



DEPARTMENT OF THE AIR FORCE

HEADQUARTERS 49TH FIGHTER WING (ACC)
HOLLOMAN AIR FORCE BASE, NEW MEXICO

HAFB 2003

3 DEC 2003

MEMORANDUM FOR NEW MEXICO ENVIRONMENT DEPARTMENT

Ms. Sandra Martin
Hazardous Waste Bureau
2905 Rodeo Park Dr., East
Santa Fe, NM 87505-6303



FROM: 49 CES/CEV
550 Tabosa Ave
Holloman AFB NM 88330-8458

SUBJECT: Hazardous and Solid Waste Amendments (HSWA) Quarterly Report for Jul – Sep 2003, EPA ID NM6572124422

1. In accordance with Module IV, Section E, of the Holloman AFB HSWA permit, attached please find the Jul – Sep 2003 Quarterly Report.
2. If you have any questions please contact Mr. Dan Holmquist at (505) 572-5395.

DAVID F. DeMARTINO, Lt Col, USAF
Base Civil Engineer

Attachment:
HSWA Quarterly Report, Jul – Sep 2003

cc (w/Atch):
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**HOLLOMAN AIR FORCE BASE
NEW MEXICO**

HAZARDOUS AND SOLID WASTE AMENDMENT

QUARTERLY ACTIVITY REPORT

EPA ID NM6572124422

**Activity Period:
July 1 to September 30, 2003**

I.0 INTRODUCTION

This quarterly report has been prepared in accordance with the Resource Conservation and Recovery Act (RCRA) Permit and the Hazardous and Solid Waste Amendments (HSWA) Permit for Holloman Air Force Base (HAFB or Holloman). This permit requires periodic reporting of activities related to corrective actions at Solid Waste Management Units (SWMUs) at HAFB.

The report summarizes activities and available data concerning corrective actions at actively remediated SWMUs across HAFB between July 1, 2003 and September 30, 2003. Table 1 briefly summarizes the status of each site undergoing the corrective action process. Table 1 provides the SWMU number, site name, corresponding Environmental Restoration Program (ERP) site number, the status of each site, the activities conducted during the reporting period and the schedule for additional activities (if needed).

Section 2.0 provides the details of specific activities such as soil excavation and sampling performed during this quarter. Figures and tables that provide details of recent activities at the site are presented as attachments. Section 3.0 summarizes planned future activities by site for the next quarter. The report certification statement is presented in Section 4.0

2.0 CORRECTIVE ACTION ACTIVITIES THIS QUARTER

Between July 1 and September 30, 2003, remediation activities were completed at the Fire Training Area (SWMU 39, 127, 135, 170 & 171). A landfarm was constructed at FT-31 to remediate hydrocarbons from petroleum contaminated sites at the Base. Excavation began at the BX Service Station (SS-17 or AOC-Q). Soil from the BX service station was treated in the new landfarm.

2.1 Old Fire Training Area FT-31 (SWMUs 39, 127, 135, 170, 171)

This is the site of the old fire training area at HAFB. A bioventing remediation system was operated at this site from approximately 1997 to 2001. The remediation system provided air to the subsurface in order to promote microbial growth. The microbes then consumed the petroleum hydrocarbons attached to the soil. However, the system was unable to remove recalcitrant hydrocarbon contamination from the soil. Between October 2002 and June 2003, approximately 20,000 tons of soil were removed for offsite disposal.

During this quarter, backfilling of the remaining excavations was completed. A new landfarm was constructed at the site. The landfarm consisting of two bermed cells, a fence with gates and four new groundwater monitoring wells was completed during the

third quarter. Additional information regarding the landfarm is presented in subsection 2.3.

2.2 BX Service Station (SS-17 or AOC-Q)

This is the site of the former Base Exchange (BX) Service Station. From 1990 to 2001, several hydrocarbon recovery systems operated at the site. Initially, hydrocarbon skimmer pumps were deployed to recover hydrocarbons. In 1996, a total fluids evacuation system was installed and began operation in October 1996. Operation of the system terminated in 2001 due to diminishing hydrocarbon recovery. However, periodic soil sampling indicated that significant hydrocarbon quantities still existed at the site.

From mid August to mid September 2003, excavation of petroleum contaminated soil was performed at the BX service station. A limited excavation was performed starting along the First Street side of the site. Approximately 7000 cubic yards of hydrocarbon contaminated soil was removed from the site. Contaminated soil was removed to a depth approximately 1 to 2 feet below the water table (approximately 7 feet below the ground surface) as necessary to remove hydrocarbon stained soil. Soil excavated from SS-17 was transported to the Landfarm at FT-31. **Attachment 1** is a map of SS-17 indicating the limits of the soil excavation and the locations of confirmation soil samples collected from the excavation walls. Summary tables of the confirmation soil sample analytical results are presented in **Attachment 2**. Soil excavation will resume in mid 2004 when funding for this activity is received.

2.3 Landfarm at FT-31

On August 25, 2003, NMED issued a temporary discharge application to operate a petroleum contaminated soil landfarm. The landfarm was used to treat soil from the BX service station (SS-17 or AOC -Q).

Construction of the landfarm began in mid July 2003. The landfarm and accompanying groundwater monitoring wells were installed and pre-treatment soil and groundwater sampling was performed in accordance with the groundwater discharge application submitted to NMED in June 2003. Four groundwater monitoring wells were installed at the landfarm as indicated in the discharge application. Additionally, two existing monitoring wells were incorporated into the groundwater monitoring network. A map of the landfarm and groundwater monitoring well locations is presented in **Attachment 3**. **Attachment 4** is a summary of the groundwater monitoring well network construction. Eight (8) pre-treatment surface soil samples were collected from the bottom of the landfarm prior to the initiation of landfarming. The samples were analyzed for TPH, VOCs and SVOCs as indicated in the permit application. **Attachment 5** is a summary table of pre-treatment soil conditions beneath the landfarm. Groundwater samples were collected from the monitoring well network surrounding the landfarm prior to initiation of

landfarming. **Attachment 6** is a summary table of pre-treatment groundwater conditions at the landfarm.

During construction of the berms, soil testing was performed to determine if berm material had been compacted as indicated in the groundwater discharge permit application. **Attachment 7** is an engineering soil laboratory report summarizing the compaction testing conducted by Southwest Engineering, Inc. of Las Cruces, New Mexico. All soil in the berms had been compacted to a least 95 %.

On August 22, 2003, NMED granted Holloman AFB temporary permission to operate the landfarm. A copy of the NMED letter granting temporary permission is presented in **Attachment 8**.

Approximately 7000 cubic yards of soil were treated in the landfarm. All the soil treated during this quarter was derived from SS-17 (BX Service Station). Each truck load of soil was manifested for the trip to the landfarm. **Attachment 9** is a summary of the manifests for soil from site SS-17 to the FT-31 Landfarm.

Each 6-inch lift of soil was treated and then removed from the cells. Eight soil samples, four from each cell were collected and analyzed to determine if the soil had been adequately treated. The cells were divided into equal areas and assigned a number. A random number generator was used to pick a grid section for treatment sample collection. **Attachment 10** is a schematic map of the landfarm indicating the cell selected for soil sampling. Also, the attached map indicates the approximate quantity of soil placed in the landfarm before treatment.

Results for landfarm treatment soil samples are presented in **Attachment 11**. These samples were collected to determine if soil had been successfully treated prior to removal from the site. In most cases, the soil was treated to below 100 mg/Kg petroleum hydrocarbons which is substantially less than the 940 mg/Kg concentration required by the landfarm discharge permit.

3.0 ACTIVITES FOR SCHEDULED FOR THE NEXT QUARTER

Activities for the next quarter (Fourth Quarter, October 1 to December 31, 2003) will include:

1. Submittal of the work plan for Ritas Draw (DP-62)
2. Submittal of the work plan for AOC-1001 (SS-61)
3. Submittal of the work plan for POL Yard Wash Rack and Tank (SWMU 123).
4. Submittal of the Closure Report for FT-31
5. Class 3 Permit Modification to remove sites from the KAFB Permit
6. Exploratory excavation pits at SS-59, the T-38 Cell.

4.0 CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to be the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Daniel K. Holmquist
Name

49 CES/CEVR
Organization

Remedial Project Manager
Position

Signature/Date

TABLES

TABLE 1
QUARTER 1, 2003 STATUS SUMMARY
(JULY 1 TO SEPTEMBER 30, 2003)
ONGOING CORRECTION ACTION SITES
HOLLOMAN AIR FORCE BASE, NEW MEXICO

SWMU NO.	SITE NAME	SITE STATUS	ACTIVITES CONDUCTED (THIS PERIOD)	SCHEDULED ACTIVITIES
39,127,135, 170 & 171	Fire Training Area (ERP Site FT-31)	Undergoing Corrective Action	Completion of North area excavation and backfill. Constructed and operated petroleum hydrocarbon soil landfarm on the site	Delivery of FT-31 Closure Report by 12/31/03
123	Building 704 Waste Oil Tank (ERP Site N/A)	Undergoing Corrective Action	Initiated revisions to the work plan based upon NMED comments.	Deliver to Base by 11/30/03. Delivery to NMED by 12/31/2003.
133	POL Yard Release (ERP Site SD-47)	Corrective Action Complete	None. Corrective action at the site was completed in Jan 1998.	Petition to remove site from RCRA Permit (Q4 2003).
136	King 1 Bio Vent Site (ERP Site)	Corrective Action Complete	None. Requested NFA status for site.	Petition to remove site from RCRA Permit (Q4 2003).
139 & 140	Lake Holloman (139) Lake Stinky (140)	Corrective Action Complete	None	Petition to remove the site from RCRA Permit (Q4 2003).
141	Pad 9 Washrack ERP Site	Site Requires Additional Characterization	None	No funding available at present time. Implement Phase II RFI work plan in FY05.

TABLE 1
QUARTER 1, 2003 STATUS SUMMARY
(JULY 1 TO SEPTEMBER 30, 2003)
ONGOING CORRECTION ACTION SITES
HOLLOMAN AIR FORCE BASE, NEW MEXICO

AOC-V	Officer's Club (EPR Site SS-57)	Undergoing Corrective Action	None	Submit work plan for activities in Q1 2004. Activities scheduled for Q3 2004
AOC-1	Chemical Agent Site (ERP Site DP-64)	Undergoing Corrective Action Preliminary Grid walk and visual site inspection for additional exposed agent conducted in FY 2000.	None. Awaiting approval of stringent Site Safety and Health Plan and funding for US Army support personnel.	Additional on-site investigations and actions await final approval of work plans and health and safety procedures. Work scheduled for FY04
AOC-3	Ammunition Disposal Site (ERP Site DP-63)	Undergoing Corrective Action PA/SI Completed 2000	Received comments from NMED concerning Final Report. FWENC preparing final report with incorporation of NMED comments	Report will be submitted to NMED in Q4.
AOC-4	West POL Fuel Spill Site	Corrective Action Complete	None. No funding available in 2004. If money becomes available, work plan for additional work will be prepared.	Preparation of a letter work plan to assess the extent of impacted soil beneath the SW corner of the tank farm basin.
AOC-1001	Building 1001 (ERP Site SS-61)	Undergoing Corrective Action	Prepared and submitted work plan to NMED.	Field work scheduled for Q1 2004.

TABLE 1
QUARTER 1, 2003 STATUS SUMMARY
(JULY 1 TO SEPTEMBER 30, 2003)
ONGOING CORRECTION ACTION SITES
HOLLOMAN AIR FORCE BASE, NEW MEXICO

148 to 154	Holloman Sewage Lagoons	Corrective Action Complete	Routine inspection and maintenance to fences.	Routine inspection and maintenance in FY04
229	T-38 Test Cell (ERP Site SS-59)	Undergoing Corrective Action	Submitted work plan for excavation and removal of soil in Q1, 2004.	Excavation and disposal of impacted soil planned for Q1 2004.
AOC-2	North Tower Site	Recently Discovered	None	Submit the work plan for additional characterization by Q4.
AOC-Q	BX Service Station (ERP Site SS-17)	Undergoing Corrective Action	Excavation, disposal and landfarming of soil from the site. Terminated activities in mid September due to depletion of funding. Approximately 7000 cubic yards of soil were excavated and treated.	Resume activities in 2004 with new funding
AOC-T	Main POL Spill (EPR Sites SS-02 and SS-05)	Undergoing Corrective Action	Developed work plans for additional excavation of contaminated soil.	Work plans to be delivered in November 2003. Excavation scheduled for Q2 of 2004.

LIST OF ATTACHMENTS

1. Map of BX Service Station with excavation limits and confirmation soil sample locations.
2. BX Service station confirmation samples analytical results.
3. Map of Landfarm and groundwater monitoring well network.
4. Summary table of landfarm monitoring well network construction
5. Summary table of landfarm groundwater monitoring well analytical results.
6. Summary table of landfarm pre-treatment soil sample analytical results.
7. Compaction soil tests of berms at the landfarm.
8. Copy of temporary permission to discharge letter from NMED.
9. Summary of manifests for soil from SS-17 to the landfarm.
10. Map of landfarm treatment sampling locations.
11. Summary of landfarm soil treatment analytical results.