



DEPARTMENT OF THE AIR FORCE

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

ENTERED

10 SEP 2001

MEMORANDUM FOR NEW MEXICO ENVIRONMENT DEPARTMENT

Attn: James P. Bearzi

New Mexico Environment Department-Hazardous Waste Bureau

P.O. Box 26110

Santa Fe NM 87502



FROM: 49 CES/CD

550 Tabosa Avenue

Holloman AFB NM 88330-8458

SUBJECT: Hazardous and Solid Waste Amendments (HSWA) Quarterly Reports for Oct 00-Mar 01 and Apr 01-Jun 01; EPA ID NM6572124422

1. In accordance with Module IV, Section E, of the Holloman AFB (HAFB) HSWA permit, attached please find the Oct 00-Mar 01 as well as the Apr-Jun 01 Quarterly Reports. The report covering Oct 00-Mar 01 combines the two quarters (4th qtr 2000 and 1st qtr 2001) as requested by HAFB in a letter dated 12 Apr 01. This letter was the result of a 5 Apr 01 meeting our Mr. Jose Gallegos had with Mr. Cornelius Amindyas and Dr. Stu Dinwiddie of your office in which pre-approval was granted on the condition that HAFB make the request in writing.

2. If you have any questions, please contact Mr. Jose Gallegos or Mr. Court Fesmire at (505) 572-5395.

Howard E. Moffitt
HOWARD E. MOFFITT

Deputy Base Civil Engineer

Attachments:

1. HSWA Quarterly Report for Oct 00-Mar 01
2. HSWA Quarterly Report for Apr-Jun 01

cc (w/Atchs):

Attn: Cornelius Amindyas
NMED-HWB
4131 Montgomery NE
Albuquerque, NM 87109

Attn: Allen Chang
USEPA, Region 6 (6 PD-N)
1445 Ross Ave, Ste 1200
Dallas TX 75202-2733

HSWA HAFB G/M/00-01

HOLLOMAN AIR FORCE BASE, NM

HAZARDOUS AND SOLID WASTE AMENDMENT

QUARTERLY REPORT

OCT 00-MAR 01

ATCH 1

I. INTRODUCTION

A. Pursuant to the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA), as amended by the RCRA Statute (42 U.S.C. 6701, et seq.), as amended by the Hazardous and Solid Waste Amendments (HSWA) of 1984, a permit has been issued to Holloman Air Force Base (HAFB or Holloman) to operate a hazardous waste disposal facility.

B. This Quarterly Report is consistent with the terms and conditions of the permit found under Module IV of Environmental Protection Agency (EPA) permit identification number NM6572124422. Module IV is also commonly referred to as the "HSWA permit" as its primary focus is requirements resulting from the HSWA.

II. STATUS OF SITE WORK COMPLETED

A. The following is a list of Solid Waste Management Units (SWMU) and Areas-of-Concern (AOC) listed on Holloman's HSWA permit (Table 1 below). Table 2 (Section IV) lists projected work for the next quarter, Apr-Jun 01. Section V of this report contains those units listed on Table A.2 of Holloman's HSWA permit (Table 3). Table 4, also in Section V and provided for cross-reference only, is a current listing of sites managed under Holloman's Environmental Restoration Program (ERP) as required by the Department of Defense's Defense Environmental Restoration Program or DERP. These tables include changes approved by the New Mexico Environment Department (NMED) per NMED letter dated 6 Feb 01. The changes are a result of a Class 3 Permit Modification proposed by HAFB in Jul 99.

Table 1 – Units Requiring Corrective Actions (Table A.1 of HSWA Permit)

No.	SWMU/AOC ID	ERP Site ID	Unit Name	Status	NFA Proposed	NFA Status
1	4	SD-08	Bldg. 131 O/WS	NFAR/SC/LTM	Jul-99	Disapproved
2	8	N/A	Bldg. 231 O/WS	NFAR/SC	Jul-99	Disapproved
3	19	N/A	Bldg. 638 O/WS	NFAR/SC	Jul-99	Disapproved
4	20	N/A	Bldg. 639 O/WS	NFAR/SC	Jul-99	Disapproved
5	39	N/A	Bldg. 1092 O/WS	CMI		N/A
6	82	SD-08	Bldg. 131 Washrack	SC/LTM	Jul-99	Disapproved
7	101	LF-10	Bldg. 121 Landfill	NFAR/SC/LTM	Jul-99	Disapproved
8	104	LF-29	Former Army Landfill	NFAR/SC/LTM		N/A
9	105	LF-19	Golf Course Landfill	SC/LTM	Jul-99	Disapproved
10	106	LF-01	Main Base Landfill	SC/LTM	Jul-99	Disapproved
11	108	LF-23	MOBSS Landfill Disposal Trench	SC/LTM	Jul-99	Disapproved
12	109	LF-10	Old Main Base Landfill	SC/LTM	Jul-99	Disapproved
13	111	RW-42	Radioactive Waste Disposal Area	SC	Jul-99	Disapproved
14	113A	OT-20	Sludge Disposal Trenches near Lagoons	SC	Jul-99	Disapproved
15	113B	DP-30/SD-33	Sludge Disposal Trenches near Fire Training Area	SC/LTM	Jul-99	Disapproved
16	114	OT-03	TEL Disposal Site	SC	Jul-99	Disapproved
17	115	LF-22	West Area Landfill #1 PCB Disposal Area	SC/LTM	Jul-99	Disapproved
18	116	LF-21	West Area Landfill #2	SC/LTM	Jul-99	Disapproved
19	118	OT-16	Bldg. 21 Pesticides Holding Tank	NFAR/SC/LTM	Jul-99	Disapproved
20	122	N/A	Bldg. 702 Waste Oil Tank	SC		N/A
21	123	N/A	Bldg. 704 Waste Oil Tank	NFAR/ASR	Jul-99	Disapproved
22	127	FT-31	Bldg. 1092 Waste Oil Tank	CMI		N/A

Table 1 – Units Requiring Corrective Actions (Table A.1 of HSWA Permit)

No.	SWMU/AOC ID	ERP Site ID	Unit Name	Status	NFA Proposed	NFA Status
23	130	SS-46	Taxiway 4 Tank 28	SC/LTM	Jul-99	Disapproved
24	132	OT-16	Bldg. 21 Entomology Leachfield	NFAR/SC/LTM	Jul-99	Disapproved
25	135	FT-31	Bldg. 1092 Oil/Water Separator Drainage Pit	CMI		N/A
26	136	N/A	Bldg. 1119 Washrack Drainage Area	SC		N/A
27	137	SS-38	Bldg. 1166 Test Track Drain Field	SC	Jul-99	Disapproved
28	139	N/A	Lake Holloman	SC	Jul-99	Disapproved
29	140	N/A	Lake Stinky	SC	Jul-99	Disapproved
30	141	SD-27	Pad 9 Drainage Pit	RFI/SC	Jul-99	Disapproved
31	165	SS-39	Bldg. 1176 Pond	NFA/SC	Jul-99	Disapproved
32	166	SD-25	MOBSS Drainage Lagoon	SC	Jul-99	Disapproved
33	170	FT-31	Fire Department Training Area 1	CMI		N/A
34	177	SS-39	Bldg. 1176 Sumps	RFI/SC/LTM	Jul-99	Disapproved
35	179	SS-39	Discharge Box	RFI	Jul-99	Disapproved
36	181	SS-39	Bldg. 1176 Drainage Trough	NFAR/SC/LTM	Jul-99	Disapproved
37	183	N/A	Air Base Sewer System	NFAR/SC	Jul-99	Disapproved
38	197	OT-14	Former Entomology Shop	SC	Jul-99	Disapproved
39	229	SS-59	T-38 Test Cell Fuel Spill Site	CMI		N/A
40	AOC-A	OT-16	Bldg. 21 Pesticide Rinsewater Spill Area	NFAR/SC/LTM	Jul-99	Disapproved
41	AOC-L	OT-37	Early Missile Test Site	SC	Jul-99	Disapproved
42	AOC-P	OT-44	Bldg. 301 Fuel Tank Leak	NFAR/SC/LTM	Jul-99	Disapproved
43	AOC-T	SS-02/SS-05	POL Storage Tank Leaks	CMI/LTM	Jul-99	Disapproved
44	AOC-U	N/A	Lost River Basin	SC	Jul-99	Disapproved
45	AOC-V	SS-57	Officer's Club	CMI		N/A
46	AOC-1001	SS-61	Building 1001 Fuel Spill Site	RI/RFI/RSI		N/A
47	AOC-FST837	N/A	Building 837 Fuel Septic Tank	SC		N/A

The following acronyms are used throughout Tables 1 to 4:

AOC	Area of Concern	RC	Response Complete
ASR	Awaiting State Review (i.e., NMED review)	RA	Remedial Action
CMI	Corrective Measure Implementation (includes LTO/RA-O)	RA-O	Remedial Action-Operation (same as LTO)
FFCA	Federal Facility Compliance Agreement	RI/FS	Remedial Investigation/Feasibility Study
IRA	Interim Remedial Action	RSI	Request for Supplemental Information (per NMED)
LTM	Long Term Monitoring	SC	Site Close-Out
LTO	Long Term Operation (same as RA-O)	SI	Site Investigation
NFA	No Further Action	WAA	Waste Accumulation Area
NFAR	No Further Action Recommendation (by base)		
PA/SI	Preliminary Assessment/Site Investigation		

III. SUMMARY OF FINDINGS

A. SWMUs 39, 127, 135, 170, 171 (ERP Site FT-31): The bioventing system, operational since Aug 96, was shut down from Oct 00 to Dec 00 due to funding shortfalls. However, the system was restarted in Feb 01 after minor repairs were completed to the system.

The system covers the entire site that is divided into three sections: the North Area (an area containing SWMUs 39, 127 and 135, excavated to cleanup goals in Sep 99), the South Area (SWMU 170) and the East Area (SWMU 171). A closure report, recommending NFA at the pertinent SWMUs, is being prepared for the North Area. The bioventing system is projected to continue operations through 2001 focusing on the South and East Areas.

B. SWMU 123: A closure report, dated Apr 99, was submitted to NMED for review and recommended NFA. NMED is reviewing the document and plans to submit comments during 2001.

C. SWMU 133 (ERP Site SD-47): The bioventing system at this site has remediated the soil to NMED soil cleanup levels. The system was shut down in Jan 98 and a NFA proposal submitted to NMED. Final NFA approval was granted by NMED on 6 Feb 01. Decommissioning of the site's remedial system is scheduled for FY02.

D. SWMU 136: A bioventing system, put into operation in Apr 97, was removed from the site in Sep 99 so that existing contaminated soil could be excavated. The excavation was part of a removal action to accelerate site cleanup. Excavation activity was completed in Dec 99.

A draft closure report was completed in Feb 00 that included excavation activities at SWMU 39, 127, 135 (site FT-31 North Area) and SWMU 136. However, final approval of the report was postponed due to discussions at NMED's Hazardous Waste Bureau (HWB) of possibly changing cleanup levels for Holloman. These discussions included a draft guidance paper addressing a Total Petroleum Hydrocarbon (TPH) based cleanup level. The TPH guidance was never finalized and, at that point, Holloman pursued finalizing the report.

Holloman decided that the initial draft report would be divided into two reports covering site FT-31 and SWMU 136, respectively. These reports are currently being reviewed and will be submitted to NMED during 2001.

E. SWMUs 139 and 140: In a NMED-HWB letter dated 30 Aug 00, Holloman received notice of an approval of NFA at Lake Holloman (SWMU 139) and Lake Stinky (SWMU 140). The decision for NFA was based on NMED's review of the HAFB Jun 97 document *Final Characterization Summary and No Further Action (NFA) Documentation: SWMUs 139 (Lake Holloman and the Ditch) and 140 (Lake Stinky)*, and the 1996 "Draft Final Risk Assessment Addendum for the Sewage Lagoons Closure Project".

A Class 3 permit modification will be submitted to remove the units from Table A.1. However, no schedule has been set for this action until HAFB is able to conduct a complete review of units on Table A.1 to identify other eligible units. The base will work with its HWB facility manager to identify these units.

F. SWMUs 148-154 (ERP Site WP-49): The former sewage lagoons have been out of service since 1996. Construction activities associated with the closure began in the fall of 1996. Construction activities were completed in Dec 97. Final activity, including revegetation, fence repairs and deed notification preparation and filing were completed during the second half of 1998. The closure report was submitted to NMED in Jul 99. The lagoons were inspected by the state in early 2000 to determine compliance with the closure requirements. NMED approved final closure of the lagoons in a 30 Jun 00 letter.

Holloman is working with the EPA Region VI office to finalize closure of the 1988 Federal Facility Compliance Agreement and transfer any remaining requirements into the base's RCRA Part B permit.

G. SWMU 229 (ERP Site SS-59): The T-38 Test Cell site, i.e., SWMU 229, uses a high vacuum dual phase extraction (HVDPE) remedial system. The system removes both subsurface vapor and liquid phases of the contaminant. The primary contaminant at the site is JP-4 jet fuel.

The HVDPE system was shut off during both quarters as the base prepared to convert the system to operate on a dual fuel system (jet fuel or natural gas). The conversion would allow the system to operate on the cleaner burning, less expensive natural gas and to operate on a 24-hour, 7-day a week schedule. Previously, the system was run on a 5-day a week, 10-hour a day schedule. Therefore, the conversion would ultimately accelerate site cleanup.

An adjunct system of 20 skimmer pumps was operational through 31 Jan 01. The pumps are designed to float at the interface of a light nonaqueous-phase liquid (LNAPL) and groundwater. This allows for LNAPL removal while minimizing groundwater uptake. Over 1,270 gallons of JP-4 were removed during the two quarters using the pumps. The pumps were shut down on 31 Jan to allow stabilization for fluid level measurements at the site. The JP-4 collected by the pumps was stored and will be reused in the future to operate the remedial system.

Work began on 9 Jan 01 (kickoff meeting) to convert the fuel system of the HVDPE unit to operate on either natural gas or jet fuel. The conversion included construction and installation of a natural gas line and modifications to the Thermal Oxidation Unit (TOU), a component of the HVDPE system. Gas line construction was completed on 15 Feb and TOU modifications completed on 25 Feb. However, as of 31 Mar 01, the system had not been restarted pending maintenance and minor repairs identified during system shut down.

A total of 234,979 gallons of product have been removed from the site as of 31 Mar 01 since the system began operations in May 96. The system is anticipated to operate through 2001.

H. SWMU 230 (ERP Site SS-60): The original remedial system, also an HDVPE unit, operated as a bioventing system since 25 Jun 99. The system was shut down on 12 Feb 01 following final state NFA approval per NMED letter dated 6 Feb 01.

The system operated a total of 2,952 hours from Oct 00 through 12 Feb 01. Approximately 21,555 pounds of contaminant were removed from the site since system startup in May 96. Decommissioning of the system (e.g., unit disassembly, proper well abandonment, etc.) is scheduled during FY02.

I. AOC-T (ERP Site SS-02/05): The soil vapor extraction (SVE) system at AOC-T, the POL Spill Sites, continued to operate during these quarters. To date, approximately 52,881 pounds of fuel contaminant have been removed. Between Oct 00 and Mar 01, the system operated for a total of 3,840 hours (over 85% availability).

In Nov 99, free product was discovered on the water table during routine soil sampling. Distribution lines and fuel transfer stations were immediately checked for leaks but none were identified. Two flexible axial peristaltic (FAP) pumps were added to the system in Feb 00 as an interim remedial action. An additional 635 gallons of LNAPL have since been removed using the FAP pumps.

Additional site investigative activity to identify the source of the LNAPL will be programmed in FY02. The installation of additional extraction wells is a possibility.

information will reflect changes that occur as a result of the Annual Unit Audit process or any other process requiring a permit modification.

B. Items listed in **bold type** in Table 3 indicate a question or concern expressed by either NMED or Holloman.

Table 3 – Units Not Requiring Corrective Actions (Table A.2 on HSWA Permit)

No.	Unit ID	ERP Site ID	Unit Name	Comment
1	1	N/A	Bldg. 55 O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
2	2	N/A	Bldg. 121 O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
3	3	N/A	Bldg. 130 O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
4	5	N/A	Bldg. 137 O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
5	6	N/A	Bldg. 193 O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
6	7	N/A	Bldg. 198 O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
7	9	N/A	Bldg. 282 O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
8	10	N/A	Bldg. 283 O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
9	11	N/A	Bldg. 300 O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
10	12	N/A	Bldg. 304 O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
11	13	N/A	Bldg. 304A O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
12	14	N/A	Bldg. 306 O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
13	15	N/A	Bldg. 309 O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
14	16	N/A	Bldg. 315 O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
15	17	N/A	Bldg. 316 O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
16	18	N/A	Bldg. 500 O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
17	21	N/A	Bldg. 702 O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
18	22	N/A	Bldg. 704 O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
19	23	N/A	Bldg. 800 O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
20	24	N/A	Bldg. 801 O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
21	25	N/A	Bldg. 805 O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
22	26	N/A	Bldg. 809 O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01

J. AOC-Q (ERP Site SS-17): A SVE system, installed in Sep 95, operates at the site. The system is designed to remove gasoline vapors from the vadose zone proximal to the base service station. The system is comprised of 16 soil vapor recovery trenches, 24 pressure/vapor monitoring probes and a TOU. During the months of Oct and Nov 00, the system was reconfigured and operated as a bioventing system. In Dec 00, the system was converted back to a SVE configuration and has operated as such since. Approximately 69,717 pounds of contamination have been removed by the SVE system as of 31 Mar 01.

K. AOC-V (ERP Site SS-57): The remedial system at AOC-V consists of an air sparge/SVE system and has been operational since Nov 96. The system is designed to remove contaminant in the vapor phase from the vadose zone and liquid phase contaminant from the saturated zone. The system operated for 2,062 hours during these quarters; an availability rate of over 90%. Holloman anticipates attaining cleanup levels during 2001; therefore, closure documentation is being prepared for the site and system operations will be limited through the remainder of the year.

IV. PROJECTED WORK FOR THE NEXT QUARTER – APR 01 TO JUN 01

A. The projected work planned for the next quarter is presented below, along with the estimated completion dates (ECD). Those tasks anticipated to continue through the next quarter are given an ECD of “Continuous”.

TABLE 2: Projected Work for Next Quarter – Apr to Jun 01

SWMU/AOC (ERP site)	TASK	ECD
39, 127, 135 (FT-31)	▪ Review site data for North Area as part of closure documentation preparation.	Sep 01
123	▪ Awaiting comment from NMED-HWB respective to NFAR.	Continuous
133 (SD-47)	▪ Site decommissioning including well abandonment.	FY02
136	▪ Preparation of closure documentation.	Sep 01
139 and 140	▪ Prepare Class 3 Permit Modification to remove units from Table A.1 of HSWA permit.	No Date Set
148-154 (WP-49)	▪ Work with EPA Region VI office toward final FFCA closure.	Dec 01
229 (SS-59)	▪ Restart remedial system following repairs/maintenance. ▪ Computer model development to use as an operations tool.	30 Jun 01 15 Sep 01
230 (SS-60)	▪ Site decommissioning including system disassembly and well abandonment.	FY02
AOC-T (SS-02/05)	▪ Long-Term Operation (LTO) of SVE System at AOC-T including continued operation of skimmer pumps to remove free product.	Continuous
AOC-Q (SS-17)	▪ LTO of SVE System at AOC-Q.	Continuous
AOC-V (SS-57)	▪ Continue system LTO. ▪ Review site data as part of closure documentation preparation.	Continuous Dec 01

V. ADDITIONAL INFORMATION

A. The information provided in Tables 3 and 4 is for reference only. Holloman will provide this information, at a minimum, as part of the first and third quarterly reports due each calendar year. The

Table 3 – Units Not Requiring Corrective Actions (Table A.2 on HSWA Permit)

No.	Unit ID	ERP Site ID	Unit Name	Comment
23	27	N/A	Bldg. 810 O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
24	28	N/A	Bldg. 822 O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
25	29	N/A	Bldg. 827 O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
26	30	N/A	Bldg. 830 O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
27	31	N/A	Bldg. 855 O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
28	32	N/A	Bldg. 868 O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
29	33	N/A	Bldg. 869 O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
30	34	N/A	Bldg. 902 O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
31	35	N/A	Bldg. 903 O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
32	36	N/A	Bldg. 1000 O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
33	37	N/A	Bldg. 1080 O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
34	38	N/A	Bldg. 1080A O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
35	40	N/A	Bldg. 1166 O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
36	41	N/A	Bldg. 1266 O/WS	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
37	42	SS-09	Bldg. 1 WAA	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
38	43	N/A	Bldg 55 WAA	Note 1: EPA identified unit during 1988 RFA as a SWMU; was never required to undergo further corrective action at that time.
39	44	N/A	Bldg 121 WAA	Note 1
40	45	N/A	Bldg 195 WAA	Note 1
41	46	N/A	Bldg 198 WAA	Note 1
42	47	N/A	Bldg 280 WAA	Note 1
43	48	N/A	Bldg 282 WAA	Note 1
44	49	N/A	Bldg 300 WAA	Note 1
45	50	N/A	Bldg 301 WAA	Note 1
46	51	N/A	Bldg 308 WAA	Note 1
47	52	N/A	Bldg 500 WAA	Note 1
48	53	N/A	Bldg 638 WAA	Note 1
49	54	N/A	Bldg. 702 WAA	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
50	55	N/A	Bldg. 702A WAA	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
51	56	N/A	Bldg. 807 WAA	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
52	57	N/A	Bldg 809 WAA	Note 1

Table 3 – Units Not Requiring Corrective Actions (Table 2 on HSWA Permit)

No.	Unit ID	ERP Site ID	Unit Name	Comment
53	58	N/A	Bldg 822 WAA	Note 1
54	59	N/A	Bldg 837 WAA	Note 1
55	60	N/A	Bldg 844 WAA	Note 1
56	61	N/A	Bldg 851 WAA	Note 1
57	62	N/A	Bldg 855 WAA	Note 1
58	63	N/A	Bldg. 867 WAA	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
59	64	N/A	Bldg 869 WAA	Note 1
60	65	N/A	Bldg 901 WAA	Note 1 (Repeat of SWMU 66?)
61	66	N/A	Bldg 901 WAA	Note 1 (Repeat of SWMU 65?)
62	67	N/A	Bldg 909 WAA	Note 1
63	68	N/A	Bldg 910 WAA	Note 1
64	69	N/A	Bldg 1080 WAA	Note 1
65	70	N/A	Bldg 1119 WAA	Note 1
66	71	N/A	Bldg. 1778A WAA	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
67	72	N/A	Bldg 1178A WAA	Note 1
68	73	N/A	Bldg 1266 WAA	Note 1
69	74	N/A	Bldg 7005 WAA	Note 1
70	75	N/A	DRMO Hazardous Storage Area	This is the current Permitted Container Storage Unit undergoing renewal; Listed twice on 1999 AUA invoice.
71	76	N/A	DRMO Non-Hazardous Waste Drain	Note 1
72	77	N/A	RATSCAT WAA	Note 1
73	78	N/A	Trim Pad 3 WAA	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
74	79	N/A	Bldg 21 Washrack	Note 1
75	80	N/A	Bldg 55 Washrack	Note 1
76	81	N/A	Bldg 121 Washrack	Note 1
77	83	N/A	Bldg 134 Washrack	Note 1
78	84	N/A	Bldg 137 Washrack	Note 1
79	85	N/A	Bldg 283 Washrack	Note 1
80	86	N/A	Bldg 304A Washrack	Note 1
81	87	N/A	Bldg 306 Washrack	Note 1
82	88	N/A	Bldg 309 Washrack	Note 1
83	89	N/A	Bldg 703 Washrack	Note 1
84	90	N/A	Bldg 801 Washrack	Note 1
85	91	N/A	Bldg. 816 Washrack	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
86	92	N/A	Bldg 822 Washrack	Note 1
87	93	N/A	Bldg 827 Washrack	Note 1
88	94	N/A	Bldg 830 Washrack	Note 1
89	95	N/A	Bldg 902 Washrack	EPA identified unit during 1988 RFA as a SWMU; was never required to undergo further corrective action at that time; Listed twice on 1999 AUA invoice.
90	96	N/A	Bldg 1080 Washrack	Note 1
91	97	N/A	Bldg 1119 Washrack	Note 1
92	98	N/A	Bldg 1166 Washrack	Note 1
93	99	N/A	Bldg 1266 Washrack	Note 1
94	100	N/A	Pad 9 Washrack	Note 1

Table 3 – Units Not Requiring Corrective Actions (Table A.2 on HSWA Permit)

No.	Unit ID	ERP Site ID	Unit Name	Comment
95	102	OT-04	Acid Trailer Burial Site	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
96	103	N/A	Causeway Rubble Disposal Area	Note 1
97	107	OT-11	Main Base Substation PCB Disposal Area	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
98	110	N/A	POL Rubble Disposal Area	Note 1
99	112	N/A	RATSCAT Disposal Area	Note 1
100	117	N/A	Wire Spool Disposal Area	Note 1
101	119	N/A	Bldg. 121 Waste Oil Tank	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
102	120	N/A	Bldg. 309 Waste Oil Tank	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
103	121	N/A	Bldg. 316 Waste Oil Tank	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
104	124	N/A	Bldg. 752 Waste Oil Tank	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
105	125	N/A	Bldg. 868 Fire Water Tank	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
106	126	N/A	Bldg. 1000 Waste Oil Tank	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
107	128	N/A	Bldg. 1166 Waste Oil Tank	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
108	129	SS-36	Bldg. 1191 Spill Tank	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
109	131	N/A	Waste Oil Bowsers	Note 1
110	133	SD-47	Bldg. 703 Washrack Discharge Ditch	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
111	134	OT-24	Bldgs. 920-924 Drainage Ditch	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
112	138	N/A	Bldg. 1166 O/WS Drainage Pit	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
113	142	N/A	Wastewater Influent Chamber	Note 1
114	143	N/A	Bar Screen	Note 1
115	144	N/A	Comminutor	Note 1
116	145	N/A	Grit Chamber	Note 1
117	146	N/A	Parshall Flume and Wet Well	Note 1
118	147	N/A	Splitter Box	Note 1
119	148	WP-49	Sewage Lagoon A	Closure approved Jun 00; NFA
120	149	WP-49	Sewage Lagoon B	Closure approved Jun 00; NFA
121	150	WP-49	Sewage Lagoon C	Closure approved Jun 00; NFA
122	151	WP-49	Sewage Lagoon D	Closure approved Jun 00; NFA
123	152	WP-49	Sewage Lagoon E	Closure approved Jun 00; NFA
124	153	WP-49	Sewage Lagoon F	Closure approved Jun 00; NFA
125	154	WP-49	Sewage Lagoon G	Closure approved Jun 00; NFA
126	155	N/A	Sludge Drying Beds	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
127	156	N/A	Imhoff Tanks (5)	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
128	157	N/A	ABLE 51 PCB Storage Area	Note 1
129	158	N/A	PCB Storage Bunker	Note 1

Table 3 – Units Not Requiring Corrective Actions (Table A.2 on HSWA Permit)

No.	Unit ID	ERP Site ID	Unit Name	Comment
130	159	N/A	Bldg 500 Lead Battery Storage Shelves	Note 1
131	160	N/A	Bldg 500 NiCad Battery Storage Area	Note 1
132	161	N/A	Bldg 844 Battery Storage Area	Note 1
133	162	N/A	DRMO Scrap Metal Storage Area	Note 1
134	163	N/A	DRMO Wood Pile	Note 1
135	164	N/A	Bldg. 1080 Pond	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
136	167	N/A	Test Shed Launch Area Collection Basin	Note 1
137	168	N/A	20,000 Pound Open Detonation Unit	This unit is the current Open Detonation Treatment Unit permitted in 1997; Listed twice on 1999 AUA invoice.
138	169	N/A	Burn Kettle	EPA identified unit during 1988 RFA as a SWMU; was never required to undergo further corrective action at that time; Listed twice on 1999 AUA invoice.
139	171	FT-31	Fire Department Training Area 2	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
140	172	N/A	300-Pound Open Burn Unit	Closure approved in Mar 00. Also listed on Table A.1, 1999 AUA invoice. Corrected via email and 5 Apr 01 meeting w/NMED-HWB (Cornelius Amindyas)
141	173	N/A	Bldg 198 Sand Trap	Note 1
142	174	N/A	Bldg 231 Hobby Shop Silver Recover Unit (SRU)	Note 1
143	175	N/A	Bldg 300 Cleaning Tank Sump	Note 1
144	176	N/A	Bldg 844 Sand Trap	Note 1
145	178	SS-36	Building 1191 Fuel Runoff Pits	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
146	180	N/A	Bldg 301 Outdoor Drainage Flume	Note 1
147	182	N/A	Bldg Floor Drains	Note 1
148	184	N/A	Wastewater Recirculating Line	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
149	185	N/A	Bldg 332 SRU	Note 1
150	186	N/A	Hospital SRU	Note 1
151	187	N/A	West Area SRU	Note 1
152	188	N/A	Bldg 161 Acid Neutralization Unit	Note 1
153	189	N/A	Bldg 282 Recycling Area	Note 1
154	190	N/A	Bldg 500 Battery Neutralization Unit	Note 1
155	191	N/A	Bldg 855 Concrete Pad	Note 1
156	192	OT-41	Coco Block House Disposal Well	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
157	193	N/A	Trash Dumpster	Note 1
158	194	N/A	SWMUs that no longer exist or could NOT be located.	Note 1
159	195	N/A	-"-"	Note 1
160	196	N/A	-"-"	Note 1
161	197	N/A	-"-"	Note 1
162	198	N/A	-"-"	Note 1

Table 3 – Units Not Requiring Corrective Actions (Table A.2 on HSWA Permit)

No.	Unit ID	ERP Site ID	Unit Name	Comment
163	199	N/A	SWMUs that no longer exist or could NOT be located.	Note 1
164	200	N/A	-""-	Note 1
165	201	N/A	-""-	Note 1
166	202	N/A	-""-	Note 1
167	203	N/A	-""-	Note 1
168	204	N/A	-""-	Note 1
169	205	N/A	-""-	Note 1
170	206	N/A	-""-	Note 1
171	207	N/A	-""-	Note 1
172	208	N/A	-""-	Note 1
173	209	N/A	-""-	Note 1
174	210	N/A	-""-	Note 1
175	211	N/A	-""-	Note 1
176	212	N/A	-""-	Note 1
177	212	SD-28	Bldg. 824 WAA	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
178	213	N/A	SWMUs that no longer exist or could NOT be located.	Note 1
179	214	N/A	-""-	Note 1
180	215	N/A	-""-	Note 1
181	216	N/A	-""-	Note 1
182	217	N/A	-""-	Note 1
183	218	N/A	-""-	Note 1
184	219	N/A	-""-	Note 1
185	220	N/A	-""-	Note 1
186	221	N/A	-""-	Note 1
187	222	N/A	-""-	Note 1
188	223	N/A	-""-	Note 1
189	224	N/A	-""-	Note 1
190	225	N/A	-""-	Note 1
191	226	N/A	-""-	Note 1
192	227	N/A	-""-	Note 1
193	228	N/A	-""-	Note 1
194	230	SS-60	Bldg. 828 Fuel Spill Site	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
195	231	LF-58	Incinerator/Landfill	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
196	AOC-B	N/A	Bldg 807 Test Cell Surface Spill Area	Note 2: This AOC required further investigation during 1988 RFA (pg. 7-63), but no explanation was given as to why the unit was not listed on HSWA Permit.
197	AOC-BBMS	N/A	Bare Base Mobility Squadron	PA/SI conducted under ERP. Site Closed.
198	AOC-C	N/A	Bldg 835 Spills	Note 2
199	AOC-D	SD-26	Bldg. 882 Spills	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
200	AOC-E	N/A	Bldg 903/909 Sand Blast Residues	Note 2

Table 3 – Units Not Requiring Corrective Actions (Table 2 on HSWA Permit)

No.	Unit ID	ERP Site ID	Unit Name	Comment
201	AOC-F	N/A	Asphalt Tank Spill Area	Note 3: 1988 RFA (pg. 7-64) EPA recommended further investigation that cannot be found, but no explanation was given as to why the unit is not listed in the HSWA permit.
202	AOC-G	DP-43	Atlas Substation PCB Spill	NFA proposed, Jul 99; NFA approved by NMED, 6 Feb 01
203	AOC-H	N/A	Chromic Acid Spill Area	Note 3
204	AOC-I	N/A	Fighter Wing Flight Line Spill	Note 4: 1988 RFA (pg. 7-65) EPA recommended further investigation that cannot be found, but no explanation was given as to why the unit is not listed in the permit; Closed by UST Bureau?
205	AOC-J	N/A	Herbicide Spill Area	Note 4
206	AOC-K	N/A	Northeast Bases Spill Area	Note 4
207	AOC-M	N/A	Bldg 19 Product Storage Tank Leak	Note 4
208	AOC-N	N/A	Bldg 137 Military Gas Tank Leak	1988 RFA (pg. 7-65) EPA recommended further investigation that cannot be found, but no explanation was given as to why the unit is not listed in the HSWA permit.
209	AOC-O	N/A	N/A	Bldg 296 Fuel Tank Leaks
210	AOC-PRI-A	N/A	N/A	Sewer Line from PRI Lab
211	AOC-Q	SS-17	BX Gas Station Fuel Line Leaks	Currently undergoing Remedial Action-Operation (RA-O) under Holloman's Environmental Restoration Program. Soil vapor extraction system in place.
212	AOC-R	SS-06	Fuel Line Spill Site No. 2	Closed by UST Bureau? The contaminant was JP4. Status is SC.
213	AOC-RR	N/A	Buried RR Cars	PA/SI conducted under ERP. Site Closed.
214	AOC-S	N/A	Leaking Underground Storage Tank	Closed by UST Bureau?
215	PRI-1	N/A	Primate Research Institute (PRI) Bldg 1264 WAA	Note 1
216	PRI-2	N/A	PRI bldg 1264 Solvent Burn Area	Note 1
217	PRI-3	N/A	PRI bldg 1264 Biological Incinerator	Note 1
218	PRI-4	N/A	PRI bldg 1264 Quarantine Area Incinerator	Note 1
219	PRI-5	N/A	PRI bldg 1264	Note 1
220	PRI-S	RW-51	Primate Research Lab Borehole Disposal Site	PRI Lab Borehole Disposal Site

Table 4 – Holloman AFB ERP Sites

No.	Site ID	Related SWMU/AOC	Site Description	Material Disposed	Status
1	LF-01	106	Main Base Landfill	Construction rubble, debris, domestic solid waste, small quantities of solvents, waste oils, and pesticides	SC, RA-O*, LTM
2	SS-02	AOC-T	POL Spill Site No. 1	JP-4 and other fuels	RA-O
3	OT-03	114	POL Tank Sludge Burial Site	Sludge, rags, iron fragments	SC/RC
4	OT-04	102	Acid Trailer Burial Site	Acid trailer lab equipment, bottles, spent rockets	SC/RC
5	SS-05	AOC-T	POL Spill Site No. 2	JP-4	RA-O
6	SS-06	AOC-R	Fuel Line Spill Site No. 2	JP-4	SC/RC
7	LF-07	110	Rubble Disposal Site	Wood, nails, sheet metal	SC/RC
8	SD-08	82	Refuse Collection Truck Washrack	Pesticides	SC, RA-O*, LTM
9	SS-09	42	Waste POL Drum Storage/Spill Area	Waste oils, hydraulic fluids, solvents, fuels	SC/RC
10	LF-10	101, 109	Old Main Base Landfill	Domestic wastes, solvents, incinerator ash, waste oils	SC w/LTM
11	OT-11	107	Main Base Electrical Substation	PCBs	SC/RC
12	SS-12	AOC-K	Fuel Line Spill Site No. 1	JP-4	SC/RC
13	SS-13	AOC-J	Sodium Arsenite Spill Site	Sodium arsenite (herbicide)	SC/RC
14	OT-14	197	Former Entomology Shop	Pesticides	SC, RA-O*
15	SD-15	80	Refrigeration/Heat Shop Washrack	Sulfuric Acid	SC/RC
16	OT-16	AOC-A, 118, 132	Existing Entomology Shop	Pesticides	SC w/LTM
17	SS-17	AOC-Q	BX Service Station Fuel Leak Area	Gasoline	RA-O
18	SS-18	AOC-H	Chromic Acid Spill Site	Chromic acid	SC/RC
19	LF-19	105	Golf Course Landfill	Grass clippings, rodenticides	SC w/LTM
20	OT-20	113A	Wastewater Treatment Plant Grit Burial Site	Sludge from grit chamber	SC/RC
21	LF-21	116	West Area Landfill No. 2	Paper bags, boxes, boards	SC w/LTM
22	LF-22	115	West Area Landfill No. 1	Plastic sheets, boxes, cans	SC w/LTM
23	LF-23	108	MOBSS Landfill	Diazinon, dibromochloromethane, construction debris, drums, buckets	SC w/LTM
24	OT-24	134	Former Equipment Maintenance Area	Cleaners, waste solvents, oils	SC/RC
25	SD-25	166	Possible Drainage Lagoon Disposal Site	Pesticides, HTH, solvents	SC/RC
26	SS-26	AOC-D	Possible Missile Fuel Spill Site	Waste fuels	SC/RC
27	SD-27	141	Pad 9 Washrack Area	Radioactive materials	SC/RC
28	SD-28	212	Former North Area Washrack	Oils, detergents, fuels	SC/RC
29	LF-29	104	Former Army Landfill	Spent munitions and missiles	SC w/LTM
30	DP-30	113B	Grease Trap Disposal Pits	Waste from grease trap	SC w/LTM
31	FT-31	39, 127, 135, 170, 171	Fire Department Training Area	Waste oils, solvents, fuels	RA-O

Table 4 – Holloman AFB ERP Sites

No.	Site ID	Related SWMU/AOC	Site Description	Material Disposed	Status
32	OT-32	PRI-A	Sewer Lines from Primate Research Lab	Carbon-14, iodine, tritium, solvents	SC/RC
33	SD-33	113B	Cooking Grease Disposal Pits	Cooking grease	SC w/LTM
34	OT-34	N/A	Spent Munitions Burial Site	Spent munitions	SC/RC
35	OT-35	PRI-5	Spent Solvent Disposal Area	Radioactive tracers, solvents	SC/RC
36	SS-36	129, 178	Unconventional Fuel Spill (Storage) Site	Fuels (UDMH, aniline, JP-4, nitric acid, IRFNA, IWFNA, LOX, JP-X, dyes, solid rocket propellant), solvents, TCE	SC/RC
37	OT-37	AOC-L	Early Missile Testing Site	Fuels, lead oxide, nitrate compounds, acids	SC/RC
38	OT-38	137, 138	Sled Test Maintenance Area	Waste oils, solvents, paint strippers	SC/RC
39	SS-39	165, 167, 177, 179, 181	Missile Fuel Spill Area	Oxidizers, fuels	SC w/LTM
40	LF-40	103	Causeway Rubble Disposal Site	Concrete rubble	SC/RC
41	OT-41	192	Coco Blockhouse Borehole Disposal Site	Propellants, oxidizers	SC/RC
42	RW-42	111	Radioactive Material Burial Site	Radioactive material, solvents	SC/RC
43	DP-43	AOC-G	Atlas Electrical Substations	PCBs	SC/RC
44	OT-44	AOC-P	Bldg 301 - Aircraft Maintenance Hangar	Heating oil, fuel	SC w/LTM
45	OT-45	AOC-O	Old AGE Refueling Station	Gasoline, JP-4, diesel fuel	SC/RC
46	SS-46	AOC-S, 130	JP-4 Spill Site	JP-4	SC w/LTM
47	SD-47	21, 22, 133	POL Washrack Discharge Area	Waste JP-4	SC w/LTM
48	SS-48	AOC-N	Military Gas Station	Gasoline	SC w/LTM
49	WP-49	139, 140, 148-154, 155, 156, 184	Sewage Lagoons	Hazardous wastes	SC, RA-O*
50	WP-50	N/A	Waste Disposal Pit	Cans, drums	SC/RC
51	RW-51	PRI-S	Primate Research Lab Borehole Disposal Site	Radioactive material, solvents	SC/RC
52	OT-52	N/A	Boles and San Andres Well Field Area	None	SC/RC
53	OT-53	N/A	Bonito Lake	None	SC/RC
54	OT-54	N/A	Silver City Radar Site	None	SC/RC
55	OT-55	N/A	El Paso Radar Site	None	SC/RC
56	SS-56	N/A	West Ramp Fuel Spill Area	Fuels	SC w/LTM
57	SS-57	AOC-V	Officer's Club	Diesel, sulfuric compounds	RA-O
58	LF-58	231	Incinerator Landfill	Ash from unconventional fuels, photographic films	SC/RC
59	SS-59	19, 20, 229	T-38 Test Cell Fuel Spill Site	JP-4	RA-O

Table 4 – Holloman AFB ERP Sites

No.	Site ID	Related SWMU/AOC	Site Description	Material Disposed	Status
60	SS-60	230	Building 828 Fuel Spill Site	Gasoline, JP-4, diesel fuel	SC/RC
61	SS-61	AOC-1001	Building 1001 Fuel Spill Site	Fuels	RI
62	DP-62	AOC-Rita's Draw	Rita's Draw Disposal Pit	Unknown	PA/SI
63	DP-63	AOC-Munitions Yard	Ammunition Yard Disposal Pit	Explosives, fuel	PA/SI
64	DP-64	AOC-1	Chemical Agent Site	Chemical agent identification sets (CAIS)	IRA

* Some type of cap or cover is maintained at these sites; therefore, RA-O is required in the form of inspections and cap maintenance.

HOLLOMAN AIR FORCE BASE, NM

HAZARDOUS AND SOLID WASTE AMENDMENT

QUARTERLY REPORT

APR-JUN 01

ATCH 2

I. INTRODUCTION

A. Pursuant to the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA), as amended by the RCRA Statute (42 U.S.C. 6701, et seq.), as amended by the Hazardous and Solid Waste Amendments (HSWA) of 1984, a permit has been issued to Holloman Air Force Base (HAFB or Holloman) to operate a hazardous waste disposal facility.

B. This Quarterly Report is consistent with the terms and conditions of the permit found under Module IV of Environmental Protection Agency (EPA) permit identification number NM6572124422. Module IV is also commonly referred to as the "HSWA permit" as its primary focus is requirements resulting from the HSWA.

II. STATUS OF SITE WORK COMPLETED

A. The following is a list of Solid Waste Management Units (SWMU) and Areas-of-Concern (AOC) listed on Holloman's HSWA permit (Table 1). The table includes changes approved by the New Mexico Environment Department (NMED) as a result of a Class 3 Permit Modification per NMED letter dated 6 Feb 01.

Table 1 – Units Requiring Corrective Actions (Table A.1 of HSWA Permit)

No.	SWMU/AOC ID	ERP Site ID	Unit Name	Status	NFA Proposed	NFA Status
1	4	SD-08	Bldg. 131 O/WS	NFAR/SC/LTM	Jul-99	Disapproved
2	8	N/A	Bldg. 231 O/WS	NFAR/SC	Jul-99	Disapproved
3	19	N/A	Bldg. 638 O/WS	NFAR/SC	Jul-99	Disapproved
4	20	N/A	Bldg. 639 O/WS	NFAR/SC	Jul-99	Disapproved
5	39	N/A	Bldg. 1092 O/WS	CMI		N/A
6	82	SD-08	Bldg. 131 Washrack	SC/LTM	Jul-99	Disapproved
7	101	LF-10	Bldg. 121 Landfill	NFAR/SC/LTM	Jul-99	Disapproved
8	104	LF-29	Former Army Landfill	NFAR/SC/LTM		N/A
9	105	LF-19	Golf Course Landfill	SC/LTM	Jul-99	Disapproved
10	106	LF-01	Main Base Landfill	SC/LTM	Jul-99	Disapproved
11	108	LF-23	MOBSS Landfill Disposal Trench	SC/LTM	Jul-99	Disapproved
12	109	LF-10	Old Main Base Landfill	SC/LTM	Jul-99	Disapproved
13	111	RW-42	Radioactive Waste Disposal Area	SC	Jul-99	Disapproved
14	113A	OT-20	Sludge Disposal Trenches near Lagoons	SC	Jul-99	Disapproved
15	113B	DP-30/SD-33	Sludge Disposal Trenches near Fire Training Area	SC/LTM	Jul-99	Disapproved
16	114	OT-03	TEL Disposal Site	SC	Jul-99	Disapproved
17	115	LF-22	West Area Landfill #1 PCB Disposal Area	SC/LTM	Jul-99	Disapproved
18	116	LF-21	West Area Landfill #2	SC/LTM	Jul-99	Disapproved
19	118	OT-16	Bldg. 21 Pesticides Holding Tank	NFAR/SC/LTM	Jul-99	Disapproved
20	122	N/A	Bldg. 702 Waste Oil Tank	SC		N/A
21	123	N/A	Bldg. 704 Waste Oil Tank	NFAR/ASR	Jul-99	Disapproved
22	127	FT-31	Bldg. 1092 Waste Oil Tank	CMI		N/A
23	130	SS-46	Taxiway 4 Tank 28	SC/LTM	Jul-99	Disapproved
24	132	OT-16	Bldg. 21 Entomology Leachfield	NFAR/SC/LTM	Jul-99	Disapproved
25	135	FT-31	Bldg. 1092 Oil/Water Separator Drainage Pit	CMI		N/A
26	136	N/A	Bldg. 1119 Washrack Drainage Area	SC		N/A

Table 1 – Units Requiring Corrective Actions (Table A.1 of HSWA Permit)

No.	SWMU/AOC ID	ERP Site ID	Unit Name	Status	NFA Proposed	NFA Status
27	137	SS-38	Bldg. 1166 Test Track Drain Field	SC	Jul-99	Disapproved
28	139	N/A	Lake Holloman	NFA/SC	Jul-99	Disapproved
29	140	N/A	Lake Stinky	NFA/SC	Jul-99	Disapproved
30	141	SD-27	Pad 9 Drainage Pit	RFI/SC	Jul-99	Disapproved
31	165	SS-39	Bldg. 1176 Pond	NFA/SC	Jul-99	Disapproved
32	166	SD-25	MOBSS Drainage Lagoon	SC	Jul-99	Disapproved
33	170	FT-31	Fire Department Training Area 1	CMI		N/A
34	177	SS-39	Bldg. 1176 Sumps	RFI/SC/LTM	Jul-99	Disapproved
35	179	SS-39	Discharge Box	RFI	Jul-99	Disapproved
36	181	SS-39	Bldg. 1176 Drainage Trough	NFAR/SC/LTM	Jul-99	Disapproved
37	183	N/A	Air Base Sewer System	NFAR/SC	Jul-99	Disapproved
38	197	OT-14	Former Entomology Shop	SC	Jul-99	Disapproved
39	229	SS-59	T-38 Test Cell Fuel Spill Site	CMI		N/A
40	AOC-A	OT-16	Bldg. 21 Pesticide Rinsewater Spill Area	NFAR/SC/LTM	Jul-99	Disapproved
41	AOC-L	OT-37	Early Missile Test Site	SC	Jul-99	Disapproved
42	AOC-P	OT-44	Bldg. 301 Fuel Tank Leak	NFAR/SC/LTM	Jul-99	Disapproved
43	AOC-T	SS-02/SS-05	POL Storage Tank Leaks	CMI/LTM	Jul-99	Disapproved
44	AOC-U	N/A	Lost River Basin	SC	Jul-99	Disapproved
45	AOC-V	SS-57	Officer's Club	CMI		N/A
46	AOC-1001	SS-61	Building 1001 Fuel Spill Site	RI/RFI/RSI		N/A
47	AOC-FST837	N/A	Building 837 Fuel Septic Tank	SC		N/A

The following acronyms are used throughout Tables 1:

AOC	Area of Concern	RC	Response Complete
ASR	Awaiting State Review (i.e., NMED review)	RA	Remedial Action
CMI	Corrective Measure Implementation (includes LTO/RA-O)	RA-O	Remedial Action-Operation (same as LTO)
FFCA	Federal Facility Compliance Agreement	RI/FS	Remedial Investigation/Feasibility Study
IRA	Interim Remedial Action	RSI	Request for Supplemental Information (per NMED)
LTM	Long Term Monitoring	SC	Site Close-Out
LTO	Long Term Operation (same as RA-O)	SI	Site Investigation
NFA	No Further Action	WAA	Waste Accumulation Area
NFAR	No Further Action Recommendation (by base)		
PA/SI	Preliminary Assessment/Site Investigation		

III. SUMMARY OF FINDINGS

A. SWMUs 39, 127, 135, 170, 171 (ERP Site FT-31): The bioventing system, operational since Aug 96, was shut down during the month of Apr for minor maintenance. The system was restarted in May and operated through the remainder of the quarter, except for periodic system checks.

The system covers the entire site that is divided into three sections: the North Area (an area containing SWMUs 39, 127 and 135, excavated to cleanup goals in Sep 99), the South Area (SWMU 170) and the East Area (SWMU 171). A closure report, recommending NFA for the North Areas SWMUs, is being prepared and projected for submittal to the NMED-HWB towards the end of Dec 01. The bioventing system is projected to continue operations through 2001 focusing on the South and East Areas.

B. SWMU 123: A closure report, dated Apr 99, was submitted to NMED for review and recommended NFA. NMED is reviewing the document and plans to submit comments during 2001.

C. SWMU 133 (ERP Site SD-47): The bioventing system at this site has remediated the soil to NMED soil cleanup levels. The system was shut down in Jan 98 and a NFA proposal submitted to

NMED. Final NFA approval was granted by NMED on 6 Feb 01. Decommissioning of the site's remedial system is scheduled for FY02.

D. SWMU 136: A bioventing system, put into operation in Apr 97, was removed from the site in Sep 99 so that existing contaminated soil could be excavated. The excavation was part of a removal action to accelerate site cleanup. Excavation activity was completed in Dec 99.

A draft closure report was completed in Feb 00 that included excavation activities at site FT-31's North Area and SWMU 136. However, final approval of the report was postponed due to discussions at NMED's Hazardous Waste Bureau (HWB) of possibly changing cleanup levels for Holloman. These discussions included a draft guidance paper addressing a Total Petroleum Hydrocarbon (TPH) based cleanup level. The TPH guidance was never finalized and, at that point, Holloman pursued finalizing the report.

Holloman decided that the initial draft report would be divided into two reports covering site FT-31 and SWMU 136, respectively. A final draft report is being reviewed for SWMU 136. The projected submittal date to NMED is Sep 01.

E. SWMUs 139 and 140: In a NMED-HWB letter dated 30 Aug 00, Holloman received notice of an approval of NFA at Lake Holloman (SWMU 139) and Lake Stinky (SWMU 140). The decision for NFA was based on NMED's review of the HAFB Jun 97 document *Final Characterization Summary and No Further Action (NFA) Documentation: SWMUs 139 (Lake Holloman and the Ditch) and 140 (Lake Stinky)*, and the 1996 "Draft Final Risk Assessment Addendum for the Sewage Lagoons Closure Project".

A Class 3 permit modification will be submitted to remove the units from Table A.1. However, no schedule has been set for this action until HAFB is able to conduct a complete review of units on Table A.1 to identify other eligible units. The base will work with its HWB facility manager to identify these units.

F. SWMUs 148-154 (ERP Site WP-49): The former sewage lagoons have been out of service since 1996. Construction activities associated with the closure began in the fall of 1996. Construction activities were completed in Dec 97. Final activity, including revegetation, fence repairs and deed notification preparation and filing were completed during the second half of 1998. The closure report was submitted to NMED in Jul 99. The lagoons were inspected by the state in early 2000 to determine compliance with the closure requirements. NMED approved final closure of the lagoons in a 30 Jun 00 letter.

Holloman is working with the EPA Region VI office to finalize closure of the 1988 Federal Facility Compliance Agreement and transfer any remaining requirements into the base's RCRA Part B permit.

G. SWMU 229 (ERP Site SS-59): The T-38 Test Cell site, i.e., SWMU 229, uses a high vacuum dual phase extraction (HVDPE) remedial system. The system removes both subsurface vapor and liquid phases of the contaminant. The primary contaminant at the site is JP-4 jet fuel. The system began operations in May 96.

The HVDPE system was shut off during most of the quarter as system repairs were completed following system modifications conducted during the previous quarter. However, on 25 Jun the system

was successfully restarted briefly (47 hours) to check recent repairs and to support data collection for site modeling. Also during this time, site conditions were assessed as to the current nature and extent of the existing JP-4 subsurface plume using fluid level measurements and bail down tests.

An adjunct system of 20 skimmer pumps continued operations and aided in removing an additional 120 gallons of JP-4. A total of 236,097 gallons of product have been removed from the site as of 30 Jun 01. The system is anticipated to operate through 2001.

H. SWMU 230 (ERP Site SS-60): The original remedial system, also an HDVPE unit, operated as a bioventing system since 25 Jun 99. The system was shut down on 12 Feb 01 following final state NFA approval per NMED letter dated 6 Feb 01.

The system operated a total of 2,952 hours from Oct 00 through 12 Feb 01. Approximately 21,555 pounds of contaminant were removed from the site since system startup in May 96. Decommissioning of the system (e.g., unit disassembly, proper well abandonment, etc.) is scheduled during FY02.

I. AOC-T (ERP Site SS-02/05): The soil vapor extraction (SVE) system at AOC-T, the POL Spill Sites, continued to operate during this quarter. The system began operations in Apr 95. The system operated for a total of 2,184 hours, or 91 days, during this reporting period (100% availability).

In Nov 99, free product was discovered on the water table during routine soil sampling. Distribution lines and fuel transfer stations were immediately checked for leaks but none were identified. Two flexible axial peristaltic (FAP) pumps were added to the system in Feb 00 as an interim remedial action. To date, a total of 665 gallons of LNAPL have been removed using the FAP pumps. Overall, approximately 53,970 pounds of fuel contaminant have been removed from the site using the SVE system.

Additional site investigative activity to identify the source of the LNAPL will be programmed in FY02. The installation of additional extraction wells is a possibility.

J. AOC-Q (ERP Site SS-17): A SVE system, installed in Sep 95, operates at the site. The system is designed to remove gasoline vapors from the vadose zone proximal to the base service station. The system is comprised of 16 soil vapor recovery trenches, 24 pressure/vapor monitoring probes and a thermal oxidation unit.

During this quarter, the system operated for 1,680 hours. Approximately 530 pounds of contamination were removed during this time. The total mass contaminant removed since the system became operational is approximately 70,247 pounds.

K. AOC-V (ERP Site SS-57): The remedial system at site SS-57 consists of an air sparge/SVE system and has been operational since Nov 96. The system is designed to remove contaminant in the vapor phase from the vadose zone and liquid phase contaminant from the saturated zone.

The system operated on a 13-hour cycle. This quarter the system operated for 940 hours. Since this site is ready for closure, operations are limited. Holloman anticipates attaining cleanup levels during 2001; therefore, closure documentation is being prepared for the site and system operations will be limited through the remainder of the year.

IV. PROJECTED WORK FOR THE NEXT QUARTER – JUL TO SEP 01

A. The projected work planned for the next quarter is presented below, along with the estimated completion dates (ECD). Those tasks anticipated to continue through the next quarter are given an ECD of “Continuous”.

TABLE 2: Projected Work for Next Quarter – Jul to Sep 01

SWMU/AOC (ERP site)	TASK	ECD
39, 127, 135 (FT-31)	▪ Review site data for North Area as part of closure documentation preparation.	Dec 01
123	▪ Awaiting comment from NMED-HWB respective to NFAR.	Continuous
133 (SD-47)	▪ Site decommissioning including well abandonment.	FY02
136	▪ Preparation of closure documentation.	Sep 01
139 and 140	▪ Prepare Class 3 Permit Modification to remove units from Table A.1 of HSWA permit.	No Date Set
148-154 (WP-49)	▪ Work with EPA Region VI office toward final FFCA closure.	Dec 01
229 (SS-59)	▪ Restart remedial system following repairs/maintenance.	30 Jun 01
	▪ Computer model development to use as an operations tool.	15 Sep 01
230 (SS-60)	▪ Site decommissioning including system disassembly and well abandonment.	FY02
AOC-T (SS-02/05)	▪ Long-Term Operation (LTO) of SVE System at AOC-T including continued operation of skimmer pumps to remove free product.	Continuous
AOC-Q (SS-17)	▪ LTO of SVE System at AOC-Q.	Continuous
AOC-V (SS-57)	▪ Continue system LTO.	Continuous
	▪ Review site data as part of closure documentation preparation.	Dec 01