



ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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September 30, 2003

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Ronald M. Levy
BRAC Environmental Coordinator
Environmental Office, 291 Jimmy Parks Blvd.
US Army Garrison
Fort McClellan, Alabama 36205

RE: ADEM Review - Regarding the Continuing Issue of the Army's Site Work for Ordnance and Explosives (OE) Removal Actions Proposed for the Alpha Redevelopment Area at Fort McClellan: August 13, 2003 Department of the Army Response to ADEM Concerns and Issues Presented in ADEM's Letters Dated April 24 and June 16, 2003

Dear Mr. Levy:

The Alabama Department of Environmental Management (ADEM or the Department) has reviewed the Army's August 13, 2003 correspondence to ADEM addressing historical OE investigation and removal work completed by the Army in the Alpha Redevelopment area. The following are the Department's comments.

The Army maintains that all of its geophysical data for the Engineering Evaluation/Cost Analysis (EE/CA) met appropriate quality standards, were validated by both an Army QC and an independent Government QA process, and that the data are acceptable for characterization purposes in the EE/CA report. While there are significant areas of agreement, the Army's overall understanding of this matter differs from ADEM. ADEM's position is that the geophysical data collected during the Alpha EE/CA were not validated, thus the data are non reproducible and hence are not appropriately defensible. There are significant grid delineations in the Alpha area, however, where the Army (or JPA) intends to proceed with an OE removal action. Thus, it is ADEM's understanding that grids in the areas to be cleared need not be further validated or characterized. Through the pending removal actions, the Army (or JPA) will extract potential OE/UXO items from such gridded areas, negating the need for further validation of the already completed characterization activities. Thus, ADEM has not approved the data collected in these pending removal activity areas. ADEM merely accepted the data without further comment at this time, as the removal action supercedes the characterization anyway.

It is ADEM's understanding that the Army is requesting the Department's concurrence with the EE/CA addressing the Alpha Area for all parcels determined by the Army to require No Further Action (NFA) Report. ADEM understands that the blue areas outlined in red (shown in Enclosure 2, "Alpha OE EE/CA No Further Action Areas") defined in the August 13, 2003 letter will be further investigated and validated by the Army (or JPA) using an approved *Validation of Data Systems (VDS)* quality control process over an area encompassing a total of 181 Acres [17 acres (southeast of M6-1L Suspect Area-I/AR) + 77 acres (west and northwest of M6-1M TA 2-PR Area) + 57 acres (south of M6-1M TA 1-PR Area) + 30 acres (backwards "L" area east and southeast of M6-1M TA 1-PR Area)]. The pending employment of a VDS will provide the needed assurance to ADEM that the data will be appropriately

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defensible and repeatable. However, ADEM has accepted the NFA Areas shown in Enclosure 2 (green striped area) and presented in the Enclosure 3 Table of the August 13, 2003 letter as areas to be released for unrestricted reuse. ADEM understands the following CERFA Parcels within the Alpha Area require No Further Action: M5-1L-(North) PR (102 acres); M6-1L Remainder-I/AR (44 acres); M6-1M Remainder-PR (91 acres); M6-1M Remainder-I/AR (80 acres); and Smoke Ranges/T-38 (85 acres).

It is ADEM's position that digital mapping will be required for all areas that will be cleared, including areas that require clearance to only 1-foot below ground surface. Areas that are cleared to one foot will require appropriate Land Use Controls (LUCs), providing information to future land owners as to the location of detected anomalies. If a 1-foot clearance is performed without the use of digital mapping, then further LUCs must be administered.

The Department's concerns regarding a limited depth 1-ft clearance were recently brought to light by the recent findings of the Alabama Department of Transportation (ALDOT) during its investigation of another nearby land area. ADEM attended a meeting at Fort McClellan on August 25, 2003 with the Alabama Department of Transportation (ALDOT) and the Army to discuss issues related to a 1-foot clearance for Tract No. 2 of the Eastern Bypass. Blackhawk UXO Services was contracted by ALDOT to perform an Electromagnetic (EM) survey on 26.5 acres. The objective of the geophysical survey was to determine the metal target anomaly density remaining in the Tract No. 2 area at this time. Results from the ALDOT survey concluded that 1,843 targets above 10 millivolts (mV) (approximately 90 targets per acre) remain in the area previously cleared by the Army. (This EM survey was performed after the Army completed a 1-foot clearance of the Tract No. 2 area). The Army has responded to this finding in a letter to ALDOT dated September 2, 2003 stating that: ["There is nothing in this report (Blackhawk UXO Services Report) of the procedures and the results of the electromagnetic survey that causes the Army to change its current position, that the parcel is suitable for the purpose of building a road upon it. Succinctly, there has been no information provided by ALDOT that indicates the existence of any remaining UXO/OE."]. ADEM does not share the same level of confidence at this time, based upon ADEM's previous comments on this matter and ALDOT's recent findings. It is unclear to ADEM why so many anomalies have been identified by ALDOT after a 1-foot clearance had been previously performed by the Army. In part because of this experience at the Tract No. 2 area, ADEM does not agree that 1-foot clearance using a "Mag and Dig" process is appropriate at this time.

ADEM understands and acknowledges the effort involved in producing an Alpha Area EE/CA Report. However, agreement cannot be reached until the agency has reviewed the Final Report. ADEM also points out that any agreements and concessions made in the Department's 24 April and 16 June correspondence apply exclusively to the Alpha Area, and in no way imply that like agreements and concessions may apply to the Bravo and Charlie Areas. These Areas must be evaluated independently by ADEM upon submittal of the Army's EE/CA Reports for these areas. It is premature of the Army to state "Future Bravo and Charlie EE/CA Reports will take into account and incorporate where appropriate recent discussions with ADEM on concerns in the Alpha Redevelopment Area." The Bravo and Charlie areas present different challenges (i.e., end land use, etc.) and as such, ADEM's comments and concerns will be presented after reviewing the individual EE/CA Reports.

As mentioned in the Army's August 13 letter, the Department's letter of April 24th ends with four main points that were the main focus of discussions during meetings held on May 7 and May 14, 2003. The Army presented responses to these four specific points based on discussions and agreements from those meetings and based on the results of early transfer technical discussions. The Army responses below

were numbered to match the summary points from the ADEM letter. ADEM's response to the Army's responses are noted in bold:

ADEM Issue 1. Complete the geophysical system validation in 63 of the 141 grids investigated for the Alpha Area EE/CA.

Army Response: Based on the discussions from the May 7 meeting, ADEM and their UXO contractor (URS) were to provide specific information related to the 63 grids in question for resolution with the Army at a subsequent meeting to be held within the next week. At the May 14 meeting, ADEM, with concurrence from their UXO contractor, stated that the data from all grids in the Alpha Area EE/CA would be accepted as is, but that ADEM believes the data does not meet the 90% Confidence Level for defensibility and it does not meet the quality required by a VDS. The Army recognized ADEM's statements on accepting the data but disagreed with the defensibility of the geophysical data. The Army maintains that all geophysical data for the project met quality standards, was validated by both a QC and an independent Government QA process, and is acceptable for characterization purposes in the EE/CA report. [Any additional characterization will be the responsibility of the JPA per the ESCA agreements.]

ADEM Response: Response noted. Once again, ADEM has documented in numerous previous correspondence why the geophysical work performed by the Army can not be validated at this time (both personnel and equipment). ADEM is accepting the geophysical data only as information that was recorded during the EE/CA process. The data are usable but should not be construed as being reliable or appropriately validated. In the interest of fiscal responsibility, ADEM accepts the Alpha EE/CA grids only because all of the Alpha EE/CA grids will be reinvestigated during the pending removal action, and because an approved VDS system will be implemented for the removal action.

ADEM Issue 2. Once the data for all 141 EE/CA grids are properly validated, then it will be necessary to complete short-term UXO removal actions within the 141 validated grids using an appropriate VDS, as outlined both above and in prior referenced ADEM correspondence to the Army.

Army Response. During the meeting of May 7, the Army presented clarification regarding the total number of grids investigated during the Alpha Area EE/CA work, as stated above. A discussion was then held regarding the Department's understanding of why a "short-term" removal action was required on the total number of EE/CA characterization grids. ADEM explained that they thought that the characterization grids used in the EE/CA investigation would not be visited/cleared by any further actions. The Army explained that all EE/CA grids located in areas proposed for removal actions would be effectively discarded after the EE/CA work was complete and the entire area for any removal action would be re-surveyed, re-mapped as needed (clear to depth actions), and then cleared by the removal action, thereby performing a removal over every acre within the designated removal sector.

We believe that ADEM and the Army are in substantial agreement that no further "short-term" removal action is necessary for those EE/CA grids that are to be cleared during any future final removal action.

The Army further explained that those EE/CA characterization grids located in areas designated for No Further Action required no other clearance, since the data indicated that no UXO exceeding the risk value for density per acre with respect to the Army approved reuse are indicated to be in the NFA areas. That is, no action is indicated because no UXO items were found in the proposed NFA areas/sectors. ADEM questioned whether sufficient data existed to fully characterize the NFA areas. During the May

14 meeting, ADEM further clarified their position regarding if there was enough characterization data in the NFA areas to support the selection of the NFA remedy, specifically that there were a limited number of grids over many acres designated as NFA and that high explosive fragmentation anomalies were found in some of those scattered grids. ADEM believes that additional characterization in the vicinity of some parts of the M6-1M Remainder-PR NFA area is necessary to show that no UXO are in the vicinity of these grids or in other nearby areas with scattered grids. The Army maintains that the combined weight of all data, to include the transect data lines, the Archive Search Report findings, the historical aerial photograph review, the pre-EE/CA field reconnaissance site walks, and the characterized anomaly density for each grid provide sufficient data to support the NFA area selections. The Army's position was that no further characterization was needed.

After an internal discussion between ADEM and the JPA, the ADEM representative, Mr. Stroud, stated that ADEM would accept the Alpha Area EE/CA report with the condition that additional characterization for UXO would be conducted during the removal action in selected parts of the M6-1M Remainder-PR NFA area. The purpose of the characterization is to fill areas perceived by ADEM to be data gaps for NFA determination. Mr. Stroud indicated that ADEM would send a letter to Fort McClellan with the acceptance of the Alpha EE/CA with the conditions outlined above regarding further characterization during the removal action(s). The Department's letter of June 16, 2003, provides that documentation. The Army indicated during these meetings that the JPA might wish to include costs for such characterization efforts in their proposal to the Army for the early transfer technical discussions. [The ESCA technical discussions selected the JPA's current reuse plan for development, which differs from the Army approved reuse, as stated in the Draft-Final Alpha Area EE/CA report. JPA will be responsible for any additional UXO characterization work and reporting necessary to support their currently intended reuse. This added work meets the Department's requirements as stated in the June 16th letter.]

ADEM Response: ADEM agrees that additional UXO characterization needs to be performed in the vicinity of some parts of the M6-1M Remainder-PR NFA area (see attached figure in the August 13 Letter) to determine the potential presence or absence of UXO.

ADEM Issue 3. Resolve the Depth of Clearance issue at all parcels.

Army Response. During the May 7 meeting, the issue of depth of clearance in the Alpha Redevelopment Area was addressed. ADEM requested that the Army clearly define how depth of clearance for a removal was determined for the Alpha Area EE/CA. The Army uses the Site-Specific Remediation Depth Determination process outlined in the Department of Defense (DoD) Standard 6055.9, Chapter 12. The Army did not use any "default planning" depth values for any removal project at Ft McClellan. All removals are based on the types of ordnance, the sensitivity of the ordnance, depth at which the UXO items are likely to penetrate on a site-specific basis, and the approved land reuse for any particular parcel or sector. The analysis of all components of this information is used to make the recommendation for the remedy for each sector. With respect to depth of clearance differences between the Army approved reuse plan, under which the EE/CA recommendations have been made, and the current reuse planning by the JPA, any changes to reuse and the impacts that might have on depth of clearance have been incorporated during the early transfer technical discussion process. The Army believes that ADEM and JPA understand the Depth of Clearance issues with respect to the Alpha Redevelopment Area and its reuse. No other actions are required of the Army with respect to this issue.

ADEM Response: ADEM does not agree with the limited 1-foot clearance depth in selected areas outlined by the Army. Not including the 200-foot buffer zone around the 1-foot clearance areas, ADEM understands that the Army proposes clearing the following areas to 1-foot: M5-1L (South)-PR (Passive Recreation) (113 acres); M6-1M Burn Pit-PR (Passive Recreation) (3 acres); M6-1M Transect Area 1 (South)-PR (Passive Recreation) (66 acres); M6-1M Transect Area 2 (North)-PR (Passive Recreation) (63 acres); M6-1M Suspect Area (North)-PR (Passive Recreation) (6.3 acres); and M6-1M Suspect Area (South)-PR (Passive Recreation) (4.6 acres). ADEM contends that "Mag and Flag" clearance will not provide adequate information to the future land owner regarding the anomalies left behind (please see above discussion related to the Tract 2/3 Area). ADEM maintains that, without relatively stringent land use controls, any area investigated with a Whites Metal Detector is generally inadequate for transfer of property because the detector has limited depth detection capabilities.

ADEM Issue 4. Complete a Remedial Investigation and Feasibility Study (or expanded EE/CA), subject to ADEM review and approval, that addresses UXO investigations and removal throughout the entire Alpha Area EE/CA.

Army Response. Based on the entire set of discussions during the May 7 meeting, ADEM agreed that an RI/FS or expanded EE/CA was not required for the Alpha Area UXO work.

The Department's letter of June 16, 2003, summarizes the May 14 meeting and presents the Department's final findings with respect to the Alpha Area EE/CA. Specifically, the letter accepts the Alpha Area EE/CA with the limitation that portions of the M6-1M Remainder-PR sector have not been fully characterized to meet the proposed No Further Action designation. Specific areas within the sector are designated for further characterization, with the condition that any areas showing increasing concentrations of ordnance debris during the investigation will require an expansion of the investigation within the Alpha Area boundary to determine if an impact zone may be located in the given direction of the increasing ordnance debris field. Additionally, the added investigation work will require a work plan to be submitted to the Department for review and approval.

During the ESCA technical discussions on June 16 - 18, 2003, the Army and the JPA teams agreed to complete this work in the following manner. The Army will complete the Alpha Area EE/CA to meet the requirements of the Department's letter of April 24th and the meetings of May 7 and 14th. This will include submittal of a Final document for the phase of work completed by the Army. The additional characterization data requested by the Department's letter of June 16th shall be completed and submitted to the Department by the JPA and its UXO contractor. The format of the additional data and preparation of final documents for the Alpha Area UXO/OE actions will be the responsibility of the JPA and their UXO contractor after Early Transfer approval. In this manner, the overall work requirements are divided cleanly such that the Alpha area UXO process can continue without undue interference between the Army and the JPA contractors. In the event that the responsibility for the OE cleanup remains with the Army, the Army will continue the Alpha Area work under an Addendum investigation and reporting process.

With respect to the issue of land reuse differences between the Army and JPA, the early transfer technical discussions have addressed the locations, types of reuse, and acreages that are different. Changes to land reuse that were negotiated between the Army and the JPA will become the responsibility of the JPA to provide sufficient justification to the Department in accordance with any consent agreement signed by the JPA.

The Department's letter of June 16th also requires that the Department approve the remedial alternative that may be required as a result of the additional investigation specified for the limited areas within sector M6-1M Remainder-PR. This work will be performed by the JPA and its UXO contractor as stated above. In the event that the responsibility for the OE removal work remains with the Army, the U.S. Army and the Department of Defense retain full authority to perform and conduct such actions in accordance with the National Contingency Plan (NCP), 40 CFR 300.120(d), Section 2701 (b) 10 USC, and in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, 1980) Section 120 for non-National Priority List (NPL) sites. The Army will conduct such investigation as needed and provide a recommended action for any newly identified sub-sectors in accordance with the JPA's current reuse plan. The Army currently believes that the NFA designation will not change from the collection of additional data. However, in the event that UXO are located in the identified sub-sectors, an appropriate removal action will be recommended for the JPA's currently identified reuse.

In order to finalize the Alpha Area EE/CA, the Army requests NFA concurrence from ADEM on the areas shown and marked as NFA on the attached Alpha Area figure (enclosure 2). The acreage for which NFA is requested is identified on the attached table (enclosure 3). The areas for which the Army is requesting NFA concurrence do not include the additional 200 foot buffer zones around the removal areas nor the additional investigation areas.

The Department's minutes from the May 7th meeting have not been accepted by the Army. To reiterate the Army's stated use of geophysics at Fort McClellan: "The Army will use a VDS quality control process for any site on which digital geophysical mapping is necessary." This does not preclude the use of hand-held geophysical instruments for surface clearance removal actions, nor 1-foot removal actions using a "mag and dig" methodology. The Army will complete appropriate UXO removal actions by employing the most suitable process for any given site. The Army's minutes from the May 7, 2003, meeting is included as enclosure 4 for your reference.

ADEM Response: Once again, the Department stands by its May 7th meeting minutes distributed to meeting attendees on May 13, 2003. Please refer to Item No. 6 in ADEM's minutes. ADEM understands that the Army/COE agreed to clarify that subsequent removal/clearance actions will include additional geo-physical survey (with VDS) of the whole areas(s) slated for removal/clearance. Item No. 7 states: "The Army did clarify that the removal/clearance action will include an additional geo-physical investigation component to locate items to be removed, and that it agrees to employ a VDS as requested by ADEM for all future geo-physical work at the site, specifically including the work to be done in support of removal/clearance actions in the Alpha area." ADEM will require that a geo-physical survey be conducted in the clearance to 1-foot areas so that anomalies can be mapped out for future reference.

[In summary, ADEM concurs with the NFA areas designated by the Army. Furthermore, ADEM also agrees with the Army that a VDS system should be employed during future OE/UXO removal actions.]. However, a result of the Department's outstanding comments, ADEM does not concur with the methods to be employed by the Army for clearance/removal of OE/UXO in the 1-foot clearance areas. ADEM does not believe that a "Mag and Flag" removal will allow future landowners to locate anomalies that have the potential to represent an OE/UXO item. Thus, if the areas are cleared to 1-foot using the Army's methodologies, then appropriate LUCs must be administered by the Army and approved by the Department.

For any questions or concerns regarding this matter please contact Mr. Philip Stroud at 334-270-5646 or via email at pns@adem.state.al.us.

Sincerely,



Stephen A. Cobb, Chief
Governmental Hazardous Waste Branch
Land Division

Enclosures

SAC/PS/JWG/mal:L:Gov Fac Sec/Stroud/9-15-03_ADEM Response to August 13 2003 Letter Dept. of the Army Alpha Redevelopment Area_JWG Rev2.doc

cc: Mr. Doyle Brittain/EPA Region 4
Mr. Dan Copeland/CEHNC-OE-DC
Mr. Jim Grassiano/ADEM
Mr. Spencer Nelson/URS Corporation
Ms. Miki Schneider/JPA

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