

HAFB



DEPARTMENT OF THE AIR FORCE

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

31 MAR 2003

MEMORANDUM FOR NEW MEXICO ENVIRONMENT DEPARTMENT

Attn: Mr. James P. Bearzi
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Bldg 1
Santa Fe New Mexico 87505-6303



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

SUBJECT: Final Long-Term Groundwater Monitoring Report Request for Supplemental Information (RSI) Response

1. This letter with attachment is our formal response to subject RSI, dated 24 Feb 03 and received 04 Mar 03. The RSI was based on the 2001 Final Long-Term Groundwater Monitoring Report that Holloman submitted to the Hazardous Waste Bureau.
2. If you have any questions, please contact Mr. Dan Holmquist at (505) 572-5395.

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

Attachment:
Responses to Comments from the New Mexico Environment Department (1 copy)

cc (w/Atch):		
Cornelius Amindyas NMED-HWD	Steve Jetter NMED-HWD	Allen Chang
Hazardous Waste Bureau	Hazardous Waste Bureau	USEPA, Region 6 (6 PD-N)
4131 Montgomery NE	4131 Montgomery NE	1445 Ross Ave., Ste 1200
Albuquerque, NM 87109	Albuquerque, NM 87109	Dallas, TX 75202-2733

CERTIFIED MAIL NO. 7000 0520 0020 3150 8874
RETURNED MAIL REQUESTED

Global Power for America

**RESPONSES TO COMMENTS FROM THE NEW MEXICO ENVIRONMENT DEPARTMENT
FINAL 2001 LONG-TERM GROUNDWATER MONITORING REPORT
HOLLOMAN AIR FORCE BASE, NEW MEXICO
JULY 2002**

The information provided below are responses to the comments submitted by the New Mexico Environment Department (NMED) Hazardous Waste Bureau to Holloman Air Force Base (AFB) for the 2001 Final Long-Term Groundwater Monitoring (LTM) Report on February 24, 2003.

1. The contract-required detection limits (CRDLs) were provided in Appendix B of the Final Work Plan for the 2001 event. *A list of the CRDLs will be provided to for inclusion within Appendix B of the report.*
2. The groundwater quality standards are presented in micrograms per liter but have been changed to milligrams per liter as indicated in the attached revised version of Table 2-1. *A replacement for Table 2-1 will be provided.*
3. Lead has been included in the revised version of Table 2-1. *A replacement for Table 2-1 will be provided.*
4. The standard for 1,2-dichloroethane has been revised as requested in Table 2-1. *A replacement for Table 2-1 will be provided.*
5. Holloman AFB will be providing recommendations for the 11 sites that will no longer require monitoring after 2003 under the LTM in the report for the 2003 event.
6. The SVE system at SS-02 and SS-05 was in operation during the 2001 sampling program. *A replacement for page 4-1 will be provided.*
7. The detection limit values presented for nondetect results represent method reporting limits (MRLs) by individual analysis of methylene chloride. The MRL is not always the same value and the CRDL based on sample dilution or matrix interference. Sample dilution (10x) took place for the MW-02&05-05 because there were elevated levels of VOCs in the sample. The MRL for methylene chloride in MW-02&05-03 should have been shown as <5 micrograms per milliliter (ug/L). The CRDL for methylene chloride is 5 ug/L and 10 ug/L for each o-xylene and m-,p-xylenes.
8. Further clarification is needed for this comment. Based on the results of the 1999 and 2001 events, only well MW-02&05-05 has shown any signs of contamination. Prior to 1999, the four wells included in the LTM showed only minor contamination; and where there was contamination, the levels have decreased.
9. There is no discrepancy between MRLs reported for iron, but the data for metals was reported in ug/L not milligrams per liter (mg/L) as the table indicates. A values of 1000 ug/L is equivalent to 1 mg/L which is the CRDL for iron. *A replacement for Table 5-2 will be provided.*
10. The correct groundwater elevation for well MW-08-03/S10-MW7 is 4074.85 ft msl. *Figure 6-2 will be corrected and provided as a replacement page.*
11. The SVE system at SS-17 was in operation during the 2001 sampling program. *A replacement for page 4-1 will be provided.*
12. The discrepancy between MRLs reported for iron are due to the dilution that was required for analyzing the sample from well MW-19-03 within the calibration range of the instrument. The need for the 10x dilution was probably due to matrix interference caused by the elevated mineral content of

high total dissolved solids groundwater in the vicinity of LF-19. The data for metals was reported in ug/L not milligrams per liter (mg/L) as the table indicates. A value of 1000 ug/L is equivalent to 1 mg/L which is the CRDL for iron. *A replacement for Table 9-2 will be provided.*

13. According to my notes and the response to NMED's comments on the 1999 report, selenium was requested by the state, but discussions between Court Fesmire, Jose Gallegos, Cornelius Amindyas, and Rob Warder indicated that selenium was not to be included. Our recommendation for LF-21 for 2001 included only analyzing for TCE, barium, iron and manganese because these analytes had been detected above CRDLs; and my notes indicate the state wanted arsenic added. In 1999 and 2001, no analytes exceeded New Mexico WQCC standards for groundwater. If the state is adamant about selenium it should be added into the 2003 program for the site. **Please advise.**
14. The discrepancy between MRLs reported for chromium are due to the dilution that was required for analyzing the sample from well MW-21-04 within the calibration range of the instrument. The need for the 10x dilution was probably due to matrix interference caused by the elevated mineral content of high total dissolved solids groundwater in the vicinity of LF-21. The data for metals was reported in ug/L not milligrams per liter (mg/L) as the table indicates. A value of 20 ug/L is equivalent to 0.02 mg/L which is the CRDL for chromium. *A replacement for Table 10-2 will be provided.*
15. The discrepancy between MRLs reported for iron are due to the dilution that was required for analyzing the sample from well MW-22-03 within the calibration range of the instrument. The need for the 10x dilution was probably due to matrix interference caused by the elevated mineral content of high total dissolved solids groundwater in the vicinity of LF-22. The data for metals was reported in ug/L not milligrams per liter (mg/L) as the table indicates. A value of 1000 ug/L is equivalent to 1 mg/L which is the CRDL for iron. *A replacement for Table 11-2 will be provided.*
16. All samples collected at LF-23 required a 10x dilution due to matrix interference caused by the elevated mineral content of high total dissolved solids groundwater in the vicinity of LF-23. The data for metals was reported in ug/L not milligrams per liter (mg/L) as the table indicates. *A replacement for Table 12-2 will be provided.*
17. Holloman AFB and USACE please advise. Over the years I have found no documentation for the rationale and selection of wells to be included in the LTM. Is well S55-MW3 the well in which we used to see product? **Please advise.**