Los Alamos
NATIONAL LABORATORY
EST. 1943

Environmental Programs
P.O. Box 1663, MS M991
Los Alamos, New Mexico 87545
(505) 606-2337/FAX (505) 665-1812

National Nuclear Security Administration
Los Alamos Site Office, MS A316
Environmental Restoration Program
Los Alamos, New Mexico 87544
(505) 667-4255/FAX (505) 606-2132

Date: February 20, 2009
Refer To: EP2009-0102

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

RECEIVED
FEB 2009
NMED Hazardous Bureau

Subject: Status of Three Shallow Groundwater Wells at Solid Waste Management Units 03-010(a) and 03-001(e)

Dear Mr. Bearzi:

This letter serves to update the New Mexico Environment Department on the status of three shallow groundwater wells at Solid Waste Management Units (SWMUs) 03-010(a) and 03-001(e). Wells B-9, B-10, and B-13 were installed in 2005 to monitor contamination in a small perched zone beneath the former vacuum pump repair shop and associated waste storage area. Wells B-10 and B-13 are sampled quarterly, in accordance with the Interim Facility-Wide Groundwater Monitoring Plan, dated May 2008. Well B-9 is currently used only for water-level measurements.

These wells have been problematic because of their position in or adjacent to a fire lane on the west side of the SM-30 warehouse. The area of the perched zone is very limited (approximately 0.1 acre) and is located almost entirely under the warehouse and fire lane [see Figure 1.0-2 of the status report for SWMUs 03-010(a) and 03-001(e), dated July 2007]. Two of the three wells (B-9 and B-10) have been damaged by snowplows on multiple occasions. Damage to these flush-completed wells has resulted in the infiltration of surface water, as evidenced by sodium and chloride ratios (from road salt) in groundwater samples.

Analysis of the data from the three wells shows that samples from wells B-10 and B-13 display very similar chemistry. As expected, water levels from these two wells also track together. Given the consistency between wells B-10 and B-13, no additional information is gained by sampling both wells. Well B-9 displays slightly different chemistry from wells B-10 and B-13 but is often dry or purged dry during sampling.

Based on this information and the difficulties experienced in sampling and maintaining these wells, the U.S. Department of Energy (DOE) and Los Alamos National Laboratory (the Laboratory) plan to plug and abandon (P&A) wells B-9 and B-10 as early as possible. Well B-13 is located close to the warehouse and has not been damaged by snowplows since its installation; therefore, well B-13

will be rehabilitated as an aboveground well, with bollards to protect it from snowplows and other vehicular traffic.

DOE and the Laboratory will submit a P&A plan for wells B-9 and B-10 at least 30 days before abandonment. If you have any questions, please contact Becky Coel-Roback at (505) 665-5011 (becky_cr@lanl.gov) or Suzy Schulman at (505)-606-1962 (sschulman@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/BCR:sm

Cy: Laurie King, EPA Region 6, Dallas, TX
Steve Yanicak, NMED-OB, White Rock, NM
Tom Skibitski, NMED-OB, Santa Fe, NM
Keyana DeAguero, DOE-LASO (date-stamped letter emailed)
Suzy Schulman, DOE-LASO, MS A316
Becky Coel-Roback, EP-CAP, MS M992
Dave McInroy, EP-CAP, MS M992
Michael J. Graham, ADEP, MS M991
Alison M. Dorries, WES-DO, MS M992
Kristine Smeltz, WES-DO, MS M992
EP-CAP File, MS M992
RPF, MS M707
IRM-RMMSO, MS A150 (date-stamped letter emailed)