

ADEM COMMENTS AND RESPONSES

October 2, 2000

Ronald M. Levy
BRAC Environmental Coordinator
Environmental Office, Bldg. 215, 15th Street
US Army Garrison
Fort McClellan, Alabama 36205-5000

**RE: ADEM's Comments on the Draft Ordnance and Explosives Final Removal Action Report,
M2 Parcel, 20 September 2000, Fort McClellan, Alabama**

Dear Mr. Levy:

The Alabama Department of Environmental Management (ADEM) has received and reviewed the Draft Ordnance and Explosives Final Removal Action Report, M2 Parcel, 20 September 2000. As a result of our review, ADEM has enclosed comments for your review and written response.

For any questions or concerns regarding this matter please contact me at 334-271-7750 or email at <mailto:pns@adem.state.al.us>.

Sincerely,

Philip N. Stroud
Governmental Facilities Section
Hazardous Waste Branch
Land Division

PNS/

cc: Bart Reedy, EPA Region 4
Ellis Pope, USACE

FOSTER WHEELER RESPONSES TO:

**ADEM's COMMENTS ON THE DRAFT ORDNANCE AND EXPLOSIVES FINAL REMOVAL
ACTION REPORT FOR THE M2 PARCEL
FORT McCLELLAN, ALABAMA**

General Comments

1. The report needs an acronym list.

Response: Concur. An acronym list will be provided.

2. Section 1 needs to reference to the M2 EE/CA or add it as an Appendix. The M2 EE/CA would give the reader more information about the M2 decision process. The public meeting that was held for the M2 Parcel needs to be discussed in Section 1.

Response: Concur. The following text has been added following section 1.4.10:

An Engineering Evaluation/Cost Analysis (EE/CA) study of the M2 Parcel was performed by the Engineering and Support Center, Huntsville, in April, 2000. Based on the findings and results of previous investigations in the vicinity of the site, and anticipated future use of the site, removal action alternatives were developed and evaluated. Surface and Subsurface Clearance to Depth with Land Use Controls was selected as the recommended alternative, "clearance to depth" requiring the removal of potential OE items regardless of depth.

On April 10th, copies of the Engineering Evaluation/Cost Analysis (EE/CA) for the M2 Parcel were placed in the information repositories for a 30-day public review. On Wednesday, May 10, 2000, the Anniston/Oxford community had the opportunity to discuss their comments and ask questions on the proposed action. The date and time of the public meeting was advertised the week prior to the meeting in the Anniston Star Press.

Representatives of the US Army Engineering and Support Center - Huntsville, the Fort McClellan Transition Force, the US Environmental Protection Agency, the Alabama Department of Environmental Management, the Joint Powers Authority, and the US Army Corps of Engineers Mobile District were available to answer questions and respond to comments during this time period. A formal presentation was not made. Posters containing maps and information about the project were displayed for review.

Responses to written comments received from the public prior to the meeting were included in Appendix G of the Final EE/CA (May 2000). In addition, a formal response to each written public comment was mailed directly to the individual making the comment. Copies of the EE/CA document are available at the Anniston Calhoun County Public Library in Anniston, Alabama and the Houston Cole Library, located at Jacksonville State University, Jacksonville, Alabama.

An Action Memorandum approving the selected alternative was signed by Glynn D. Ryan, BRAC Site Manager, on 4 August, 2000.

(Explosives Safety Submission M2 Parcel Ordnance and Explosives Removal Action) for implementing the selected alternative at the M2 parcel were prepared by Foster Wheeler Environmental. Following approval of the site- specific work plan, onsite activities were initiated May 22, 2000.

The purpose of the ESS is to ensure that all applicable DOD and Army regulations regarding safe and secure handling of ordnance are followed. Intrusive operations may not begin until the ESS has been reviewed by the U.S. Army Technical Center for Explosives Safety (USATCES) and received final approval of the Department of Defense Explosives Safety Board (DDESB). The ESS received final approval of the DDESB on 26 July, 2000.

3. This report needs a Reference List.

Response: Concur. A reference list will be included in the revised report.

4. This Action Report contains words that are general and vague (i.e., “some”, “few”, etc.). Please change or clarify these with actual percentages or exact numbers.

Response: Concur. Vague and general terms have been replaced with more specific terms where possible.

Specific Comments

#/Page/Section Comment

1/2/1.3 Figure 1-1: Put Figure 1-1 after page 2.

Response: Concur. Location of figure will be changed.

2/2/1.4.1 Last Sentence: Please state who performed the “CWM” study.

Response: A CWM study was not performed. The reference in paragraph 1.4.1 is only meant to indicate that there was no evidence to suspect CWM presence within the M Parcel.

3/2/1.4.1 This section needs to reference the HTRW study performed by IT Corp. and discuss the results of the study.

Response: This section will be revised to include reference to the IT study, its purpose and results.

The following text will be added as Section 1.4.2:

1.4.2 IT Corporation recently completed a site investigation (SI) of the M2 Parcel to determine whether chemical constituents are present at the M2 parcel and if present, whether the concentrations would present an unacceptable risk to human health or the environment. Following the collection and analysis of surface and subsurface soil, surface water, and sediment samples, IT concluded that there were no metals or

organic compounds present in site media that posed an unacceptable risk to human health and the environment.

4/2/1.4.1 Put Table 1-1 after page 2.

Response: Concur. Table 1-1 will be relocated to follow the reference page.

5/3/1.4.2 Delete the first sentence starting with “Several previous and ongoing...”.

Response: Concur. Sentence has been deleted.

6/4/1.4.7 A reference to Zapata Engineering’s report is needed.

Response: Concur. The referenced paragraph has been revised to read as follows:

In February of 1999, Zapata Engineering conducted a geophysical survey of six areas encompassing 8.56 acres in and adjacent to the M2 Parcel. Approximately half of the geophysical data collected in Area 6 overlaps the M2 Parcel. Several subsurface anomalies were identified as potential OE. *The complete geophysical report is located in Appendix B.1 of the Eastern Bypass EE/CA (April 2000).*

7/5/1.4.9 The M2 Parcel EE/CA needs to be referenced and the location of the remains of the White Phosphorus grenade need to be discussed (i.e., east, west, northwest?).

Response: Concur. The referenced paragraph has been revised to read as follows:

In February of 2000, Mr. Hank Hubbard, a safety specialist with the U.S. Army Corps of Engineers, Engineering Support Center, Huntsville (CEHNC), performed visual ground reconnaissance within and adjacent to the M2 Parcel, identifying the remains of a White Phosphorus *hand* grenade on the ground surface, *approximately 250 feet north of the M2 Parcel.*

8/Figure 1-1 Figure 1-1: Figure 1-1 needs a better figure of the State of Alabama (not a hand drawn figure). An additional figure would help identify the details of the M2 Parcel. The figures in the M2 EE/CA are better examples and could be used in this report.

Response: Concur. Figure 1-1 has been revised as suggested. An additional Figure 1-2 has been added to better identify details of the M2 Parcel.

9/7/2.0 4th line: Please explain what “*Clearance to Depth*” means.

Response: Concur. The paragraph has been revised to include the “definition” and will read as follows:

Field work began on May 22, 2000 with the start of brush clearance activities and was completed the week of September 18, 2000. In all, seventy-two grids of 100 ft x 100 ft and 31 partial grids were cleared of OE in accordance with the approved removal alternative *Surface Clearance and Subsurface Clearance to Depth (Clearance to depth means removal of potential OE items regardless of the depth)*. The total area

cleared was approximately 22 acres. All field activities including site preparation (brush clearance and location surveys), geophysical surveying, anomaly reacquisition, and intrusive operations are described in this section. Quality Control and Quality Assurance are discussed in the next section.

10/7/2.1.1.1 6th line: Spell out what diameter the “small trees” were in inches (3-inches).

Response: Concur. The referenced line has been revised to read as follows:

This required the removal of brush, vines, and small trees (**3 inches and less**) within 4 inches of the ground (to prevent risk of tripping) and the removal of hanging limbs and vines to provide a minimum 8-foot overhead clearance.

11/8/2.2.1.2 5th line: Please state what “work plan” is being used in this sentence.

Response: Concur. The referenced line has been revised to read as follows:

In accordance with the **M2 Parcel** work plan, the USRADS (Ultra-Sonic Ranging and Detection System) navigation system coupled with the Geonics EM-61 detector was used to perform the surveys.

12/9/2.2.4 Put a space between “2.2.4” and “Target Objectives”.

Response: Concur.

13/10/2.3.3 Please discuss the QA/QC process. The park adjacent to the M2 Parcel was also closed on August 20, 2000 while digging was occurring. Please add the closing information to this section.

Response: Concur. The referenced paragraph has been revised as follows:

2.3.3 Because of public safety concerns, it was necessary to limit intrusive operations within 200 ft of the public to times that public access could be restricted without causing excess inconvenience to the public. Operations in grids located along the western boundary of the site adjacent to Highway 21 and the first row of grids (the A row) bordering the southern boundary of the site adjacent to the museums of Natural History and World History were affected. Intrusive operations within the grids located along the western boundary of the M2 Parcel adjacent to Highway 21 were not permitted until arrangements could be made to close the highway and detour vehicles. The Fort McClellan Transition Force Operations coordinated this requirement with the Alabama Department of Transportation. On Sunday, August 20, the Anniston Police Department closed both north and south-bound lanes of the highway from 6 AM to 4 PM to permit intrusive operations within the grids. Intrusive operations were completed within all 18 grids. Because grids located in the far southwest corner were also within 200 ft of the entrance to the museums located south of the M2 Parcel, the entrance was also blocked to traffic during the intrusive operations. Intrusive operations in other grids located along the southern border of the M2 parcel and within 200 ft of the museums were timed to occur in the early morning prior to workers and visitors arriving at the museums. The museum director was present at the coordination

meeting held earlier to discuss the required closures, wherein it was agreed that intrusive operations affecting the museums would be conducted prior to museum personnel arriving for work each day. During the time that intrusive operations were in progress in the grids involved, project personnel watched for traffic coming into the area and operations were terminated when the first vehicle came into the museum area.

14/11/2.3.5 This paragraph includes words like “most” and “several”. Please change these words to actual percentages (i.e., 10-percent, 50-percent, etc.). There is enough information to perform statistical calculations and to produce results that are reliable.

Response: Concur. The referenced paragraph has been revised to read as follows:

2.3.5 Consistent with the type of training exercises thought to have occurred at the site, greater than 99-percent of the items recovered were within 18 inches of the ground surface, and more than 95-percent were at a depth less than 6 inches. There were several items found deeper including a steel shovel at 2.5 to 3 ft (Grid B-14, Anomaly 4) and an expended smoke rifle grenade at 2.5 ft (Grid F16, Anomaly 46). The range of depths at which the items discussed above were recovered is presented below:

Items Recovered	Surface to 6 Inch Depth	>6 to 12 Inch Depth	>12 to 18 Inch Depth	>18 to 24 Inch Depth	>24 to 36 Inch Depth
UXO	100%	--	--	--	--
Practice Ordnance	100%	--	--	--	--
OE Debris	96%	--	--	--	4%
Small Arms	97%	3%	--	--	--
Non-OE Scrap	95%	4.5%	<1%	<1%	<1%

15/11/2.3.5 4th Line: Please define “An” in the grid “Grid B-14, An #4”.

Response: Concur. “An” means Anomaly and “An #4” means Anomaly #4. “An” has been replaced with “Anomaly”. See response to comment 14 above.

16/11/2.3.6 Please explain how, when, and where the UXO items were destroyed.

Response: Concur. (1) There was actually only one “UXO” item. The second item, the practice anti-tank land mine was improperly classified as a UXO. The proper classification is “practice ordnance”. (2) However, both were destroyed as indicated in the report. (3) The text has been revised to read as follows (Note that in addition to the revision of this paragraph, a portion of the former paragraph has been broken off into an additional paragraph):

2.3.6 The white phosphorus hand grenade and the practice anti-tank land mine were both destroyed by Foster Wheeler Environmental UXO specialists. Because of a high humidity index and fire concerns, the hand grenade was transported by Foster Wheeler UXO-qualified technicians to Range 18 for disposal. The item was disposed of by open detonation. The practice anti-tank land mine considered to possibly contain a spotting charge was vented with a perforator charge onsite at Grid F16 where it was located.

2.3.7 The Table 1 in Appendix B lists for each grid, the description of items found including anomaly number, general description, object description, and depth. Additional information is included on the data CD included in Appendix A.

17/13/3.2.2 4th Line: Explain “elec6tromagnetic”.

Response: The word is “electromagnetic”. Spelling has been corrected.

18/14/4.6 4th Line: Were the “.30 caliber rifle balls” actually balls? Please clarify.

Response: No. A more proper term is “cartridge”. The text has been revised accordingly to:

Approximately 60 pounds of OE-related scrap and 1410 pounds of non-OE scrap have been removed from the site. The OE scrap was inspected, containerized and transported to the secure EODT, Inc. waste processing area where it will receive a final inspection to certify it free of explosives prior to final disposal. Eight (8) .30 caliber rifle *cartridges* were found unexpended at grid E6 (anomaly 29) and turned into the Ammunition Supply Point (ASP, operated by the Alabama National Guard) for salvage, recycle, or disposal. Documentation for the disposal of scrap removed from the M2 parcel is included in Appendix E.

19/Summary The Summary section needs work. Please add that the 3350 anomalies were intrusively investigated in “103 grids (100ft X 100ft)”. In the 6th line, explain how the UXO were safely “destroyed” onsite. In the 5th line, please explain what the “UXO item” were. The Summary needs to explain delays and problems that may have occurred.

Response: Concur. Based on this and other comments, the Summary section has been rewritten to provide more details. See revised Section 5.0 Summary.

20/Appendix A M2 Parcel Grid Map: The map needs a Scale. The following grid maps need a reference page describing the actual scale (1”:300”) and other potential descriptions associated with the maps.

Response: Concur. (1) The M2 Parcel Grid Map will be revised to include a scale (2) A reference page will be inserted in front of the anomaly maps which clarify the scales. There are two scales: a bar scale and a numerical scale. The bar scale is self explanatory. The numerical scale expresses the ratio between the image and the actual real distance, in identical units. For example, 1:300 can be read as 1 inch = 300 inches, or 1 ft = 300 ft.

21/Appendix B Results of Intrusive Investigations: Please do a complete review of Appendix B. There are several discrepancies throughout the results. An example of this is Grid E5, where

there are two Anomaly ID Numbers 8. One of them suggests that under the Object Description to see "f6#60. If you look at "f6#60, it does not exist. The other Anomaly ID Number 8 states that the Item is "Non OE Scrap" and is a 2x?x1/8" sheet metal found on the surface. There are blanks that can be filled in. Some of the headings are missing for some of the grids.

Response: Concur. The data have been reviewed and revised/corrected. A new revised Table has been included in Appendix B.

22/Appendix C Site Quality Control Documentation: Please explain what "All" means under "COMPANY". Fill in all blanks under "COMPANY" and "PROCESS".

Response: "All" means "All Personnel" assigned to the project. The blanks have been filled in. The revised table is included in Appendix C.

23/Appendix G Site Photographs: Please add the "Date", "View", and photographer (Foster Wheeler, etc.) to the photographs. The photograph that states "Explosives Magazine" is incorrect. Please clarify.

Response: Concur. Date, view, and photographer have been added to each photograph as appropriate. The revised photos are included in Appendix G.

End of Comments