



DEPARTMENT OF THE ARMY
U.S. ARMY GARRISON
FORT McCLELLAN, ALABAMA 36205-5000

November 18, 2002

REPLY TO
ATTENTION OF

Environmental Office

Mr. Philip Stroud
Alabama Department of Environmental Management
Hazardous Waste Branch, Land Division
1400 Coliseum Boulevard
Montgomery, AL 36110-2059

Dear Mr. Stroud:

Enclosed are responses to U.S. Environmental Protection Agency (EPA) and Alabama Department of Environmental Management (ADEM) comments on the Final Site Investigation Report and Decision Document for the Range 4A Fog Oil Storage Area, Parcel 123(6). Request your office provide a letter of concurrence on these final documents by December 18, 2002.

These responses were reviewed during the October 2002 BCT meeting. Following discussions to clarify additional ADEM concerns, EPA and ADEM accepted the responses as written. These responses do not involve any changes to the subject documents.

Copies of this memorandum with enclosures have been provided to Mr. Doyle Brittain, Environmental Protection Agency Region 4, Ms. JoAnn Watson, National Guard Bureau, LTC David McPherson, Alabama Army National Guard Training Center, and MAJ Wayne Sartwell, Alabama Army National Guard.

If further information is required or you have questions regarding this submittal, please contact Mrs. Lisa Holstein at (256) 848-7455.

Sincerely,

Ronald M. Levy
BRAC Environmental Coordinator

Enclosure

**RESPONSE TO COMMENTS ON THE FINAL SITE INVESTIGATION
REPORT AND DECISION DOCUMENT FOR THE
RANGE 4A FOG OIL STORAGE AREA, PARCEL 123(6)**

- 1. EPA**
- 2. ADEM**

EPA COMMENTS

**RESPONSE TO COMMENTS FROM THE
U.S. ENVIRONMENTAL PROTECTION AGENCY
ON THE FINAL SITE INVESTIGATION REPORT AND DECISION DOCUMENT
RANGE 4A FOG OIL STORAGE AREA, PARCEL 123(6), DATED APRIL 2002
FORT McCLELLAN, CALHOUN COUNTY, ALABAMA**

Comments from Doyle T. Brittain, Senior Remedial Project Manager, dated April 30, 2002.

General Comments

Comment 1: **The Environmental Protection Agency (EPA) has reviewed the subject documents and as agreed upon in the February 2002, On Board Review considers them approvable. As ADEM considers appropriate, please transmit this comment to Fort McClellan (FTMC).**

Response 1: Comment noted.

ADEM COMMENTS

**RESPONSE TO COMMENTS FROM THE
ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
ON THE FINAL SITE INVESTIGATION REPORT
RANGE 4A, FOG OIL STORAGE AREA, PARCEL 123(6), DATED APRIL 2002
FORT McCLELLAN, CALHOUN COUNTY, ALABAMA**

Comments from Stephen A. Cobb, Chief, Hazardous Waste Branch, Land Division, dated July 10, 2002.

General Comments

Comment 1: The Alabama Department of Environmental Management (ADEM or the Department) has reviewed the above referenced document. Draft findings related to the subject document were discussed at the Base Realignment and Closure Team (BCT) review meeting on February 20, 2002. During the meeting, the Department provided its comments on the Range 4A Fog Oil Storage Area in an interactive manner so that the Army and its consultants could begin resolving the Department's comments. As documented in the meeting minutes issued on April 11, 2002 by IT Corporation, Fort McClellan indicated its intention to pursue a No Further Action (NFA) designation for Parcel 123(6). After a briefing on this site and a review of available information, ADEM stated that it was premature to make such a designation without further sampling or an appropriate risk analysis to support the Army's request for an NFA designation. Fort McClellan conducted no further additional field sampling but elected to submit a preliminary risk analysis (PRA) as part of its Site Investigation (SI) Report for Parcel 123(6).

Response 1: The following is a chronology of events related to the Range 4A Fog Oil Storage Area, Parcel 123(6) (as documented in the BCT meeting minutes):

February 2001 – IT presents proposed site investigation (SI) work plan. BCT adds additional sediment sample to proposed site investigation work plan and moves the proposed location of MW02.

October 2001 – SI data presented to the BCT. ADEM and EPA request a preliminary risk assessment (PRA) to support a recommendation for “No Further Action.”

February 2002 – PRA results presented to the BCT. Based on the PRA results, the BCT made a risk management decision that the site does not pose an unacceptable risk to human health and concurred with the NFA recommendation.

April 2002 – IT issues Final SI report.

July 2002 – ADEM issues comments.

**RESPONSE TO COMMENTS FROM THE
ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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FORT McCLELLAN, CALHOUN COUNTY, ALABAMA**

During the February 2002 BCT meeting, ADEM did not state that it was premature to make an NFA designation for this site. In fact, the BCT (including ADEM) agreed to NFA with unrestricted land reuse based on the results of the PRA, which was performed at the BCT's request – not Fort McClellan's.

Comment 2: In one subsurface soil sample, arsenic was detected at 66.3 mg/kg, significantly exceeding its established upper background range value of 38.0 mg/kg. In its PRA, Fort McClellan concluded that elevated arsenic concentrations pose no potential threat to human and ecological receptors at this site. However, the PRA yielded a hazard index (HI) for arsenic of 1.5, exceeding the threshold level of 1. Fort McClellan's PRA also mentions that it has some concern about releasing the site for NFA with unrestricted use.

Response 2: Disagree. The PRA only evaluated the potential threat to human health – not ecological receptors. It is misleading to imply that the PRA had concern about releasing the site for NFA with unrestricted reuse. The full text from the PRA concerning the statement in question is as follows:

“The HI of 1.50E+0 for arsenic slightly exceeds the threshold level of 1, raising concern about releasing the site for unrestricted use with no further action. However, the HI of 1.50E+0 is near the low end of the HI range of 1 to 3 often used by EPA for establishing remedial goal options. Also, there is no reason to believe that arsenic is a site-related chemical at the Range 4A Fog Oil Storage Area. Finally, the HI is based on an EPA oral reference dose (RfD) of 3E-4 mg/kg-day. EPA notes that the RfD is enveloped with considerable uncertainty, and that values from 1E-4 to 8E-4 mg/kg-day would be reasonable. An HI of 5.63E-1 is estimated from an RfD of 8E-4 mg/kg-day. Given these factors, IT recommends that the site can be released for unrestricted use requiring no further action.”

As indicated in the response to Comment #1, the BCT agreed with this recommendation at the February 2002 BCT meeting.

Comment 3: Based on the data presented, the Department believes that elevated arsenic levels at Parcel 123(6) pose a potential threat to human and ecological receptors. Therefore, ADEM does not concur with Fort McClellan's NFA designation with unrestricted reuse. ADEM

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RANGE 4A, FOG OIL STORAGE AREA, PARCEL 123(6), DATED APRIL 2002
FORT McCLELLAN, CALHOUN COUNTY, ALABAMA**

recommends that Fort McClellan implement appropriate land use restrictions through an approved land use control plan.

Response 3: Disagree. Based on the results of the SI (including PRA), Shaw E & I believes that arsenic does not pose an unacceptable risk to human health and the environment. Furthermore, the BCT made a risk management decision concurring with this recommendation.

ADEM

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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JAMES W. WARR
DIRECTOR

DON SIEGELMAN
GOVERNOR

July 10, 2002

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

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Water: 279-3051
Groundwater: 270-5631
Field Operations: 272-8131
Laboratory: 277-6718
Mining: 394-4326
Education/Outreach: 394-4383

RE: ADEM Review and Comments: Final Site Investigation Report for Range 4A, Fog Oil Storage Area, Parcel 123(6), dated April 2002
Fort McClellan, Calhoun County, Alabama
Facility ID No. AL4 210 020 562

Dear Mr. Levy:

The Alabama Department of Environmental Management (ADEM or the Department) has reviewed the above referenced document. Draft findings related to the subject document were discussed at the Base Realignment and Closure Team (BCT) review meeting on February 20, 2002. During the meeting, the Department provided its comments on the Range 4A Fog Oil Storage Area in an interactive manner so that the Army and its consultants could begin resolving the Department's comments. As documented in the meeting minutes issued on April 11, 2002 by IT Corporation, Fort McClellan indicated its intention to pursue a No Further Action (NFA) designation for Parcel 123(6). After a briefing on this site and a review of available information, ADEM stated that it was premature to make such a designation without further sampling or an appropriate risk analysis to support the Army's request for an NFA designation. Fort McClellan conducted no further additional field sampling but elected to submit a preliminary risk analysis (PRA) as part of its Site Investigation (SI) Report for Parcel 123(6).

Although the site is projected for continued use by the Alabama Army National Guard, Fort McClellan elected to screen its SI analytical data against residential human health site-specific screening levels (SSSLs) to evaluate for any potential threat to future human receptors at the site. Fort McClellan collected eight surface/depositional soil, four subsurface soil and five groundwater samples. See the attached ADEM-prepared summary table listing exceedences of various contaminant levels reported by Fort McClellan

Fort McClellan's chemical analysis of samples collected at the site indicates that metals, arsenic and volatile organic compounds (VOCs) were detected in the environmental media sampled. However, Fort McClellan only identified arsenic and three metals (copper, nickel and zinc) as chemicals of potential concern (COPCs) at parcel 123(6). Concentration levels of VOCs were below established SSSLs. Zinc results were within the range of background values. The reported copper and nickel concentration levels exceeded background values in only one surface soil sample location.



Ronald M. Levy
July 10, 2002
Page 2

However, the elevated copper and nickel levels only minimally exceeded their ESV values and were below the established SSSLs. The Department believes that copper and nickel do not pose a significant threat to human or ecological receptors at this site. In one subsurface soil sample, Arsenic was detected at 66.3-mg/kg, significantly exceeding its established upper background range value of 38.0-mg/kg. In its PRA, Fort McClellan concluded that elevated arsenic concentrations pose no potential threat to human and ecological receptors at this site. However, the PRA yielded a hazard index (HI) for arsenic of 1.5, exceeding the threshold level of 1. Fort McClellan's PRA also mentions that it has some concern about releasing the site for NFA with unrestricted use.

Based on the data presented, the Department believes that elevated arsenic levels at Parcel 123(6) pose a potential threat to human and ecological receptors. Therefore, ADEM does not concur with Fort McClellan's NFA designation with unrestricted reuse. ADEM recommends that Fort McClellan implement appropriate land use restrictions through an approved land use control plan.

ADEM has recently obtained the services of an ordnance and explosives/unexploded ordnance (OE/UXO) contractor to provide OE/UXO services to the Department. ADEM will provide comments concerning OE/UXO related issues, under separate cover, after the contractor has had an opportunity to review OE/UXO related activities at this site.

For any questions concerning 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/MH/sep/:L:Gov Fac Sec/Harrison/Fort McClellan/SIR Range 4A, 123(6).doc

cc: Mr. Doyle Brittain/EPA Region 4
Mr. Jim Grassiano/ADEM
Mr. Philip Stroud/ADEM
Mr. Mark Harrison/ADEM

File: Land Division/DSMOA/HW/Fort McClellan/Correspondence, 2002

Fort McClellan's Summary of Reported Contaminant Levels: Page 1

Range 4A Fog Oil Storage Area

Parcel 123(6)

Metals	Reported Level	SSSL	UBR	ESV	Sample Type	Number of Samples	Exceeds SSSL	Exceeds UBR	Exceeds ESV
Arsenic	4.07-mg/kg	.426-mg/kg	49.0-mg/kg	10.0-mg/kg	Surface Soil	8 of 8	Yes	No	No
	6.90-mg/kg						Yes	No	No
	7.01-mg/kg						Yes	No	No
	5.16-mg/kg						Yes	No	No
	12.3-mg/kg						Yes	No	Yes
	12.1-mg/kg						Yes	No	Yes
	9.61-mg/kg						Yes	No	No
	13.0-mg/kg						Yes	No	Yes
	66.3-mg/kg	.426-mg/kg	38.0-mg/kg	NA	Subsurface Soil	4 of 4	Yes	Yes	NA
	7.26-mg/kg						Yes	No	NA
	9.8-mg/kg						Yes	No	NA
	6.15-mg/kg						Yes	No	NA
	0.0033-mg/L	.000044-mg/L	.224-mg/L	NA	Groundwater	1 of 5	Yes	No	NA
Copper	46.1-mg/kg	313.0-mg/kg	24.0-mg/kg	40.0-mg/kg	Surface Soil	1 of 8	No	Yes	Yes
Nickel	31.8-mg/kg	154-mg/kg	22.0-mh/kg	30.0-mg/kg	Surface Soil	1 of 8	No	Yes	Yes
	.0964-mg/L	.0313-mg/L	NA	NA	Groundwater	1 of 5	Yes	NA	NA
Zinc	58.2-mg/kg	2340-mg/kg	209-mg/kg	50.0-mg/kg	Surface Soil	1 of 8	No	No	Yes
	81.7-mg/kg						No	No	Yes
	83.9-mg/kg						No	No	Yes
	73.5-mg/kg						No	No	Yes
	58.4-mg/kg						No	No	Yes



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

April 30, 2002

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4WD-FFB

Mr. Philip Stroud
Alabama Department of Environmental Management
Hazardous Waste Branch, Land Division
1400 Coliseum Boulevard
PO Box 301463
Montgomery, AL 36110-2059

SUBJ: Final Site Investigation Report and Decision Document, Range 4A Fog Oil Storage Area,
Parcel 123(6); Fort McClellan

Dear Mr. Stroud:

The Environmental Protection Agency (EPA) has reviewed the subject documents and as agreed upon in the February 2002, On Board Review considers them approvable. As ADEM considers appropriate, please transmit this comment to Fort McClellan (FTMC). If you have any questions, please call me at (404) 562-8549.

Sincerely,

Doyle T. Brittain
Senior Remedial Project Manager

cc: Ron Levy, FTMC
Lisa Holstein, FTMC
Ellis Pope, USA/COE
Jeanne Yacoub, IT
Daniel Copeland, CEHNC-OE-DC
Maj. Wayne Sartwell, ALANG
Maj. Bernie Case, ALANG
Hugh Vick, Gannett-Fleming

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