

HAFB 2003



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**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

February 24, 2003

Mr. Howard Moffitt  
Deputy Base Civil Engineer  
49 CES/CIV  
550 Tabosa Avenue  
Holloman Air Force Base, NM 88330-8458

**RE: REVIEW OF THE FINAL LONG-TERM GROUNDWATER  
MONITORING REPORT, JULY 2002.  
HOLLOMAN AIR FORCE BASE, EPA ID # NM6572124422-2  
HWB-HAFB 02-007**

Dear Mr. Moffitt:

The Hazardous Waste Bureau (HWB) of the New Mexico Environment Department (NMED) has reviewed the 2001 Final Long-Term Groundwater Monitoring (LTM) Report that Holloman Air Force Base (HAFB) submitted to the HWB. NMED has determined that additional information is required prior to approving the 2001 LTM.

Please provide the following information to NMED within thirty (30) days of receipt of this letter.

- 1) Please provide the Contract Required Detection Limits (CRDLs) for the LTM.
- 2) Table 2-1 – The groundwater standard lists analytes in mg/L whereas it appears that the values reported are in ug/L. Please correct the table.
- 3) Table 2-1 – Please include Lead in the table.
- 4) Table 2-1 – The applicable Water Quality Control Commission standard for 1,2-Dichloroethane is 10 ug/L not 25 mg/L as listed in the table.
- 5) Since the 2003 LTM report will conclude the 10-year LTM program for 11 of the 17 sites in the LTM program, will HAFB be providing recommendations for these sites in the 2003 LTM?

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- 6) Page 4-1, Section 4.1 – Please state when operations of the SVE system at SS-02 & SS-05 was discontinued or that it was in operation during the reporting period. The text only indicates results as of December 1999.
- 7) Please explain the apparent reporting detection limit discrepancy for methylene chloride and m,p-Xylenes. Example: MW-02 & 05-05 and MW-02 & 05-03 have methylene chloride detection limits of <50 ppb whereas MW-02 & 05-06 and MW-02 & 05-08 have methylene chloride detection limits of <5 ppb.
- 8) Figures 4-2 and 4-3 – Please provide an explanation as to why the reported VOC contamination appears at the upgradient well, MW-02&05-08, and not at the downgradient well. HAFB may want to sample S1-MW3 to facilitate the site investigation. Please provide information if the area of this spill site been delineated previously.
- 9) Table 5-2 – Please explain why there is a <1000 ppm detection limit for iron.
- 10) Figures 5-2 and 6-2 – MW-08-03/S10-MW7 was sampled for water level with a water level of 4074.85 msl and 4071.64 msl at sites SD-08 and LF-10 respectively. Please provide an explanation as to the difference in elevation.
- 11) Page 8-1, Section 8.1 – Please state when operations of the SVE system at SS-17 was discontinued or that it was in operation during the reporting period (2001). The text indicates results as of January 2000.
- 12) Table 9-2 – Please explain the apparent reporting detection limit discrepancy for iron. Example: MW-19-03 has an iron detection limit of <10,000 ppm whereas MW-19-02 has a iron detection limit of <1000 ppm.
- 13) Page 10-1 – In the “Review of the Final Long-Term Groundwater Monitoring Report, June 2000” letter dated May, 2001, NMED recommended continuing the LF-21 sampling program for TCE, Arsenic, Barium, Iron, Manganese, and Selenium (See Comment #6). On Page 10-1, HAFB erroneously states that the analyte list was revised to include only TCE, arsenic, chromium, iron, and manganese as approved by NMED. Please explain why the recommendations in the May 2001 letter were not followed.
- 14) Table 10-2 - Please explain the apparent reporting detection limit discrepancy for chromium. Example: MW-21-04 has a chromium detection limit of <200 ppm whereas the other three monitoring wells have chromium detection limits of <20 ppm.
- 15) Table 11-2 – Please explain the apparent reporting detection limit discrepancy for iron. Example: MW-22-03 has a iron detection limit of <10,000 ppm whereas the other three monitoring wells have iron detection limits of <1000 ppm.
- 16) Table 12-2 – Please explain why there is a <10,000 ppm detection limit for iron.
- 17) Figure 18-3 – Please provide an explanation as to why the well closest to the presumed origination point, S55-MW3, was not included in the long-term sampling program.

The following recommendations to the sampling program or NMED concurrence with HAFB recommendations may be provided in the 2003 Final Long-Term Groundwater Monitoring Report.

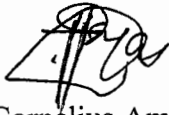
- 1) Page ES-1 – Recommendations were made to remove root growth from wells at seven landfills prior to sampling. Page 20-1 recommends removing root growth from three landfills. NMED concurs with recommendations to remove root growth wherever necessary prior to sampling.
- 2) Page 3-3 – NMED concurs with continuing the LF-01 sampling program for Arsenic, Barium, Manganese, and Selenium.
- 3) Table 4-2 – NMED recommends that sampling continue for VOCs at SS-02 & SS-05.
- 4) Page 5-3 – NMED concurs with continuing the SD-08 sampling program for 1,2-Dichloroethane, Arsenic, Barium, Iron, and Manganese.
- 5) Page 6-2 – NMED recommends continuing the LF-10 sampling program for Arsenic, Barium, Manganese, and Selenium.
- 6) Page 7-3 – NMED recommends continuing the OT-16 sampling program for VOCs and Lindane in 118-MW1602.
- 7) Page 8-3 – NMED concurs with no changes to the LTM Program for SS-17.
- 8) Figure 8-1 – A building is shown in Figure 8-1 to the northeast of Building 18, which doesn't appear to exist.
- 9) Page 9-3 – NMED concurs with continuing the LF-19 sampling program for Barium, Iron, and Manganese.
- 10) Page 10-3 – NMED recommends that HAFB continue with the LF-21 sampling program for TCE, Arsenic, Barium, Iron, Manganese, and Selenium.
- 11) NMED recommends HAFB continue investigating the LF-21 site in an attempt to determine the cause of the TCE contamination detected in upgradient monitoring well MW-21-01.
- 12) Page 11-2 – NMED recommends continuing the LF-22 sampling program for Arsenic, Barium, Iron, Manganese, and Selenium.
- 13) Page 12-2 – NMED recommends continuing the LF-23 sampling program for Barium, Iron, Manganese, and Selenium.
- 14) Consideration should be given into investigating the LF-23 site in an attempt to determine the cause of the Iron, Manganese, and Barium detected in upgradient monitoring well MW-23-01.
- 15) Page 13-3 – NMED concurs with the recommendation to monitor for chloroform and 1,2-dichloroethane at LF-29.
- 16) Page 14-2 – NMED recommends continuing the DP-30 and SD-33 sampling program for chloroform, 1,1-dichloroethane, TCE, Arsenic, Barium, Iron, and Selenium.
- 17) Page 15-2 – NMED concurs with no changes to the LTM Program for SS-39.
- 18) Page 16-2 – NMED concurs with the recommendation to discontinue long-term monitoring at OT-44 due to no VOCs detected during the last sampling event.
- 19) Page 17-2 – NMED concurs with the recommendation that monitoring for bromodichloromethane, chloroform, and methylene chloride continue at SS-46.

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- 20) Page 18-2 – NMED concurs with the recommendation that monitoring for VOCs continue at SS-48.
- 21) Page 19-2 – NMED concurs with the recommendation to discontinue long-term monitoring at SS-56 due to no VOCs and Lead detected during the past three sampling events.

If you have any questions or need any further information please contact me, or Robert Warder at the address above or by phone at 505-841-9040.

Sincerely,



Cornelius Amindyas  
Project Leader  
Holloman Air Force Base

CAA/rw

cc: John Kieling, NMED HWB  
Will Moats, NMED HWB  
Robert Warder, PE, NMED HWB  
Steve Jetter, NMED HWB  
Allen Chang, EPA Region 6 (6PD-N)  
Debbie Hartell, HAFB  
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