

HAFB 97



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RETURN RECEIPT REQUESTED

August 11, 1997

Howard E. Moffitt
Deputy Base Civil Engineer
49 CES\CEV
550 Tabosa Ave
Holloman Air Force Base, N.M. 88330-8458

**SUBJECT: Request for Supplementary Information, RCRA Facility
Investigation (RFI) Phase II Report for Table 2 SWMUs
Holloman Air Force Base, EPA I.D. No. NM6572124422**

Dear Mr. Moffitt:

The New Mexico Environment Department (NMED) Hazardous and Radioactive Materials Bureau (HRMB) has completed technical review of the RCRA Facility Investigation Phase I Report dated October 1994, for the Table 2 Solid Waste Management Units (SWMUs). HRMB's comments reflect and include remarks of this RFI review conducted by Region VI EPA previously submitted to HRMB on December 10, 1996. Enclosed is a list of comments for Holloman Air Force Base (HAFB) to address.

HAFB must submit the information requested in the enclosed Attachment within thirty (30) calendar days from the date you receive this letter.

If you have any questions, please contact Cornelius Amindyas or Jerry Bober of my staff at (505) 827-1561.

Sincerely yours,


Stu Dinwiddie, Ph.D., Manager
RCRA Permits Management Program
Hazardous and Radioactive Materials Bureau

cc: Benito Garcia, Chief, HRMB
David Neleigh, EPA Region VI

FILE: HSWA, HAFB, 97, T2
TRACK: HAFB, 8/11/97, HAFB, HRMB/CA, RE.

ATTACHMENT
NMED'S COMMENTS ON TABLE 2 RFI REPORT
HOLLOMAN AIR FORCE BASE (HAFB)

August 6, 1997

Introduction:

The subject RFI Report includes information on the following Solid Waste Management Units (SWMUs):

SWMU 2	-	Building 121 Oil/Water Separator
SWMU 119	-	Building 121 Waste Oil Tank
SWMU 15	-	Building 309 Oil/Water Separator
SWMU 120	-	Building 309 Waste Oil Tank
SWMU 17	-	Building 316 Oil/Water Separator
SWMU 121	-	Building 316 Waste Oil Tank
SWMU 21	-	Building 702 Oil/Water Separator
SWMU 22	-	Building 704 Oil/Water Separator
SWMU 123	-	Building 704 Waste Oil Tank
SWMU 32	-	Building 868 Oil/Water Separator
SWMU 125	-	Building 868 Fire Water Tank
SWMU 36	-	Building 1001 Oil/Water Separator
SWMU 126	-	Building 1001 Waste Oil Tank
SWMU 39	-	Building 1092 Oil/Water Separator
SWMU 127	-	Building 1092 Waste Oil Tank
SWMU 135	-	Oil/Water Separator Drainage Pit
SWMU 40	-	Building 1166 Oil/Water Separator
SWMU 128	-	Building 1166 Waste Oil Tank
SWMU 138	-	Oil/Water Separator Drainage Pit
SWMU 54	-	Building 702 Waste Accumulation Area

SWMU 55 - Building 702A Waste Accumulation Area
 SWMU 56 - Building 807 Test Cell Waste Accumulation Area
 SWMU 63 - Building 867 Waste Accumulation Area
 SWMU 71 - Building 1178A Waste Accumulation Area
 SWMU 75 - DRMO Waste Storage Area
 SWMU 78 - Trim Pad 3 Waste Accumulation Area
 SWMU 91 - Building 816 Washrack
 SWMU 101 - Building 121 (Old Main Base) Landfill
 SWMU 118 - Building 21 Pesticide Holding Tank
 SWMU 132 - Building 21 Leach Field
 AOC-A - Open Concrete Containment Box
 SWMU 124 - Building 752 Waste Oil Tank
 SWMU 129 - Building 1191 and 1192 Spill Tanks
 SWMU 178 - Building 1191 and 1192 Runoff Pits
 SWMU 136 - Building 1119 Washrack Drainage Pit
 SWMU 141 - Pad 9 Drainage Pit, Drain, and Drainline
 SWMU 155 - Sludge Drying Beds
 SWMU 156 - Imhoff Tanks
 SWMU 164 - Building 1080 Pond
 SWMU 165 - Building 1176 Pond
 SWMU 177 - Building 1176 Sumps
 SWMU 179 - Discharge Box
 SWMU 181 - Building 1176 Drainage Troughs
 SWMU 183 - Air Base Sewer System
 SWMU 184 - Wastewater Recirculation Line
 AOC-U - Lost River Basin

General Comments:

1. On January 2, 1996, the New Mexico Environment Department (NMED) received authorization to make final determination on Corrective Action (CA) Documents. From now on, please address all documents to NMED and not the EPA.
2. Numerous important points pertinent to trigger criteria are not discussed on page 3-3 of volume one. Additional points should include the following:
 - Subpart S action levels stipulated in FR072790 may not be determined with the most currently accepted toxicological/epidemiological information used to calculate reference doses or carcinogenic slope factors. The NMED prefers the more current "Media-Specific Screening Levels", which is published by EPA Region VI. If HAFB has multiple constituents present at a SWMU, then HAFB must divide the appropriate Media-Specific Screening Level by 10 to derive the appropriate screening level for each constituent.
 - NMED policy requires that HAFB use the most conservative trigger criteria for a particular medium (i.e., residential scenario assumptions) for a particular medium when delineating the extent of contamination.
3. Include a list of all the acronyms used in the document.
4. For each SWMU which NMED has made a No Further Action (NFA) determination, but the SWMU continues to receive waste, HAFB must submit a monitoring plan to NMED. Also, HAFB must submit a ground water monitoring plan for each SWMU that has not been cleaned up. Please revise the report to include this information.
5. Include the background photoionization detector (PID) or organic volatile analyzer (OVA) reading for each boring log in the revised document.
6. In the revised report include all information that has been identified in the specific comments section, as "was/were not included."

COMMENTS SPECIFIC TO THE SWMUS:

**SWMU 2 - Building 121 Oil/Water Separator, and
SWMU 119 - Building 121 Waste Oil Tank:**

Page 4-5, Paragraph 1, second sentence:

Please include information on the halon vapor monitoring system in the revised report.

Table 4.1-1, Page 4-6: Analytical Results: HAFB mentions that the soil samples from boring 00-B002 had visible contamination; however, Table 4.1-1 does not present the SVOC results. The Work Plan requires that all visible hydrocarbon contamination be analyzed for SVOCs. Furthermore, the boring log does not reflect visible contamination. In addition, the halon vapor monitoring system for both SWMUs has indicated leaks. Please include the SVOC results and an explanation on the boring log in the revised report.

**SWMU 15 - Building 309 Oil/Water Separator, and
SWMU 120 - Building 309 Waste Oil Tank:**

NMED agrees with the NFA recommendation for both SWMUs. However, a monitoring plan must be developed for SWMU 15 and included in the revised report.

**SWMU 17 - Building 316 Oil/Water Separator, and
SWMU 121 - Building 316 Waste Oil Tank:**

Page 4-17; Section 4.3: NMED understands that the tank did not leak during the period of October 1991 to July 1992, however, that does not mean that the tank did not leak before 1991 or after 1992. NMED requires an investigation of this tank. Also, according to the report, the borings were taken next to SWMU 17; however, looking at Figure 4.3-1, the borings appear to be 5 to 10 feet away, please clarify. Revise the report to reflect the correct distance.

Page 4-20, Section 4.3.4: Since staining has showed up at the most vertical depth on one of the borings from SWMU 17, further investigation will be required.

**SWMU 21 - Building 702 Oil/Water Separator,
SWMU 22 - Building 704 Oil/Water Separator, and
SWMU 123 - Building 704 Waste Oil Tank:**

General Comment: The boring logs from SWMUs 21 and 22 were not included in the report.

Page 4-30; Conclusions: NMED question/doubts how HAFB can project the aerial extent of the soil contamination if only two borings were sampled. Additional borings are needed. Explain what measures have been taken to remediate SWMU 123 since Table 4.4-3 shows very high values for hydrocarbons (1500 to 4510 ppm), Benzene (54,000 ppm), Toluene (345,000 ppm), Ethyl Benzene (229,000 ppm), Xylene (363,000 ppm), Chromium up to 21.1 ppm, and Lead up to 76.8 ppm.

NMED cannot agree on an NFA recommendation for SWMUs 21 and 22 until the soil boring logs are submitted.

**SWMU 32 - Building 868 Oil/Water Separator, and
SWMU 125 - Building 868 Fire Water Tank:**

NMED will require that deeper soil samples be taken under SWMU 125, since the bottom of the unit is 5.5 feet and the deepest soil sample taken was 5 feet. Please revise the report and indicate if SWMU 32 still in operation.

**SWMU 36 - Building 1001 Oil/Water Separator, and
SWMU 126 - Building 1001 Waste Oil Tank:**

The headspace reading for the split spoon sample was not included for borehole 126-B01.

Page 4-44; Table 4.6-1: Holloman did not include the SVOC results for SWMU 36 although the sampling plan requires Holloman to sample for SVOC when visible contamination is found.

Page 4-48; under the title "Recommendations": Please include a remediation schedule for SWMU 36.

**SWMU 39 - Building 1092 Oil/Water Separator,
SWMU 127 - Building 1092 Waste Oil Tank, and
SWMU 135 - Oil/Water Separator Drainage Pit:**

General Comment: The boring logs for SWMU 135 were not included in the report.

Page 4-57; Recommendations: Please include a schedule for the additional investigations to be performed on these SWMUs.

**SWMU 40 - Building 1166 Oil/Water Separator,
SWMU 128 - Building 1166 Waste Oil Tank, and
SWMU 138 - Oil/Water Separator Drainage Pit:**

Page 4-59; Section 4.8: NMED understands that the waste oil tank (SWMU 128) did not leak during a period in October of 1991,

however, that does not mean that the tank did not leak before 1991. NMED will require investigation of this tank.

General Comment: The boring logs for SWMUs 128 and 138 were not included in the report.

Page 4-64; Recommendations: Please include a schedule for the investigations/remediation to be performed on SWMU 138.

**SWMU 54 - Building 702 Waste Accumulation Area, and
SWMU 55 - Building 702A Waste Accumulation Area**

The headspace reading for the split spoon sample was not included for borehole 054-B01.

General Comment: The boring log for borehole 054-B03 was not included in the report.

Page 4-72; Recommendations: Please include the excavated soil results from SWMU 54 in the revised report.

SWMU 56 - Building 807 Test Cell Waste Accumulation Area:

The headspace reading for the split spoon sample and the headspace sample were not included for borehole 056-B02.

SWMU 63 - Building 867 Waste Accumulation Area

Please provide the borehole logs for the *A series* soil samples.

SWMU 71, Building 1178A, Waste Accumulation Area:

NMED agrees with the no further action determination.

SWMU 78, Trim Pad 3 Waste Accumulation Area:

NMED disagrees with the recommendation for no further action. The borehole log for 078-B01 mentions moderate petroleum odor at 3-4 feet. Also, the OVA readings for that zone are very high. Explain the discrepancy between the hydrocarbon concentration data of Table 4.13-1, Page 4-93, Column 3, Row 3 (<DL) and the drill log description with 434.7 ppm hydrocarbon head space sample reading. Indicate if a groundwater sample was taken. Explain why the analytical results did not indicate a release, but the OVA readings and the boring log description indicate a release. In addition, justify why HAFB did not analyze for VOCs. Describe the extent of the contaminant plume since the water table is only 3 feet below ground surface.

SWMU 91 - Building 816 Washrack:

The highest headspace reading for Borehole 091-B02 is the zone from 4-6 feet, not the 0-2 foot zone. Please justify why the sample was taken from the lower reading zone.

SWMU 124 - Building 752 Waste Oil Tank:

General Comment: The boring log for borehole 124 was not included in the report.

Section 4.15.1, Page 4-100, paragraph 5, Release History:

Explain what remedial measures were taken to clean up the less than ten (< 10) gallons of waste that was spilled and the nature of the waste.

Also, NMED questions why the soil sampling was limited to .333 feet in depth. In addition, was NMED notified of this hazardous waste oil tank?

SWMU 136 - Building 1119 Washrack Drainage Pit

Figure 4.16-1, Page 4-105: The top figure indicates that the groundwater is probably contaminated. HAFB must install some groundwater monitoring wells. Please include the requested information in the revised report.

Also, submit the remediation schedule for this SWMU in the revised report. Explain the discrepancy between the analytical data for hydrocarbon concentration at the 6 to 8 feet interval below ground surface (445 ppm to 9360 ppm), and the headspace drilling log of 136-B01 headspace hydrocarbon reading of 280 ppm to 320 ppm hydrocarbon concentrations for the same interval below ground surface.

SWMU 155 - Sludge Drying Beds:

The soil borings for this SWMU were not included in the report.

Table 4.17-1, Page 4-113: Explain why HAFB used different detection limits for the same hazardous constituent in soil samples from the locations 155-A01 through 155-A06. For example the detection limits for 4,4'-DDD (organochlorine pesticides) are given as 21.6 ppm (for location 155-A01), 2.21 ppm (for location A02), and 22.8 ppm (for location 155-A04). The detection limits used in soil sample analysis must be consistent. In addition, explain why some of the detection limits are higher than the EPA remediation standards.

Describe how HAFB plans to remediate the chromium and selenium at SWMU 155 to cleanup standards acceptable to NMED. This information is required because the analytical data from all the

soil samples are all above regulatory standards. Provide information about the high concentrations of benzene, ethyl benzene and xylene in soil sample # 155-A05-01-01.

SWMU 156 - Imhoff Tanks:

Before NMED accepts HAFB' recommendation for NFA, explain how SWMU 155 will be remediated of pesticides which have high values in soil samples taken from drill holes 156-B01, and 156-B02.

SWMU 164 - Building 1080 Pond SWMU 164

Please provide the borehole logs for the A series samples. Since the volatile organics for the 164-06 soil sample are very high, NMED believes that deeper sampling is necessary at this SWMU. Please include sampling provisions in the revised report.

SWMU 183 - Wastewater Recirculation Line

The report does not mention specifically the results of the sewer investigation. Please include this information in the revised report.

AOC-U - Lost River Basin

Please provide the borehole logs in the revised report.

Phase II SWMUs

SWMU 118 - Building 21 Pesticide Holding Tank

SWMU 132 - Building 21 Leach Field

AOC-A - Open Concrete Containment Box

Please submit the specific cleanup details in the revised report. The extent of pesticide and VOC contamination at SWMU 132 and AOC-A needs to be defined. Since composite sampling is not appropriate for volatiles, HAFB must take discrete samples. Also, there will be a need for monitoring of the groundwater since pesticides and PCBs have shown up periodically in high concentrations in ground water samples, including upgradient wells.

**SWMU 129 - Building 1191 and 1192 Spill Tanks, and
SWMU 178 - Building 1191 and 1192 Runoff Pits**

Please submit the specific cleanup details in the revised report. Also, there will be a need for monitoring of the groundwater since organics have shown up periodically. In addition, the soil samples taken for the leaded sites only went to one foot. Deeper

samples will need to be taken where lead was elevated above background.

**SWMU 165 - Building 1176 Pond,
SWMU 177 - Building 1176 Sumps,
SWMU 179 - Discharge Box, and
SWMU 181 - Building 1176 Drainage Troughs**

Page 5-69; Conclusions: The extent (horizontally and vertically) of the groundwater plume still needs to be determined as well as the source of the plume. In addition, please include the soil sampling results from the 1991 investigation. Further, permanent monitoring wells need to be installed.

SWMU 75 - DRMO Waste Storage Area

Holloman must include the data from the investigation in the revised report before NMED approves of an NFA determination.