



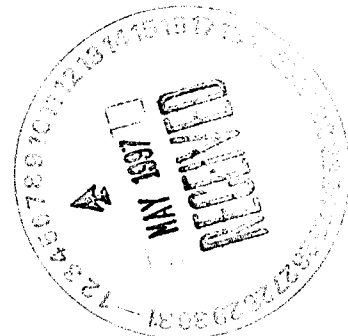
DEPARTMENT OF THE AIR FORCE

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

01 MAY 1997

MEMORANDUM FOR NEW MEXICO ENVIRONMENT DEPARTMENT

Attn: Cornelius Amindyas
Hazardous & Radioactive Materials Bureau
P.O. Box 26110
Santa Fe NM 87502



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

SUBJECT: Hazardous and Solid Waste Amendment (HSWA) Quarterly Report (Jan-Mar 97)

1. In accordance with Module IV, Section E of Holloman AFB's HSWA permit, attached please find the Jan-Mar 97 Quarterly Report.
2. If you have any questions, please contact Warren Neff at (505) 475-5395.

Howard E. Moffitt
HOWARD E. MOFFITT
Deputy Base Civil Engineer

Attachment:
HSWA Quarterly Report

cc: w/Atch

Mr Rich Mayer
US Environmental Protection Agency, Region 6
Hazardous Waste Management Division
1445 Ross Ave
Dallas TX 75202-2733

Mr. Allen Chang
US Environmental Protection Agency, Region 6
Hazardous Waste Management Division
1445 Ross Ave
Dallas TX 75202-2733

Ms Julie Jacobs
New Mexico Environment Department
Groundwater Protection & Remediation Bureau
1190 St Francis Dr
Santa Fe NM 87502

Mr Jerry Bober
New Mexico Environment Department
Hazardous & Radioactive Materials Bureau
P.O. Box 26110
Santa Fe NM 87502

HOLLOMAN AIR FORCE BASE, NM

HAZARDOUS AND SOLID WASTE AMENDMENT

QUARTERLY REPORT

JAN-MAR 97

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 of 1984 (HSWA), a permit has been issued to Holloman AFB 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, Section E.

II. DESCRIPTION OF WORK COMPLETED.

A. The following is a list of solid waste management units (SWMUs) and Installation Restoration Program (IRP) sites investigated under the IRP program. Also listed are the site descriptions and status as of this quarter.

SUMMARY OF HOLLOMAN AFB IRP/SWMU SITES

IRP/ SWMU #	Site Description	Material Disposed	Dates of Operation	Status
1/106	Main Base Landfill	Construction rubble, small quantities of solvents, waste oil, and pesticides	1958-Present	SC/LTM
2/AOC-T	POL Spill Site No. 1	JP-4 and other fuels	1960-1970s	LTO
3/114	POL Tank Sludge Burial Site	Sludges, rags, iron fragments	1955-1975	SC
4/102	Acid Trailer Burial Site	Acid trailer, lab equipment, bottles, spent rockets	1958	SC
5/AOC-T	POL Spill Site No. 2	JP-4	1978	LTO
6/AOC-R	Fuel Line Spill Site No. 2	JP-4	1979	SC
7/110	Rubble Disposal Site	Wood, nails, sheet metal	1965 - Present	SC
8/82	Refuse Collection Truck Washrack	Pesticides	1970s	SC/LTM
9/42	POL Drum Storage/Spill Area	Waste oils, solvents, hydraulic fluid, fuels	1965-1980	SC
10/101,109	Old Main Base Landfill	Domestic waste, incinerator ash, solvents, waste oil	1942-1958	SC/LTM
11/107	Main Base Electrical Substation	PCBs	Unknown-1979	SC
12/AOC-K	Fuel Line Spill Site No. 1	JP-4	1975	SC

IRP/ SWMU #	Site Description	Material Disposed	Dates of Operation	Status
13/AOC-J	Sodium Arsenite Spill Site	Sodium Arsenite	1979	SC
14/197	Former Entomology Shop	Pesticides	1968-1977	SC
15/80	Refrigeration/Heat Shop Washrack	Sulfuric Acid	1971-1981	SC
16/132,118 AOC-A	Existing Entomology Shop	Pesticides	1977-Present	SC/LTM
17/AOC-Q	BX Service Station Fuel Leak	Gasoline	1950s-Present	LTO
18/AOC-H	Chromic Acid Spill Site	Chromic Acid	1970s	SC
19/105	Golf Course Landfill	Grass clippings, rodenticides	1968-1978	SC/LTM
20/113A	WWTP Grit Burial Site	Sludge from grit chamber	1947-Present	SC
21/116	West Area Landfill No. 2	Paper bags, boxes, boards	1970-1977	SC/LTM
22/115	West Area Landfill No. 1	Plastic sheets, boxes, cans	1974-1978	SC/LTM
23/108	MOBSS Landfill	Diazinon, dibromochloromethane, construction debris, drums, buckets	1976-1979	SC/LTM
24/134	Former Equipment Maint. Area	Cleaners, waste solvents, oils	1959-1970	SC
25/166	Possible Drainage Lagoon Disposal Site	Pesticides, HTH, solvents	1977	SC
26/AOC-D	Possible Missile Fuel Spill Site	Waste fuels	1976	SC
27/141	Pad 9 Washrack Area	Radioactive Materials	1940s	SC
28/212	Former North Area Washrack	Oils, detergents, fuels	1950s	SC
29/104	Former Army Landfill	Spent munitions and missiles	1950s-1975	SC/LTM
30/113B	Grease Trap Disposal Pits	Wastes from grease trap	1959-Present	SC/LTM
31/170,171, 127,135,39	Fire Department Training Area	Waste oils, solvents, fuels	Unknown-1990	LTO
32/PRI-A	Sewer line from Primate Research Lab	Carbon-14, iodine, tritium, solvents	1960s-1981	SC
33/113B	Cooking Grease Disposal Pits	Cooking grease	Unknown- Present	SC/LTM
34	Spent Munitions Burial Site	Spent munitions	Unknown	SC

IRP/ SWMU #	Site Description	Material Disposed	Dates of Operation	Status
35/PRI-5	Spent Solvent Disposal Area	Radioactive tracers, solvents	1950s	SC
36/129,178	Unconventional Fuels Storage Site	JP-X, nitric acid, UDMH, aniline, JP-4	1950s	SC
37/AOC-L	Early Missile Testing Site	Fuels, lead oxide, nitrate compounds, acids	1947-1955	SC
38/137,138	Sled Test Maintenance Area	Waste oils, solvents, paint, strippers	1951-1979	SC
39/165,167, 177.179,181	Missile Fuel Spill Area	Oxidizers, fuels	Unknown-1975	SC/LTM
40/103	Causeway Rubble Disposal Site	Concrete rubble	Unknown- Present	SC
41/192	Coco Block House Borehole Disposal Site	Propellants, oxidizers	1960s	SC
42/111	Radioactive Material Burial Site	Radioactive material	1950s	SC
43/AOC-G	Atlas Electrical Substations	PCBs	Unknown-1979	SC
44/AOC-P	Bldg. 301 Aircraft Maintenance Hangar	Heating oil, fuel	Unknown	SC/LTM
45/AOC-O	Old AGE Refueling Station	Gasoline, JP-4, diesel	Unknown- 1980s	SC
46/130,AOC- S	JP-4 Spill Site	Waste JP-4	1978-1990	SC
47/21,22	POL Washrack Discharge Area	Waste JP-4	1953-1993	LTO
48/AOC-N	Military Gas Station	Gasoline	Unknown- Present	SC/LTM
49/148-154	Sewage Lagoons	Hazardous wastes	1943-Present	IRA/RD
50	Waste Disposal Pit	Can, drums	Unknown	SC
51/PRI-S	Primate Research Lab Borehole Disposal Site	Radioactive material, solvents	1950-Present	SC
56	West Ramp Fuel Spill	Fuels	Unknown- Present	SC
57	Officer's Club	Diesel, sulfurous compounds	1960-Present	LTO
58/231	Incinerator/Landfill	Ash from unconventional fuels, film	Unknown- Present	SC
59/19,20,229	T-38 Test Cell Fuel Spill Site	JP-4	1966-1991	LTO

IRP/ SWMU #	Site Description	Material Disposed	Dates of Operation	Status
60/230	Bldg 828 Fuel Spill Site	Diesel, gasoline, JP-4	1977-1991	LTO
AOC-BBMS	Bare Base Mobility Squadron	JP-4	Unknown	SC
AOC-RR	Buried RR Cars	Waste oil, fuel	Unknown	SC

FFCA Federal Facility Compliance Agreement
 IRA Interim Remedial Action
 PA/SI Preliminary Assessment/Site Investigation
 RA Remedial Action
 RI/FS Remedial Investigation/Feasibility Study
 SC Site Close-Out
 SI Site Investigation
 LTM Long Term Monitoring
 AOC Area of Concern (Air Force Designation)

III. SUMMARY OF FINDINGS.

Operation of the T-38 Test Cell (SWMU 229) dual phase vapor extraction (DPVE) continued this quarter. The system was shut down due to elevated groundwater. The stingers have been adjusted and the system has been optimized, resulting in an average weekly recovery of 2,000 gallons of JP-4.

Operation of the Bldg 828 Fuel Spill (SWMU 230) DPVE system continued this quarter. All free product has been removed from the water table. The system is anticipated to remediate the site by the spring of 1998.

Voluntary clean-up actions required to comply with the 1,000 parts per million (ppm) total petroleum hydrocarbon (TPH) clean-up standard established with NMED continued this quarter. Excavation work began again in January 1997 and will continue through May 1997 with an additional 500 to 1,000 yards of TPH-contaminated soil anticipated for removal.

The soil vapor extraction system (SVE) at SWMU AOC-T, the POL Spill Sites, continued to operate this quarter. At this time, approximately 30,000 pounds of JP-4 have been removed. This system is anticipated to operate through the fall of 1997.

The biovent system at SWMU 133, Building 703, Washrack Discharge Area, continues to operate flawlessly. Confirmation borings were taken in July 1996. Only one boring contained TPH greater than 1,000 ppm. The system was reconfigured to focus remediation at this location.

The biovent system at the Fire Training Area (SWMUs 39, 127, 135, 170, 171) continued this quarter. The system has 22 injection wells that inject air into the subsurface which is, in-turn, used by microorganisms to degrade JP-4. Respirometry tests have been conducted at the site that have shown the biovent system has been effective in aerating the subsurface and has initiated microbial activity at the site, resulting in the degradation of approximately 20,000 pounds of petroleum hydrocarbons. The system will have respirometry tests run biannually to effectively track the system operation and project the timing of remediation to the required 1,000 ppm TPH. Biannual soil borings will also be taken to compare respirometry results to soil TPH concentrations.

An air sparg/biovent/SVE system was installed at the Officer's Club, AOC-V, to remediate diesel contamination. The system has a single injection well with three discreet air injection depths. The SVE serves to remove any potential infiltration of diesel vapors into the Officer's Club produced by the air injection. Respirometry tests will be conducted in April to evaluate system efficiencies.

IV. PROJECTED WORK FOR THE NEXT REPORTING QUARTER - APR-JUN 97

<u>TASK</u>	<u>ANTICIPATED COMPLETION DATE</u>
A. Long-Term Operation of SWMU 229 DPVE System	Sept 2001
B. Long-Term Operation of SWMU 230 DPVE System	Mar 1998
C. Long-Term Operation of SVE System at SWMU AOC-T	Sep 1997
D. Long-Term Operation of Biovent System at Fire Training Area (SWMUs 170 & 171)	Aug 1998
E. Long-Term Operation of Air Sparg/Biovent/SVE System at SWMU AOC-V, the Officers Club	Oct 1998
F. Construction of Biovent System at SWMU 136	Apr 1997