



BILL RICHARDSON
GOVERNOR

State of New Mexico
ENVIRONMENT DEPARTMENT

Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303
Telephone (505) 428-2500
Fax (505) 428-2567
www.nmenv.state.nm.us

HAFB 05



RON CURRY
SECRETARY

DERRITH WATCHMAN-MOORE
DEPUTY SECRETARY

February 9, 2005

Ms. Debbie Hartell
Chief
Environmental Flight
49 CES/CEV
550 Tabosa Ave.
Holloman AFB, NM 88330-8458

**RE: ADDITIONAL INVESTIGATION REQUIREMENTS AT SITES - SS-02&05, SD-08, SS-39
HOLLOMAN AIR FORCE BASE
EPA ID# NM6572124422
HWB-HAFB-04-009**

Dear Ms. Hartell:

The New Mexico Environment Department (NMED) has reviewed the 2003 Long-Term Groundwater Monitoring Report and older investigation reports for the above referenced sites. Based on this review the NMED has additional concerns and will require additional ground water investigations at these sites. The NMED's current policy (May 15, 1995) regarding the treatment of ground water contamination at Holloman AFB states, in part, that soil and ground water contaminant plumes must be adequately characterized and monitoring wells defining the plumes must be sampled at least annually. NMED interprets "monitoring wells defining the plumes" to include wells located within the plume, particularly in the area of highest contamination, not just the wells defining outside the perimeter of the plume. NMED does not believe the ground water monitoring at the referenced sites conforms to this policy.

The following provides a brief reasoning for requiring the additional work at each site.

Site SS-02/05 (SWMU AOC-T)

This site is currently undergoing a voluntary corrective measures to remove contaminated soils a part of the final remedy and site closure. As part of site closure a final risk assessment must be

2. Monitoring wells must be installed in the former drain field and at or down gradient of the wash rack. Ground water shall be sampled for VOCs, SVOCs, metals, and organochlorine pesticides.
3. Samples from these new wells should be collected on a quarterly or semi-annual basis over a two-year period.

Site SS-39 (SWMUs 165, 177, 179, 181)

As part of the LTM review, the NMED also looked at the original site investigation material presented in the *Phase I RCRA Facility Investigation Report, Table 2 Solid Waste Management Units*, September 1997 report. Based on the review of the original characterization data, it appears that all monitoring wells are installed up gradient of the TCE plume as determined by Geoprobe sampling locations. Ground water samples collected from several Geoprobe locations showed TCE concentrations between 324 ug/L and 2730 ug/L in locations down gradient of the LTM sampling locations. Additional ground water characterization work was performed in 1998 that defined the ground water plume but no permanent monitoring wells were installed. See the attached map. Also, according to the site summary presented in the HAFB's September 1995 Decision Document, tetrachloroethene (PCE) concentration of 95 mg/kg was detected in the soils around the drainage sumps at Building 1176. This is above the NMED's residential risk based soil screening levels of 9.83 mg/kg.

Therefore, the following actions are required:

1. An in-depth review of previous investigations should be performed and summarized in the work plan. An investigation of the current soil and ground water conditions shall be performed based on the analysis of the historical data.
2. Ground water monitoring wells shall be installed in area of highest contaminant concentrations and at down gradient locations. The distance between well(s) shall be no more than 200 feet, unless approved by NMED. The down gradient extent of the plume shall be defined where the concentration of TCE in the ground water is less than 5 mg/L. The wells shall be installed at the shallowest depth possible to yield representative ground water samples.
3. A vertical extent well shall be installed in the area of highest contaminant concentrations.
4. Initially, samples shall be analyzed for VOCs, SVOCs, RCRA metals, and perchlorate.
5. Samples from these new wells should be collected on a quarterly or semi-annual basis over a two-year period.

Ms. Debbie Hartell

February 9, 2005

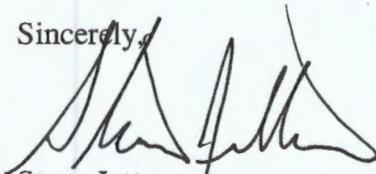
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Additional requirements for these sites may be required based on the historical information provided in the work plans.

Work plans for the above requirements must be reviewed and approved by the NMED before the work is performed. The work plans shall include detailed summaries of the operational history and investigational history of each site, potential contaminants of concern, proposed monitoring well locations and construction details, analytical parameters and methods, quality controls and any other details as determined by the NMED as necessary to properly investigate each site. The work plans shall be submitted within 90 days from receipt of this letter.

If you have any questions, please contact me at (505) 845-5932.

Sincerely,



Steve Jetter

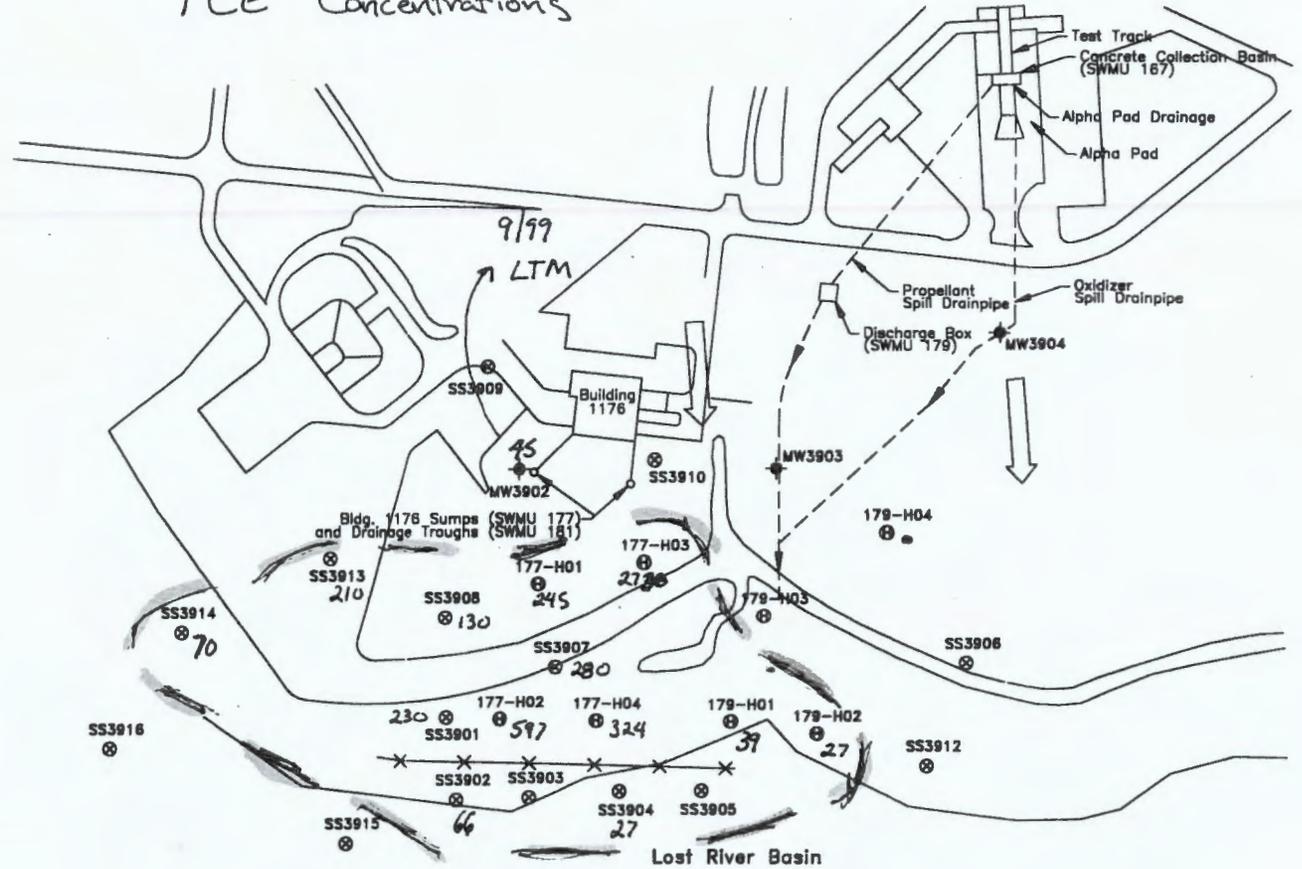
Permits Management Program

cc: James Bearzi, NMED HWB
John Kieling, NMED HWB
Cornelius Amindyas, NMED HWB
James Harris, EPA-Region 6
Dan Holmquist, HAFB
File: Reading and **HAFB-HSWA 2005**

SS-39 SWMU 177 & 179

TCE Concentrations

Look in
 - Phase II, Table 2 RFI Report
 Radian 1994
 or
 - Phase I, Table 2, RFI Report
 Sept 97



SS3911

LEGEND

- ◆ Monitoring Well
- ⊕ Previous Groundwater Sample Location (1993)
- ⊗ DPT Groundwater Sample Location 5/98
- ✕-✕ Fence
- ➔ Groundwater Flow Direction (November, 1991)

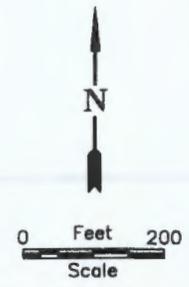


Figure 1. SS-39 SITE MAP WITH DPT GROUNDWATER SAMPLING LOCATIONS