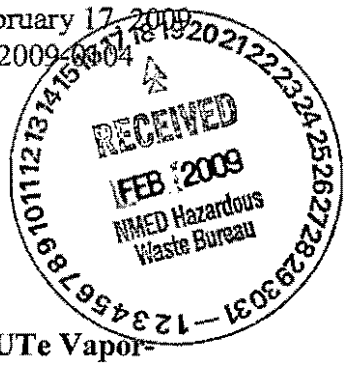
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*Date*: February 17, 2009
*Refer To*: EP2009-0004




James P. Bearzi, Bureau Chief
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6303

**Subject: Submittal of the Pilot Test Report for Comparing Packer and FLUTe Vapor-Monitoring Systems at Material Disposal Area H, Revision 1**

Dear Mr. Bearzi:

Los Alamos National Laboratory (the Laboratory) and the U.S. Department of Energy are submitting the Pilot Test Report for Comparing Packer and FLUTe Vapor-Monitoring Systems at Material Disposal Area H, Revision 1. The Laboratory wishes to rescind the Pilot Test Report for Comparing Packer and FLUTe Vapor-Monitoring Systems at Material Disposal Area H, September 2008, transmitted on September 16, 2008.

Following a review of the Periodic Monitoring Report for Vapor-Sampling Activities at Material Disposal Area H, Solid Waste Management Unit 54-004, at Technical Area 54, Fiscal Year 2007, the New Mexico Environment Department (NMED) directed the Laboratory to conduct a pilot test. This request is documented in a letter dated December 21, 2008. The pilot test was requested because the data collected in federal fiscal year (FY) 2005 and the first two quarters in FY 2006 (before the installation of FLUTe sampling membrane by the Laboratory) indicated that there were significant differences between the two data sets. NMED stated that the material used for the construction of the membrane may have absorbed some volatile organic compounds (VOCs) or influenced VOC concentration levels of detected VOCs in other ways.

As directed by NMED in its December 21, 2008, correspondence, the Laboratory collected samples using the two different sampling methods from the same depths at each location. This was first done during the 2nd quarter FY 2008 by sampling using the FLUTe system, then by removing the FLUTe system and repeating vapor sample collection, using the original packer system. For the next sampling event, 3rd quarter FY 2009, this sampling procedure was repeated in reverse to evaluate the effect of the FLUTe system on the data quality. A report presenting the results was provided to NMED on September 16, 2008.

Following the 2nd quarter FY 2008 sampling of the FLUTe system at location 54-15462, the FLUTe was removed from the borehole to accommodate sampling with the packer system. During the FLUTe's removal it was damaged and sent to the manufacture for repair. Following the repair and

3rd quarter sampling of location with the packer, the FLUTe was reinserted into the borehole and sampled to conclude field activities associated with pilot test.

Following the 1st quarter FY 2009 sampling event in December 2008, field crews observed that one of the FLUTe sample ports and associated tubing did not correspond to the correct sample depth. The FLUTe system was later removed from the borehole and the tubing/manifold configuration was investigated. The results of this investigation confirmed that the tubing/manifold configuration was incorrect for five of the six ports. Table 1 below presents the port/manifold configuration for 3rd and 4th quarter FY 2008 and 1st quarter FY 2009 sampling events.

**Table 1.0**
**Tubing Label and Port Depth Configuration During 3rd Quarter 2008, 4th Quarter 2008, and 1st Quarter 2009**

| Tubing Label | Assumed Port Depth (ft) | Actual Port Depth (ft) |
|---|---|---|
| 1 | 10 | 60 |
| 2 | 60 | 100 |
| 3 | 100 | 150 |
| 4 | 150 | 200 |
| 5 | 200 | 10 |
| 6 | 254 | 254 |

Field documentation, including sample collection logs, logbooks, and the Laboratory's Environmental Restoration Database have been revised to present the correct pore depths with corresponding samples. The Periodic Monitoring Report for Vapor-Sampling Activities at Material Disposal Area H, Solid Waste Management Unit 54-0004, at Technical Area 54, Fiscal Year 2008 presents data for the correct pore depths.

NMED stated in its approval letter that the results of vapor monitoring must be submitted within 60 days after completion of the fieldwork for each monitoring event. It has been the Laboratory's understanding that vapor monitoring results would be submitted in annual reports for MDA H. However, if NMED would like the results submitted for each monitoring event, the Laboratory proposes 120 days following completion of the sampling event, to be consistent with Table XII-4, General Requirements, Periodic Monitoring Reports, for groundwater, surface water, and springs. This duration will allow the Laboratory to refrain from accruing additional costs for quick turnaround times from the analytical laboratories and allow time for quality assurance of the reports.

If you have any questions, please contact Steve Paris at (505) 606-0915 (smparis@lanl.gov) or Ed Worth at (505) 606-0398 (eworth@doeal.gov).

Sincerely,

Michael J. Graham, Associate Director
Environmental Programs
Los Alamos National Laboratory

Sincerely,

David R. Gregory, Project Director
Environmental Operations
Los Alamos Site Office

MG/DG/DM/SP:sm

Enclosures: 1) Two hard copies with electronic files - Pilot Test Report for Comparing Packer and FLUTe Vapor-Monitoring Systems at Material Disposal Area H, Revision 1 (LA-UR-09-0924)

Cy: (w/enc.)
Neil Weber, San Ildefonso Pueblo
Steve Paris, EP-CAP, MS M992
Ed Worth, DOE-LASO, MS A316
RPF, MS M707 (with two CDs)
Public Reading Room, MS M992

Cy: (Letter and CD only)
Laurie King, EPA Region 6, Dallas, TX
Steve Yanicak, NMED-OB, White Rock, NM
Candace Christensen, Northwind, Los Alamos, NM
Kristine Smeltz, WES-DO, MS M992
EP-CAP File, MS M992

Cy: (w/o enc.)
Tom Skibitski, NMED-OB, Santa Fe, NM
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