



UNITED STATES ARMY ENVIRONMENTAL HYGIENE AGENCY

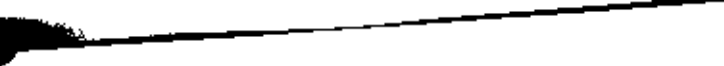
ABERDEEN PROVING GROUND, MD 21010-5422

HAZARDOUS WASTE CONSULTATION NO. 37-26-1649 88
FORT MCLELLAN, ALABAMA
8-12 DECEMBER 1986

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REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
U. S. ARMY ENVIRONMENTAL HYGIENE AGENCY
ABERDEEN PROVING GROUND, MARYLAND 21010-8422



HSFB-ME-SE

23 December 1987

MEMORANDUM FOR: Commander, U.S. Army Training and Doctrine Command, ATTN:
ATMD, Fort Monroe, VA 23651-5451

SUBJECT: Hazardous Waste Consultation No. 37-26-1649-88, Fort McClellan,
Alabama, 8-12 December 1986

EXECUTIVE SUMMARY

The purpose, major conclusions and the recommendations of the enclosed report follow:

a. Purpose. To identify all solid waste management units (SWMU's) present on Fort McClellan and to assemble data to provide a decision making mechanism for determining whether action at any of the sites is necessary.

b. Major Conclusions. Additional environmental sampling is needed for 23 of the SWMU's identified, to further assess the sites. Some of these sites have been identified under the Installation Restoration program by the U.S. Army Toxic and Hazardous Materials Agency. One identified site qualifies for a Resource Conservation and Recovery Act Facility Investigation (RFI).

c. Recommendations. To ensure regulatory compliance the following recommendations are made: coordinate with the U.S. Environmental Protection Agency Region IV to determine the final list of SWMU's which require further action; design a sampling and analytical plan for those SWMU's requiring further assessment or investigation.

FOR THE COMMANDER:

PAUL R. THIES
MAJ, MS
Chief, Waste Disposal Engineering
Division

Encl

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DEPARTMENT OF THE ARMY
U. S. ARMY ENVIRONMENTAL HYGIENE AGENCY
ABERDEEN PROVING GROUND, MARYLAND 21010-6422



REPLY TO
ATTENTION OF

HSHB-ME-SE

HAZARDOUS WASTE CONSULTATION NO. 37-26-1649-88
FORT McCLELLAN, ALABAMA
8-12 DECEMBER 1986

1. AUTHORITY. Letter, TRADOC, ATEN-FN, 17 July 1986, subject: Resource Conservation and Recovery Act (RCRA) Part B Permit.

2. PURPOSE. The purpose of this consultation was to identify all solid waste management units (SWMU's) present on Fort McClellan and to assemble data to provide a decision making mechanism for determining whether or not action at any of the sites is necessary. This information is required under section 3004(u) of the Resource Conservation and Recovery Act (RCRA) Hazardous and Solid Waste Amendments (HSWA) of 1984.

3. GENERAL.

a. Personnel Contacted.

(1) Mr. Bill Pittman, Chief, Environmental Management Office, Directorate of Engineering and Housing (DEH), Fort McClellan.

(2) Mr. Luke Owen, Wildlife Biologist, DEH.

b. Background. Title 40, Code of Federal Regulations (CFR), Part 264.101(a), requires that the owner or operator of a facility seeking an RCRA permit institute corrective action, as necessary, to protect human health and the environment for all releases of hazardous wastes (HW's) or hazardous constituents from any SWMU at the facility, regardless of the time at which waste was placed in the unit. Fort McClellan is anticipating the submission of a Part B permit application for a permanent HW storage facility to be constructed onsite. Each of the SWMU's at Fort McClellan must, therefore, be identified and evaluated to determine if a hazardous constituent release has occurred before a permit can be issued. Corrective action issues for any SWMU which has had a release to the environment will be addressed in the permit. This Agency has been requested to assist Fort McClellan in identifying and evaluating all SWMU's on Fort McClellan.

c. Consultation Methodology. The information gathering and decision making process associated with this consultation was developed based on several key documents. These documents included the RCRA Facility assessment guide, the U.S. Environmental Protection Agency (EPA) National RCRA Corrective Action Strategy document, the proposed rule of 28 March 1986 (51 FR 10713) and those documents listed in the references. Through the use of these documents, and in conjunction with an onsite visit, those activities

classified as SWMU's were identified. Sites requiring further action either in terms of the RCRA facility assessment or an RCRA facility investigation were determined based on information gathered onsite and through the document review.

4. FINDINGS AND DISCUSSION.

a. General. A listing of SWMU's at Fort McClellan may be found in Appendix A. This listing, in most cases, contains the location, type and size of each unit; a description of activities and wastes at the unit; a description of sampling already performed and; a recommendation of future work required. Where possible, maps are provided for each site. Table 1 contains a summary of the SWMU's by name and type for reference purposes.

b. Hazardous Constituent Releases.

(1) Table 2 contains a list of those activities which have or may have released hazardous constituents to the environment. Further work must be conducted at these sites to determine to what extent a threat to human health or the environment may exist. Table 3 contains a summary of proposed environmental sampling for those SWMU's requiring further action.

(2) Fort McClellan sites 25 to 38 involve chemical agent training sites which have been evaluated under the U.S. Army's Installation Restoration Program (IRP) by the U.S. Army Toxic and Hazardous Material Agency (USATHAMA). The evaluation determined that sites 28, 29, 30, 32 and 38 do not require further action. Appendix A includes a general discussion of the findings and recommendations for these sites. Fort McClellan sites 39 to 41 are landfill sites which were also evaluated under the IRP. Those USATHAMA IRP sites requiring further action are listed and identified in Table 2. Further investigation of these sites will be conducted by the USATHAMA, with the exception of site 41. Action on site 41 is currently being addressed by USAEHA.

c. SWMU's with No Releases. Table 4 contains a list of those SWMU's at which no releases have occurred or the potential for a release was low. This list also includes those sites which are reported to have existed but for which, an exact site could not be identified. No further action is recommended for these sites.

d. EPA Coordination. Based on Fort McClellan's intention to file a Part B permit application for an HW storage facility, a meeting among Fort McClellan, the major command, the U.S. Army Environmental Hygiene Agency (USAEHA), the USATHAMA and the EPA Region IV representatives should be scheduled to finalize a list of those SWMU's which will require further action. In addition, a final sampling and analytical protocol should be developed and agreed upon for those sites requiring additional action. It is recommended that this meeting be scheduled as soon as possible as investigation of some of the identified sites is dependent on expiring funds.

TABLE 1. SWMU's FORT McCLELLAN

SWMU Site Number	SWMU	Site Type
FTMC-1	Underground Waste Oil Tanks	Waste Oil Tanks
FTMC-2	Pesticide Mixing and Storage Facility	Pesticide Management
FTMC-3	Herbicide Storage Facility	Pesticide Management
FTMC-4	Golf Course Pesticide Mixing and Storage Facility	Pesticide Management
FTMC-5	Wastewater Treatment Plant	Sludge Drying Beds
FTMC-6	Sanitary Landfill	Landfill
FTMC-7	Pentachlorophenol (PCP) Dip Tank	Wood Preservative Treatment Facility
FTMC-8	Small Weapons Repair Shop	Industrial Operation
FTMC-9	Vehicular Radiator Repair Shop	Weapons Cleaning and Repair
FTMC-10	Lead-Acid Battery Maintenance	Industrial Operation
FTMC-11	Boiler Plant No. 1	Radiator Repair
FTMC-12	Boiler Plant No. 2	Acid Neutralization
FTMC-13	Boiler Plant No. 3	Steam Generating
FTMC-14	Boiler Plant No. 4	Steam Generating
FTMC-15	Wash Racks With Associated Oil Water Separators	Steam Generating
FTMC-16	142d Explosives Ordnance Disposal (EOD) Open-Burning (OB)/Open-Detonation (OD) Area	Vehicle Washing
FTMC-17	U.S. Army Chemical School	Explosives Disposal Area
FTMC-18	Polychlorinated biphenyl (PCB) Transformer Storage Facility	Chemical Laboratory Storage
FTMC-19	Temporary Transformer Storage Area	Storage
FTMC-20	Chemical Decontamination Training Facility Incinerator	Incinerator
FTMC-21	Infectious/Pathological Waste Incinerator	Incinerator
FTMC-22	Fire Training Pit	Basin
FTMC-23	Lead-Acid Battery Maintenance Shop	Battery Neutralization
FTMC-24	DRMO HW/HM Storage	Storage
FTMC-25*	D and I (Detection and Identification Area)	Agent Training Area
FTMC-26*	Toxic Agent Shell Tapping Area	Agent Training Area
FTMC-27*	Lima Pond	Agent Disposal
FTMC-28*	Area T-4	Biological Stimulant Test Area
FTMC-29*	Area T-5	Agent Training Area
FTMC-30*	Area T-6	Agent Training Area
FTMC-31*	Area T-31	Agent Training Area
FTMC-32*	Area T-38	Agent Training Area
FTMC-33*	Area T-24A	Agent Training Area
FTMC-34*	Old Toxic Training Area	Agent Disposal Training
FTMC-35*	Range K	Agent Training Area
FTMC-36*	Range J	Agent Training Area
FTMC-37*	Old Water Hole	Agent Training and Disposal
FTMC-38*	HD Spill Sites	Agent Disposal
FTMC-39*	Old Landfill No.1	Disposal
FTMC-40*	Old Landfill No.2	Landfill
FTMC-41*	Old Landfill No.3	Landfill

* USATHAMA IRP Site.

TABLE 2. SWMU's REQUIRING FURTHER ACTION

SWMU Site Number	SWMU	Site Type
FTMC-1	Underground Waste Oil Tanks	Waste Oil Tanks
FTMC-6	Sanitary Landfill	Landfill
FTMC-7	PCP Dip Tank	Wood Preservative Treatment Facility
FTMC-8	Small Weapons Repair Shop	Industrial Operation Weapons Cleaning and Repair
FTMC-9	Vehicular Radiator Repair Shop	Industrial Operation Radiator Repair
FTMC-10*	Lead-Acid Battery Maintenance	Acid Neutralization
FTMC-16	142d EOD OB/OD Area	Explosives Disposal Area
FTMC-17	U.S. Army Chemical School	Chemical Laboratory
FTMC-22	Fire Training Pit	Basin
FTMC-23	Lead-Acid Battery Maintenance Shop	Battery Neutralization
FTMC-24*	DRMO HW/HM Storage	Storage
FTMC-25†	D and I (Detection and Identification Area)	Agent Training Area
FTMC-26†	Toxic Agent Shell Tapping Area	Agent Training Area
FTMC-27†	Lima Pond	Agent Disposal
FTMC-31†	Area T-31	Agent Training Area
FTMC-32†	Area T-38	Agent Training Area
FTMC-33†	Area T-24A	Agent Disposal Training
FTMC-34†	Old Toxic Training Area	Agent Training Area
FTMC-35†	Range K	Agent Training Area
FTMC-36†	Range J	Agent Training and Disposal
FTMC-39†	Old Landfill No.1	Landfill
FTMC-40†	Old Landfill No.2	Landfill
FTMC-41	Old Landfill No.3	Landfill

* This site has been identified to have had a release and qualifies this site for RFI.

† Site investigation (sampling and evaluation) to be conducted by USATHAMA.

TABLE 3. PROPOSED ENVIRONMENTAL SAMPLING AT SWMU's REQUIRING FURTHER ACTION

SWMU Site Number	Proposed Environmental Investigations
FTMC-1	Tank integrity testing
FTMC-6	Additional monitoring of inplace wells
FTMC-7	Test and remove tank; sample and remove soil beneath tank; install ground water monitoring wells, if necessary
FTMC-8	Sediment sampling
FTMC-9	Test drain discharge point and sample soil/sediment, if necessary
FTMC-10	Test drain discharge point and sample soil/sediment, if necessary
FTMC-16	Soil sampling
FTMC-17	Soil sampling
FTMC-22	Soil sampling
FTMC-23	Sediment sampling
FTMC-24	Soil sampling
FTMC-25*	Soil sampling
FTMC-26*	Soil sampling
FTMC-27*	Geophysical survey and sediment sampling
FTMC-31*	Soil sampling
FTMC-32*	Soil sampling
FTMC-33*	Soil sampling
FTMC-34*	Soil sampling
FTMC-35*	Soil sampling
FTMC-36*	Soil sampling
FTMC-39*	Geophysical survey, ground-water monitoring well installation and sampling
FTMC-40*	Geophysical survey, ground-water monitoring well installation and sampling
FTMC-41	Additional ground-water sampling and analysis

* Site investigation (sampling and evaluation) to be conducted by the USATHAMA IRP.

TABLE 4. SWMU's NOT REQUIRING FURTHER ACTION

SWMU Site Number	SWMU	Site Type
FTMC-2	Pesticide Mixing and Storage Facility	Pesticide Management
FTMC-3	Herbicide Storage Facility	Pesticide Management
FTMC-4	Golf Course Pesticide Mixing and Storage Facility	Pesticide Management
FTMC-5	Wastewater Treatment Plant	Sludge Drying Beds
FTMC-11	Boiler Plant No. 1	Steam Generating
FTMC-12	Boiler Plant No. 2	Steam Generating
FTMC-13	Boiler Plant No. 3	Steam Generating
FTMC-14*	Boiler Plant No. 4	Steam Generating
FTMC-18	PCB Transformer Storage Facility	Storage
FTMC-19	Temporary Transformer Storage Area	Storage
FTMC-20	Chemical Decontamination Training Facility Incinerator	Incinerator
FTMC-21	Infectious/Pathological Waste Incinerator	Incinerator
FTMC-28*	Area T-4	Biological Simulant Test Area
FTMC-29*	Area T-5	Agent Training Area
FTMC-30*	Area T-6	Agent Training Area
FTMC-37*	Old Water Hole	Agent Disposal
FTMC-38*	HD Spill Sites	Disposal

* Site evaluated under the USATHAMA IRP.

5. CONCLUSIONS.

a. Additional environmental sampling or site investigation is needed for those sites listed in Table 2. This is required, since either a release has occurred or the potential for a release to have occurred exists at these sites. The Defense Reutilization and Marketing Office (DRMO) hazardous materials (HM)/HW storage yard (FTMC-24) has been identified as having had a release and qualifies for RCRA Facility Investigation (RFI).

b. No further environmental sampling is recommended for the sites listed in Table 4. These sites either showed no evidence of a release or were reported sites, which could not be physically identified.

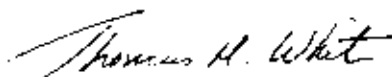
6. RECOMMENDATIONS. To ensure regulatory compliance, the following recommendations are made:

a. Coordinate with the EPA region IV to determine the final list of SWMU's which require further action.

b. Design a sampling and analytical plan for designated SWMU's, based on the EPA's finalized SWMU list for Fort McClellan. This plan should be based on this report and EPA recommendations and requirements.

7. TECHNICAL ASSISTANCE: Questions concerning this consultation may be referred to Mr. Thomas M. White or Chief, Waste Disposal Engineering Division, this Agency, AUTOVON 584-2024 or commercial (301) 671-2953.

8. REFERENCES. See Appendix B for a list of references.



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APPROVED:



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