO) or munitions and explosives of concern (MEC) were being mishandled during road clearance activities conducted by the Army for the U. S. Fish and Wildlife Service (USFWS). On July 21, 2004, ADEM conducted a field visit to the area to investigate this matter. This memorandum documents the field data and observations noted during ADEM field visit and also provides a brief history of correspondence that led to ADEM initiating an investigation of the area.

The field visit began with a review of pending field activities related to the Alpha Area. During the field visit, the Joint Powers Authority (JPA), along with its prime contractor [Matrix Environmental Services, L.L.C. (MES)] accompanied ADEM. Because of the potential to encounter UXO, ADEM requested that the JPA provide UXO avoidance support. As a result, JPA's UXO contractor, URS Corporation (URS), participated in the site visit.

Personnel visiting the site included: Philip Stroud, Jim Grassiano, David Bush, and Frederick Rudolph from ADEM and employees of JPA, MES, and URS. The purpose of the ADEM site visit to the Alpha area and the investigation plan was initially unknown to JPA, Matrix, and URS. After Charlie Area access was obtained through JPA, ADEM continued to need UXO avoidance support to assess the area under investigation. Hence, ADEM requested that JPA continue to provide UXO avoidance support (through URS) to investigate a specific area of concern to ADEM. Not knowing the basis of the investigation, JPA agreed to support ADEM and directed URS to respond to ADEM's request for UXO avoidance support.

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## **Additional Background Information**

The purpose of the site visit was to verify statements from a confidential informant that numerous 81 mm mortar rounds were found in the subject area and that all of the most significant items (i.e., the fuzed practice and apparent or potential high explosive (HE) rounds) were being mishandled and misreported. These potentially sensitive items were reportedly excavated by the Army during a road clearance action and moved/relocated to a location to the north and/or south of the road. The mortars were reportedly purposely placed outside the bounds of the roadway clearance, which was limited to 15 feet on either side of the road.

According to the informant's and ADEM's understanding of UXO clearance protocols, the fuzed and/or HE rounds should not have been moved and repositioned out of the area of investigation. The items in question should have been clearly flagged and the area should have been immediately secured. Proper notification requirements should have been followed. Furthermore, the area should have immediately been re-characterized as one known to contain fuzed UXO items. This would have required the Army to change its technical approach to conducting UXO clearance activities in the area.

On July 19, 2004, a second informant reported that a fuzed 81 mm mortar was dug from a shallow depth (< 1 ft) and repositioned away from the study area. The informant reported that the item was "more than likely HE configured". This event reportedly occurred in early to mid June 2004.

According to the second informant, the area in question was not expected to contain fuzed HE items. The area was reportedly characterized as a site with a 1 in 600 chance of finding a fuzed item. The informant indicated that such a designation is intended to be conservative and is only used when you are "pretty certain" that you will not find fuzed items. The informant stated that the finding of any such item will result in a re-designation of the area and a stop work order. Work can only re-commence when additional safety precautions are put in place, taking significantly more effort to clear the area in question.

The second informant stated that the clearance personnel reported the finding of the fuzed UXO item to the Team Leader who called the TtFW program management office. The directive reportedly came back from the program management office to reposition the item and not to report it. This is consistent with the chain of events reported by the first informant. The remainder of this memorandum addresses only the Sector 16 area in the vicinity of the stake marked as FSW1H-56.

## **Specific Disclosure**

According to one informant, approximately 25 fuzed UXO/MEC items were excavated from underneath the road and repositioned/reburied away from the study area, placed into the nearby woods. In total, approximately 75 mortars were dug, but only approximately 25 were fuzed. The non-fuzed items were removed from the site. Only the fuzed items were repositioned outside the clearance area. The informant reported that the items were generally repositioned behind trees and that some were simply placed on the ground and others were re-buried under shallow dirt and

leaves. The informant is an employee of Tetra Tech FW, Inc. (TtFW). The informant reported that the TtFW UXO field team was uncomfortable taking this action but did so to protect their jobs. They were reportedly told to take the action and not ask any questions.

It was reported to ADEM that the field log books contain inaccurate information, because the UXO field team was directed not to provide any evidence of the existence of fuzed mortars in the area in question.

#### **Site Location**

At 1645 hours, ADEM entered the northern-most gate of the Charlie area on Falcon Road. At ADEM's direction, we proceeded to the general vicinity of USFWS Stake No. FSW1H-56 (Lat 33° 44, 788'; Long 085° 44, 628'). The site under ADEM investigation is a hilly area, heavily wooded with deciduous trees and pine trees. It is believed to be in an area known as Sector 16. The site is located approximately 1200 feet south of the northern property boundary separating the former installation from a residential area. Directions to the USFWS Stake are provided below.

Starting at a double locked gate at the northeastern most portion of the Alpha property on Falcon Road, proceed as follows:

- Continue east on Falcon Road approximately 0.7 miles to the base of French Truitt Hill. The road will bend to the southeast.
- Continue on the road but veer to the southeast road that is better maintained (i.e., do not continue due east up French Truitt Hill). Continue on this road approximately 0.7 miles (Total 1.4 miles).
- Take a sharp-right and continue east-southeast about 360-feet. This dirt road will intersect with a northwest-southwest trending dirt road. A USFWS wooden stake marked "FSW1H-56" is located at this intersection.
- The investigation area is located adjacent and east of the intersection of the two dirt roads. The investigation area was approximately 200 feet in width (based on the centerline of the road as the divide from the north and south of the dirt road) and about 600 feet in length.

#### **Site Visit Activities and Findings**

We arrived at the area of concern at 1800 and had a safety briefing from the JPA/URS employees. The safety briefing included topics on OE/UXO avoidance tactics and procedures. Following the safety briefing, at ADEM's direction, a URS employee proceeded to enter to the north side of the dirt road about 200 feet from the USFW marker stake. The employee was directed to sweep the area and identify to ADEM any apparent UXO surface finds or recently buried UXO items. The employee used a Schonstedt hand-held magnetometer. The URS employee rapidly found an 81 mm mortar round that appeared to be recently laid on the ground surface about 15 feet from the northern edge of the dirt road. As a result of the find, the URS employee proceeded back to the road and asked that we regroup, limiting the number of people in the field. The employee also suggested a heightened level of precaution, limiting the intrusive team to the employee, Jim Grassiano and Philip Stroud.

During the site walk, we proceeded in a meandering transect pattern paralleling the road. We encountered numerous 81 mm mortar rounds to the north and south of the dirt road. Most items were apparently repositioned on top of the ground or under shallow cover directly behind trees as if to hide the items from being visible from the road. A total of 13 relocated 81 mm mortar rounds were identified (nine mortars to the north of the road and four to the south) by ADEM. Of the 13 relocated items that we found, five were visibly fused. Of the five fused items, it appeared that three of them had a hint of blue paint, perhaps designating them as practice items. Three other items appeared to have a high potential of being HE configured, with no sign of blue paint. Some of the rounds that were not clearly fused had a white/yellowish substance protruding out of the mortar round from the former fuze position, indicating remnants of a charged fuze still exists.

The condition of the 81 mm mortars varied considerably. Some were more corroded than others but most were rusted, making it difficult to identify if they were training rounds or not. However, the 13 relocated mortar rounds appeared covered with scale and dirt and appeared to have been freshly excavated out of the ground. Some were covered in leaves, soil and debris.

ADEM counted approximately 90 dig locations visible in the road bed area. In most instances, the re-positioned UXO item was located in a manner perpendicular to the dig area(s). Thus, it appears that if an item was excavated on the south edge of the road, TtFW would relocate the item approximately 15 to 20 feet in the woods to the south. Similar techniques were apparently used for the north edge of the road. Also, it appears significant that the fresh soil coated on the mortar rounds was similar in color, texture, and consistency to the soil excavation sites located in the road, providing additional evidence that the mortars were recently moved.

Also during the site visit, two in-situ 81 mm mortar rounds were located by ADEM that were partially protruding out of the ground. The items were approximately 20 feet from the north edge of the road. One of the existing mortars was blue coated and laying horizontal about an inch out of the ground. The other mortar round was found nose-down, slightly off vertical (approximately 80 degrees) with only the tail fins visible, protruding approximately 2-inches out of the ground. This mortar was located adjacent to a tree with tree roots near and perhaps partially encasing the item.

Observation of both in-situ and repositioned mortar rounds provided evidence of markedly different item characteristics. The appearance of the relocated mortars clearly indicated that the rounds were completely below ground before they were recently excavated. Corrosion and weathering of the items indicated they were in the ground for some time. Most apparent, the mortar rounds were covered in fresh dirt. The freshly placed and relocated mortar rounds showed soil tailings (crumbling pieces or clods of soil) dislodged from the round and scattered in the immediate vicinity of the round and also on top of leaf litter adjacent to the round. It was visibly apparent that the person relocating the rounds took the time to place the mortars behind a tree, and then scratched up leaf litter, sticks, and nearby vegetation to cover them from view. The disturbed vegetation area surrounding the newly repositioned mortars had about a one foot radius, indicating that the scratched up leaf litter was used to cover the mortar round. Some of the mortar rounds were just simply placed on the ground with no cover. According to the first informant, such clearly visible items were repositioned by him so that they would be easily identified (perhaps by ADEM) at a later time.

By about 19:30, the area was getting dark. As a result of the darkness and ensuing safety concerns, ADEM did not attempt to locate any more of the approximately 25 fuzed mortars and demobilized from the area.

To document ADEM's findings, ADEM representatives photographed all of the items encountered.

#### **Follow-Up Information**

ADEM completed this investigation after hours (after 4:00 p.m.) on July 21, 2004. According to an informant, the Corps of Engineers completed its QA/QC review of UXO activities at the area in question on the afternoon of July 21, 2004, prior to ADEM's entry to the site. The Corps of Engineer QC reviewer reportedly found several repositioned items but did not report or note them as having been repositioned.