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February 4, 2005

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

**RE: ADDITIONAL GROUND WATER MONITORING REQUIRMENTS FOR SPILL
SITE 61 (AOC 1001)
HOLLOMAN AIR FORCE BASE
EPA ID# NM6572124422
HWB-HAFB-04-005**

Dear Ms. Hartell:

The New Mexico Environment Department (NMED) has performed additional review of the AOC 1001 site investigation history and the *Interim Final, Focused Feasibility Study, Spill Site 61* dated September 2004. Based on this review the NMED has additional concerns and requirements regarding this site. NMED believes the additional requirements will prevent future delays for implementation of the anticipated corrective measures study (CMS).

The NMED had previously required continued ground water sampling on an annual basis as part of the NMED's March 2, 2001 correspondence on the review of the Final Phase II Remedial Investigation (RI) Report. This sampling has not been performed.

The NMED also approved a feasibility study work plan that was limited to the collection of additional ground water data from a select number of wells in order to determine whether or not natural attenuation is occurring at the site. In reviewing the interim feasibility study, it is apparent that the proposed study has expanded into a full CMS to evaluate all potential remediation technologies. This approach was not part of the approved work plan. In addition, in order for NMED to adequately review the final CMS report, current ground water conditions

throughout the plume must be established.

NMED has also performed additional review of the Final Phase II RI Report and the following observations have been made.

1. The contaminant plume appears to be migrating in a northerly direction and not with the ground water flow direction. The potentiometric surface maps for May 2000 (Fig 3-3, Final Phase II RI Report) and June 2004 (Interim Final Focused Feasibility Report) indicates a ground water flow direction that is slightly north of west. A detailed plot of the ground water contaminant plume based on data from Figures 5-3, 5-4, and 5-5 of the Phase II RI report, indicates the contaminant plume is migrating in a north-northwest direction.
2. The RI report also concluded that the 1,2 DCA was attributed to a separate solvent plume. This may not be the case. 1,2 DCA is also a fuel additive referred to as ethylene dichloride (EDC). A plot of the benzene and 1,2 DCA plumes appear to indicate one source for both of these plumes.
3. The previous investigations have also identified a TCE contamination in the eastern portion of the site. Ground water samples from MW-02 and DPT locations DP15, DP29, DP47, DP36, and DP56 along the eastern portion of the SS-61 site investigation had detections for TCE. This is in the upgradient portion of the site, based on ground water flow and may represent a distal end of a TCE contaminant plume. If TCE migration is similar to the benzene/EDC plume, then a TCE source may exist south or southeast of MW-02 (possibly from Building 1088 or 1080).

Based on the review of this site, the NMED will require the following actions be taken.

1. NMED will require that the natural attenuation feasibility study associated with the approved work plan and the CMS report be compiled and submitted separately due to the significant differences that these reports entail.
2. Additional investigation of the TCE plume to the east and southeast of MW-02 must be performed.
3. A ground water sampling program must be established. Ground water samples must be collected from a sufficient number of wells throughout the plume on at least a semi-annual basis. NMED suggest that initially the following wells and analysis be included for sampling:
 - i) MW-09 or 10, MW-05, MW-08, MW-06, MW-03, MW-02, MW-29-04, MW-29-05, MW-29-02 and MW-29-08
 - ii) All wells should be analyzed for the following constituents:

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VOC's (to include BTEX, naphthalene, 1,2 dichloroethane (EDC), 1,2 dibromoethane (EDB)), SVOCs and metals (including lead)
In addition, MW-02 and MW-05 should be analyzed for TCE.

- iii) Ground water elevations should be collected from all SS-61 and LF-29 wells for development of ground water potentiometric surface maps.

A work plan for the above requirements must be reviewed and approved by the NMED before the work is performed. The work plan shall include details on the 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 plan shall be submitted within 90 days from receipt of this letter.

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

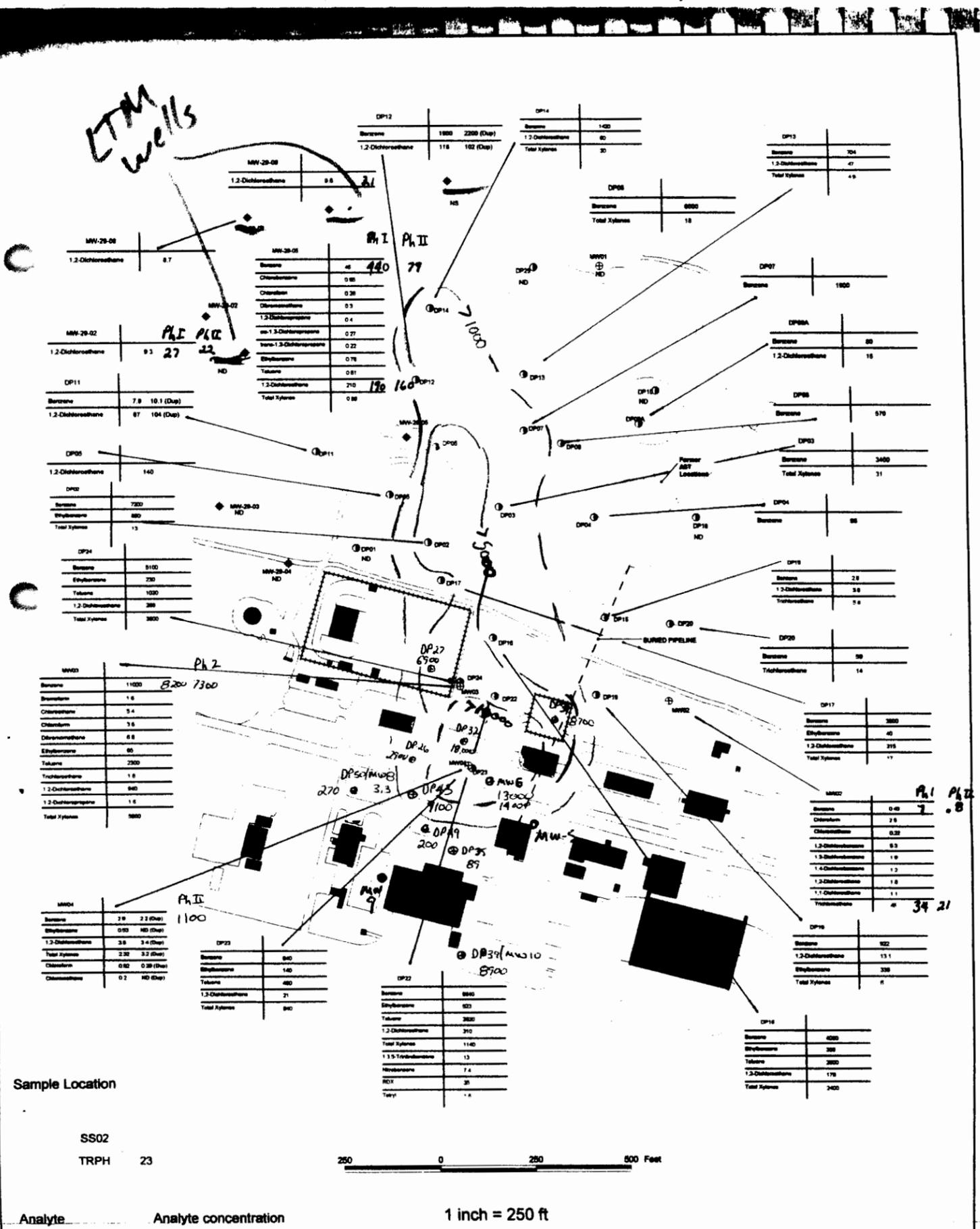
Sincerely,



Steve Jetter
HWB 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

NMEDI interpretation of Groundwater Data From Phase II RI Report



Analyte Analyte concentration

LEGEND

- Piezometers
- Fenceline
- SS-61 Monitoring Wells
- LF-29 Monitoring Wells
- Direct Push Samples
- Buildings
- Roads

Notes:

Analyte concentrations are presented in micrograms per liter (ug/L).

All groundwater samples were collected from the upper portion (less than 10 feet) of the shallow water-bearing zone

ND - Analyte not detected
NS - Location not sampled

Benzene Plume

SS-61 REMEDIAL INVESTIGATION REPORT
Holloman Air Force Base, New Mexico
U.S. Army Corps of Engineers, Omaha District

Figure 6-3
Distribution of Analytes Detected in Groundwater During the RPI

Foster Wheeler Environmental Corporation

Revision Date: 12-12-00

LTM wells

Ph I
Ph II

Ph 2

Ph II

Ph I
Ph II

Ph I
Ph II

Benzene Plume

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