

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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JAMES W. WARR
DIRECTOR

December 11, 2001

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

DON SIEGELMAN
GOVERNOR

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RCOB DEC 18 '01 AM 10:22

RE: ADEM Review and Concurrence: *Draft Action Memorandum for the M1.01 Parcel* dated September 5, 2001, Fort McClellan, Calhoun County, Alabama
Facility I.D. No. AL4 210 020 562

Dear Mr. Levy:

The Alabama Department of Environmental Management (ADEM or the Department) has reviewed the subject *Draft Action Memorandum for the M1.01 Parcel* dated September 5, 2001, Fort McClellan. The Department finds that the memorandum is well written and adequately addresses the issues concerning the selected unexploded ordnance (UXO) removal alternative (i.e., Clearance to One-Foot Depth). The Department understands that if a UXO item is found within 12-inches of the ground surface and is removed, and if another anomaly is detected below 12-inches, the anomaly will be investigated further. This additional effort was requested by the Department to provide further assurance that any potential, though unexpected, burial sites would be identified and removed. The Department also notes that the M1.01 Parcel has been extensively addressed in many Base Realignment and Closure Team (BCT) and Restoration and Advisory Board (RAB) meetings. Based on all of the historical discussions regarding proposed UXO removal activities at the M1.01 Parcel and based on the Department's review of the Draft Action Memorandum, the Department concurs with the proposed actions presented by Fort McClellan in the subject document.

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
Hazardous Waste Branch
Land Division

SAC/ps

cc: Mr. Doyle Brittain/EPA Region 4
Mr. Dan Copeland/ CEHNC-OE-DC, Huntsville
Mr. Ellis Pope/USA COE, Mobile District
Mr. Jim Grassiano/ADEM

File: ADEM Land Division/Hazardous Waste Branch/Fort McClellan, Correspondence, 2001





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

September 12, 2001

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4WD-FFB

Mr. Ron Levy
BRAC Environmental Coordinator
U.S. Army Garrison
Environmental Office
Building 215, 15th Street
Fort McClellan, AL 36205-5000

SUBJ: Draft Final M1.01 Parcel EE/CA; Draft M1.01 Parcel Action Memorandum; Fort
McClellan

Dear Mr. Levy:

The Environmental Protection Agency (EPA) has reviewed the subject document. On July 20, 2001, EPA approved the subject document. Although revised to consider comments submitted by others, EPA retains that approval. Thank you for your cooperation. If you have any questions, please call me at (404) 562-8549.

Sincerely,

A handwritten signature in cursive script that reads "Doyle T. Brittain".

Doyle T. Brittain
Senior Remedial Project Manager

cc: Lisa Kingsbury, Ft. McClellan
Ellis Pope, USA/COE
Phil Stroud, ADEM
Jeanne Yacoub, IT
Daniel Copeland, CEHNC-OE-DC
Maj. Wayne Sartwell, ALANG
Maj. Bernie Case, ALANG



U.S. Army Training and
Doctrine Command

ACTION MEMORANDUM

M1.01 Parcel, Fort McClellan, Alabama

PURPOSE

The purpose of this Action Memorandum is to document the U.S. Army's decision regarding the selected risk-reduction alternative taken to address the presence of ordnance and explosives (OE) that pose a threat to human health and the environment in the area of the M1.01 Parcel, Fort

McClellan, Alabama. The U.S. Army will implement the selected risk-reduction alternative based on the Engineering Evaluation/ Cost Analysis (EE/CA) (FWE, 2001). The alternative that was selected for the M1.01 Parcel includes clearance to one-foot depth and a deed notice describing notification procedures if OE is found on the property after transfer. The Environmental Protection Agency, Region 4 (EPA)

and the Alabama Department of Environmental Management (ADEM) have concurred with this Action Memorandum.

This Action Memorandum serves as the primary decision document substantiating the need for a response

action, identifying the response action, and explaining the rationale for the response action (EPA, 1990). The decision process is consistent with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 CFR 300.120d, 40 CFR 300.415).

The DoD may address explosives safety hazards, to include unexploded ordnance (UXO), on closed, transferring, and transferred (CTT) military ranges using the EE/CA process that is described in the NCP. Response activities may include removal actions, remedial actions, or a combination of the two. The response actions described in this Action Memorandum are based on the EE/CA and on input from stakeholders, where given, and are documented in the Administrative Record. As the primary decision document, the Action Memorandum becomes a critical component of the administrative record, required by Section 113(k) of the CERCLA, (EPA, 1990).

SITE CONDITIONS AND BACKGROUND

Site History and Land Use

Fort McClellan is an inactive U.S. Army post, located in Calhoun County, Alabama, that formerly occupied approximately 41,174 acres. The main post encompassed approximately 18,929

Table of Contents

Purpose	1
Site Conditions and Background	1
Threats to Public Health or Welfare or Environment	5
Endangerment Determination	6
Response Actions and Estimated Cost	6
Expected Changes in the Situation Should Action Be Delayed or Not Taken	8
Enforcement	8
Recommendation and Approval	9
References	10

acres while Pelham Range encompassed 22,245 acres. Documented military use at Fort McClellan began in 1912 when the Alabama National Guard used part of the site as a Field Artillery Range. The installation was deactivated for a brief period of time in the late 1940s but was reactivated in 1950 and remained active until September 1999 when it closed under Base Realignment and Closure (BRAC) as recommended by the 1995 Defense Base Closure and Realignment Commission in conformance with Public Law 101-510, as amended, the Base Closure and Realignment Act of 1990.

The Fort McClellan main post is bounded on the south and west by the City of Anniston and on the northwest by the City of Weaver. Adjoining the main post to the east is the 4,488-acre Choccolocco Corridor, which was leased from the state by Fort McClellan until May 1998 and connected the post to the Talladega National Forest. Figure 1 depicts the location of Fort McClellan within the State of Alabama and the location of the M1.01 Parcel within Fort McClellan. The M1.01 Parcel is located on the western boundary of Fort McClellan in the vicinity of the Summerall Gate Road. The M1.01 Parcel as defined in the EE/CA includes approximately 97 acres, divided into three segments as follows:

- Property north of the proposed Summerall Gate Road Extension;



Figure 1. M1.01 Parcel Vicinity Map

- Property south of Summerall Gate Road Extension; and
- Miscellaneous Property south of the Eastern By-Pass Right-of-Way (This property is part of the M3 Parcel).

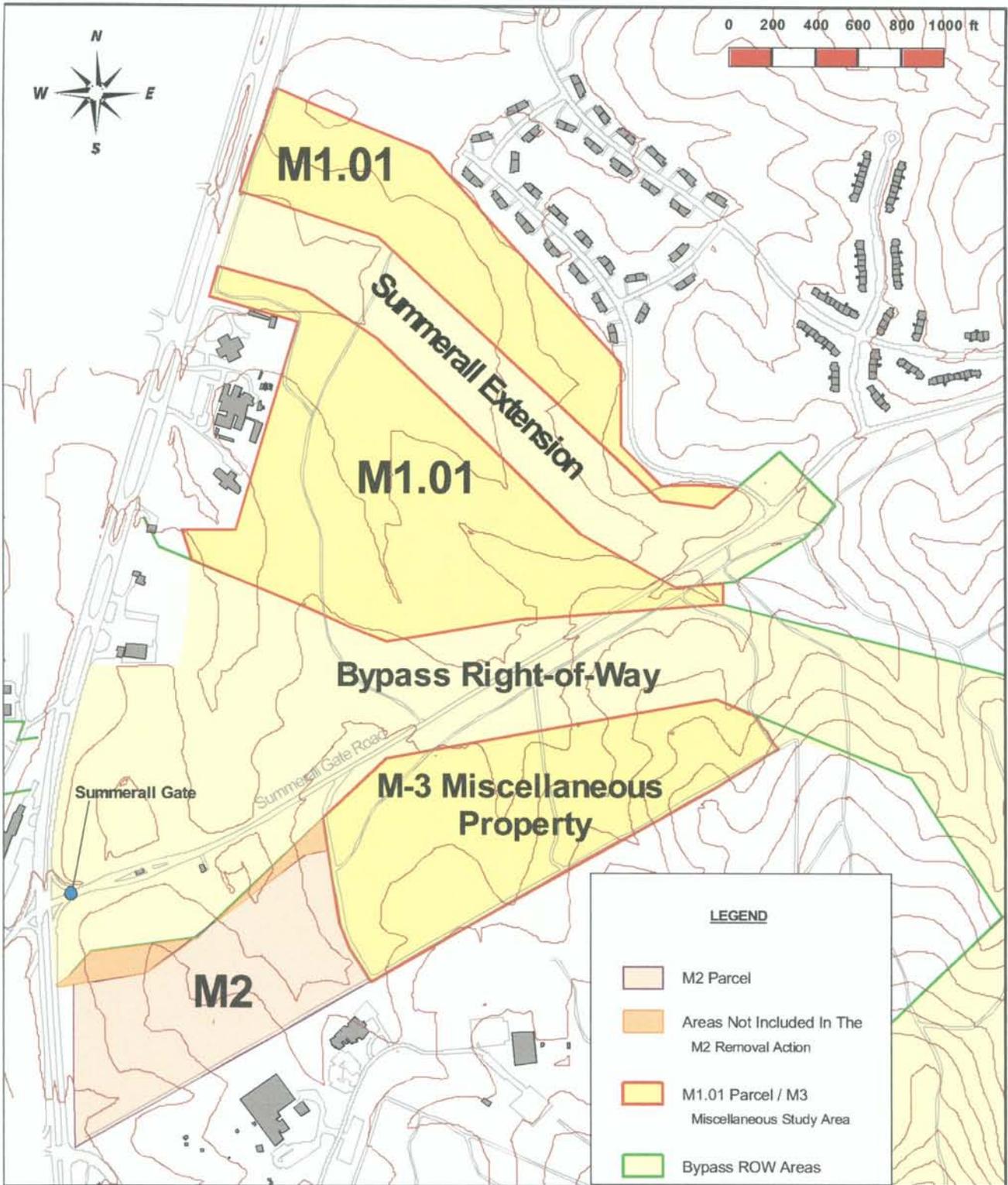
Figure 2 shows the M1.01 Parcel study area and the three property segments described above.

Previous Site Investigations

Archives Search Report (ASR)

The U.S. Army Corps of Engineers, St. Louis District, compiled an ASR in 1996. The ASR was prepared by reviewing available records and reports documenting the history of the site.

Historical information pertaining to site operations, including a listing of site investigations conducted before 1996, is contained within this document. In




FOSTER WHEELER ENVIRONMENTAL CORPORATION
 Huntsville, Alabama

U.S. Army Engineering and Support Center
 Huntsville, Alabama

FIGURE 2
STUDY AREA AND ADJACENT M2 PARCEL

1998, the U.S. Army Corps of Engineers, St. Louis District, revised the ASR to include suspect Chemical Warfare Materiel (CWM) areas. The ASR, finalized in July 1999, presented the findings of the site inspection and evaluation of potential ordnance and explosives occurrence at Fort McClellan. The area identified under the EE/CA as M1.01 Parcel showed evidence of use as an OE training area.

EE/CA for the M1.01 Parcel

The purpose of the EE/CA was to characterize the type and extent of ordnance items within the M1.01 Parcel study area. This was accomplished using existing site-specific field data that was collected during three previous response activities that took place in 1999-2001 in areas inclusive and adjacent to the M1.01 Parcel:

- M2 Parcel Removal Action (22 acres) (FWE, 2000),
- Eastern Bypass EE/CA (~2 acres) (Zapata, 2000), and
- Eastern Bypass Construction Support Clearance to One Foot (~81 acres) (EODT, 2001).

Based on archival records and the results of these previous actions, the evidence indicates that the area was primarily used for OE training activities. Almost all the items found during the previous investigations have been training items at depths of one foot or less and include such items as 2.36 inch practice rockets, practice hand grenades, practice mortars (60 & 81 mm), expended rifle grenades, flares and practice land mines. Only two UXO items were found during the previous investigations – a white phosphorous hand grenade (fuzed) and a practice mine activator. But for one exception,

there is no evidence that high explosives (HE) were ever used in the area. Small quantities of HE were used in M-15 White Phosphorous (WP) smoke hand grenades to open the case for the purpose of exposing/releasing the WP.

Analysis of the existing investigation data enabled the US Army Engineering and Support Center, Huntsville (USAESCH) to determine the risks associated with the future use of the M1.01 Parcel and to evaluate and recommend effective risk-reduction alternatives.

Roles and Responsibilities

The DoD is the lead authority for the Fort McClellan cleanup project. Fort McClellan's major command, Training and Doctrine Command (TRADOC), is responsible for providing funding while the Fort McClellan Transition Force is responsible for implementing public involvement activities, producing public statements and media releases, and serving as community point of contact. In support of the Transition Force is the USAESCH providing technical expertise and contractor support for the proposed risk-reduction alternatives.

Regulatory, Stakeholder, and Community Participation

The Base Realignment and Closure (BRAC) Cleanup Team (BCT) is comprised of representatives from the EPA, ADEM, the Fort McClellan Transition Force, with support from the U.S. Army Corps of Engineers. This group has been directly involved throughout the EE/CA process to ensure protection of public health and the environment and consistency with Federal and state environmental regulations and policies. Regulatory acceptance of the findings of the EE/CA

is considered in the final recommendations of the alternative(s) presented in the EE/CA Action Memorandum.

The EE/CA document was reviewed by the BCT and placed on file in the information repositories established at the Anniston Calhoun County Library and the Houston Cole Library on November 1, 2001, for the public to review. The availability of the EE/CA in the Administrative Record was announced in the local newspaper, The Anniston Star, and the public was provided a 30-day review and comment period. A public meeting was held on November 19, 2001, to allow the public an opportunity to ask questions or comment on any aspect of the project. Comments received from the Public were considered in the Final EE/CA document.

The Fort McClellan Restoration Advisory Board (RAB) meets on a monthly basis to review and advise the Army on restoration activities for the Fort McClellan cleanup. The RAB has participated in the EE/CA process and was invited to the public meeting. The Army updated the RAB on the status of the M1.01 Parcel action through its monthly meetings.

THREATS TO PUBLIC HEALTH OR WELFARE OR ENVIRONMENT

Threats to Public Health or Welfare

The potential exists that unexploded ordnance (UXO) may be present within the M1.01 Parcel area located on Fort McClellan. The objective of the response action is to reduce human health risk from potential exposure to UXO. The findings of the EE/CA were relevant

only to the area within the M1.01 Parcel area. Potential land uses in the M1.01 Parcel area include residential, mixed business and recreational. The risk evaluation focused first on the protection of construction workers and residents associated with residential land use, followed by construction workers in areas of mixed business use, and then on passive recreational users.

An OE exposure is defined as a person coming into contact with or being in immediate proximity to UXO. The exposure does not imply that the UXO item detonates. The primary hazard associated with ordnance is from accidental detonation of an item rather than any potential toxic effect of the explosive or incendiary substances. Exposure to ordnance items occurs when the item is unearthed either by natural processes or excavated by human activities. Once uncovered, contact with an explosive item could cause detonation. Risk from incidental contact with OE also depends on the condition of the OE item. An expended item has no explosive hazard associated with it while an unexpended item will have an explosive hazard associated with it.

OE is expected to be on the surface and near surface. Items recovered in this area during previous investigations were training and practice items and two UXO items, all found within 12 inches of the ground surface. Surface and subsurface removal of OE items will greatly reduce the risk of possible OE encounters for future residents, construction workers, and passive recreational users.

Threats to the Environment

The goal of the action is to reduce the explosive threat to the public, while

incurring the least damage possible to the environment. OE that may be present at the site presents no explosive potential to the environment as long as the OE item remains undisturbed. Accidental detonation of ordnance has little impact on the environment unless fires are started. Removal of brush and limited removal of small trees will be required to accomplish an effective risk reduction within the M1.01 Parcel area.

ENDANGERMENT DETERMINATION

The presence of OE in the M1.01 Parcel area, if the recommended action is not taken, presents a threat to human health and the environment. Response actions presented in this Action Memorandum are required to reduce/manage the risk to future residents, construction personnel, and passive recreational users.

RESPONSE ACTIONS AND ESTIMATED COST

Risk Reduction Alternatives Considered

The EE/CA for the M1.01 Parcel area evaluated six alternatives as possible courses of action to reduce the risk of public exposure to OE. Each of the alternatives was evaluated in terms of effectiveness, implementability, and cost. Alternatives included in the EE/CA process were as follows:

- Alternative 1 – No Action
- Alternative 2 – Land Use Controls
- Alternative 3 – Construction Support
- Alternative 4 – Surface Clearance

- Alternative 5 – Clearance to One-Foot Depth
- Alternative 6 – Clearance to Depth

1. *No Action* means that, based on current information, no DoD action is warranted to reduce the risk of public exposure to OE. If new information becomes available, indicating the presence of OE, the Government will reconsider the status of the property.

2. *Land Use Controls* are legal or institutional mechanisms that limit access to or use of property or warn of a hazard and may include public awareness activities.

3. *Construction Support* for this site involves providing surface and near surface clearance of OE items in areas designated for construction activities.

4. *Surface Clearance* involves performing a visual survey of the surface and removing OE from the ground surface or OE that is partially buried.

5. *Clearance to One-Foot Depth* involves all the activities necessary to locate, excavate, and remove OE to a depth of one foot across the entire M1.01 Parcel. The depth of clearance is based on: (1) site specific information, (2) the types of ordnance items that have been found in the vicinity of the M1.01 Parcel area, and (3) the typical penetration depths for the types of OE items that may be present. Surface anomalies that do not have an explosive hazard will be removed. Using hand-held metal detection instruments, the near surface anomalies will be flagged to identify their location. The anomalies will then be investigated to identify them as OE, OE scrap, or non-OE metallic scrap. OE

items suspected to be UXO will be destroyed in place. However, unfuzed UXO items could be removed and consolidated within the investigation grid and then destroyed. The OE-related scrap will be removed, inspected, certified safe, and turned over to the local Defense Reutilization Marketing Organization (DRMO) or a local scrap dealer. All excavations will be returned to their original elevations.

6. *Clearance to Depth* involves all the activities necessary to locate, excavate, and remove OE to its depth of detection. Under this alternative, investigation of anomalies (i.e., suspect OE items) continues until the source of the anomaly is found, or until it is determined that no OE item is present. This alternative differs from Alternative 5 in that the depth of clearance is not limited to one foot. This alternative would be performed using digital geophysical mapping. The entire site would be surveyed with a geophysical detection instrument, recording the electromagnetic signatures and location data for potential OE items. This data will then be processed and analyzed to identify anomalies that could potentially be OE items. The anomalies will then be investigated to identify them as OE, OE scrap, or non-OE metallic scrap. OE items suspected to be UXO will be destroyed in place. However, unfuzed UXO items could be removed and consolidated within the investigation grid and then destroyed. The OE-related scrap will be removed, inspected, certified safe, and turned over to the local Defense Reutilization Marketing Organization (DRMO) or a local scrap dealer. All excavations will be returned to their original elevations.

Response Actions and Rationale

The selected alternative for the M1.01 Parcel is based on existing site conditions and an understanding of the projected land use and represents conclusions based on the data previously developed for areas inclusive within and adjacent to the M1.01 Parcel area.

If, during implementation of response actions in accordance with this Action Memorandum, ordnance items are found that are not consistent with the characterization data, appropriate procedures will be implemented to assess the situation.

Clearance to One-Foot (Alternative 5) is the recommended alternative for the M1.01 Parcel area.

Based on the previous actions within and adjacent to the M1.01 Parcel, all OE and OE related scrap were found within 12 inches of the surface:

- At the M2 Parcel, all items were found at depths of 6 or less inches (FWE, 2000),
- During the Eastern Bypass EE/CA sampling, all items were found at depths of 12 or less inches (Zapata, 2000), and
- The types of items recovered during the Eastern Bypass one-foot clearance, were consistent with findings in the M2 Parcel and the Eastern Bypass EE/CA (EODT, 2001).

Furthermore, the types of items found during these previous investigations are normally located within 12 inches of the surface.

This alternative provides:

- High level of public safety protection by removing both the surface and near surface OE.

- High reduction in residual risk by removing both surface and near surface OE.
- Permanent long-term solution since it results in permanent removal of OE.
- Technically and administratively achievable solution and because it addresses both surface and near surface OE, it is likely to receive high support from the stakeholders, including the community, EPA and the State.

The deed included in the property transfer documents for this parcel will serve to provide information on notification requirements in the event an OE item is encountered after transfer.

Recurring reviews will be completed every five years to ensure that the public health, safety and environment are being protected by this response action. The reviews will evaluate site-specific factors that may impact the continued effectiveness of the response action, such as changes in physical conditions at the site and/or changes in public accessibility and land use. More specifically, the reviews will focus on answering the following questions:

- Is the response functioning as intended?
- Are the assumptions used at the time of response selection still valid?
- Does new information indicate that the previously selected response is no longer protective of human health, safety, and the environment considering the best available technology?

The estimated cost to implement this alternative is \$1.8 million. This estimate is based on existing data collected within and adjacent to the study area and based

on Foster Wheeler Environmental Corporation experience at similar sites within Fort McClellan and at other ordnance-contaminated sites.

EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Lack of implementation of the response actions may result in increased risk of OE exposure to future residents, construction workers, and passive recreational users, or possible cancellation of the transfer of the M1.01 Parcel property for future reuse.

ENFORCEMENT

The DoD has responsibility for OE response action at this site. This action will be executed in compliance with the OE requirements of DoD 6055.9-STD; Army Regulation (AR) 385-61; AR 385-64; Department of the Army Pamphlet (DA Pam) 385-61; and Headquarters (HQ) DA LTR 385-00-2 "Explosives Safety Policy for Real Property Containing Conventional Ordnance and Explosives." Legal authorities governing OE response actions include the Defense Environmental Restoration Program (DERP), established by Congress in 1986 under Chapter 160 of SARA. DERP directed the Secretary of Defense to "carry out a program of environmental restoration" at facilities under the jurisdiction of the Secretary of Defense. Fort McClellan is not on the National Priority List.

The NCP designated DoD as the removal response authority for incidents involving munitions. Applicable sections of the NCP for the EE/CA

include 40 CFR 300.120d (DoD authorization) and 40 CFR 300.415 (Removal Action).

RECOMMENDATION AND APPROVAL

This Action Memorandum decision document represents the selected risk-reduction alternative for the M1.01 Parcel area on Fort McClellan in

Calhoun County, Alabama. The selected risk-reduction alternative has been developed in a manner consistent with CERCLA, as amended, and with the NCP. This decision is based on the administrative record for this site.

Approval of the response action is included in the signature box below. The total project ceiling, when approved, is projected to be \$1.8 million.

SITE AND LOCATION

M1.01 Parcel project located on Fort McClellan, an inactive U.S. Army post located in Calhoun County, Anniston Alabama.

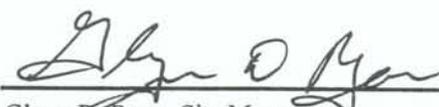
DESCRIPTION OF THE SELECTED REMEDY

As Described in this Action Memorandum, the alternative for the M1.01 Parcel area is based on existing site conditions and an understanding of the projected land use, and represents conclusions based on the data previously developed for areas inclusive within and adjacent to the M1.01 Parcel area. *Clearance to One-Foot Depth* is the

selected alternative for the M1.01 Parcel area.

DECLARATION

This decision document represents the selected risk-reduction alternative for the M1.01 Parcel on Fort McClellan in Calhoun County, Alabama. The selected risk-reduction alternative has been developed in a manner consistent with CERCLA, as amended, and with the NCP. This decision is based on the administrative record for this site.


Glynn D. Ryan, Site Manager

18 Jan 02
Date

References

<u>Ref. No.</u>	<u>AUTHOR¹ - DATE</u>	<u>REFERENCE TITLE</u>
1	BWS&C, 1998	Draft Environmental Assessment Anniston East Bypass. Prepared for the Alabama Department of Transportation and the U.S. Department of Transportation.
2	CFR (no date)	Military Munitions Rule. 40 Code of Federal Regulations (CFR) 260.
3	DA, November 1997	Ammunition and Explosives Safety Standards. DA PAM 385-64.
4	DA, October 12, 2001	Army Toxic Chemical Agent Safety Program. Army Regulation (AR) 385-61
5	DA, December 23, 1988	Environmental Effects of Army Actions. Army Regulation (AR) 200-2.
6	DA, June 30, 2000	Explosives Safety Policy for Real Property Containing Conventional Ordnance and Explosives, HQDA LTR 385-00-02.
7	DA, March 13, 1997	Toxic Chemical Agent Safety Standards, Department of the Army (DA) Pamphlet (PAM), DA PAM 385-61.
8	DoD, July 1999	Ammunition and Explosives Safety Standards. DOD 6055.9-STD.
9	EODT, June 2001	Final Report, Ordnance and Explosives Surface Removal, Proposed Eastern Bypass, Fort McClellan, Alabama. Prepared for the U.S. Army Engineering and Support Center, Huntsville.
10	EPA, December, 1990	Superfund Removal Procedures, Action Memorandum Guidance, EPA/540/P-90/004, Environmental Protection Agency, December, 1990.
11	ESE, January 1998	Final Environmental Baseline Survey, Fort McClellan, Alabama. Prepared for the U.S. Army Environmental Center, Aberdeen, Maryland.
12	FWE, November 2000	(Final) Ordnance and Explosives Final Removal Action Report, M2 Parcel, Fort McClellan, Alabama. Prepared for the U.S. Army Engineering and Support Center, Huntsville.
13	FWE, October 2001	Draft Final Engineering Evaluation/Cost Analysis, M1.01 Parcel, Fort McClellan, Alabama. Prepared for the U.S. Army Corps of Engineers, Engineering and Support Center, Huntsville.

<u>Ref. No.</u>	<u>AUTHOR¹ - DATE</u>	<u>REFERENCE TITLE</u>
14	ORNL, 1998	Historical Aerial Photography Investigation of the Fort McClellan East By-Pass Study Area. Prepared for the US Army Engineering and Support Center, Huntsville.
15	SAIC, 1999	Remedial Investigation / Baseline Risk Assessment Report, Fort McClellan, Alabama. Prepared for the US Army Corps of Engineers, Mobile District.
16	UA, 1990	1990 Census Population and Housing. Alabama State Data Center.
17	USACE, Huntsville, May 2000	Final Engineering Evaluation/Cost Analysis Report for the M2 Parcel, Fort McClellan, Anniston, Alabama
18	USACE, Mobile District, 1998	Final Environmental Impact Statement, Disposal and Reuse of Fort McClellan, Alabama.
19	USACE, St Louis District, 1999a	Archives Search Report Findings Fort McClellan, Anniston, Alabama
20	USACE, St Louis District, 1999b	Archives Search Report Conclusions and Recommendations Fort McClellan, Anniston, Alabama.
21	Zapata, 1998	Ground Reconnaissance Trip Report. Prepared for the U.S. Army Corps of Engineers, Engineering and Support Center, Huntsville.
22	Zapata, 2000	Eastern Bypass EE/CA at Fort McClellan, Alabama. Prepared for the U.S. Army Corps of Engineers, Engineering and Support Center, Huntsville.

¹ Authors:

BWS&C Barge, Wagoner, Sumner and Cannon, Inc.
CFR Code of Federal Regulations
DA Department of the Army
DoD Department of Defense
EODT EOD Technology, Inc.
EPA Environmental Protection Agency
ESE Environmental Science & Engineering, Inc.
FWE Foster Wheeler Environmental Corporation, Inc.
ORNL Oak Ridge National Laboratory
SAIC SAIC, Inc.
UA University of Alabama
USACE United States Army Corps of Engineers
Zapata Zapata Engineering, P.A