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Date: July 25, 2007
Refer To: EP2007-0446

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: Review of June 2007 Groundwater Data

Dear Mr. Bearzi:

The Los Alamos National Laboratory (LANL) Water Stewardship Project (LWSP) met on July 11, 2007, to review new groundwater data received in June 2007. At that time, several groundwater samples were identified with contaminant concentrations above the New Mexico or federal water-quality standards. The LWSP director notified the Hazardous Waste Bureau by telephone on June 12, 2007, and followed up with an email on the same day. The instances of a contaminant above a standard for the first time were as follows:

- At Mortandad Canyon alluvial well MCO-6, nitrate (as nitrogen) was measured at 241 mg/L. The result was close to the total dissolved solids (TDS) value of 308 mg/L and is 24 times the New Mexico groundwater standard of 10 mg/L. The source of this high value is likely a field preservation error resulting from the use of nitric acid.

- In Ancho Canyon regional well R-31, at 532 ft, dissolved iron (1340 µg/L) was detected for the first time above the New Mexico ground water standard of 1000 µg/L. This port is impacted by reducing conditions resulting from residual drilling fluid.

- The unfiltered lead result in Cañon de Valle intermediate well CdV-16-2(i)r is the first above the U.S. Environmental Protection Agency maximum contaminant level (MCL) of 15 µg/L. The result was 15.7 µg/L (method detection level [MDL] 0.5 µg/L) and was 105% of the MCL; lead was not detected in the filtered sample.

- A nitrate (as nitrogen) result at Pine Rock Spring on San Ildefonso Pueblo in lower Mortandad Canyon north of Overlook Park, at 144% (March 2007) of the New Mexico groundwater standard of 10 mg/L, is the first above the standard at this location. The spring chemistry suggests that it is impacted by discharge of sanitary effluent from the nearby treatment plant or by irrigation of athletic fields at the park with effluent.

This letter is our written submission that indicates in the accompanying report and tables the contaminants that meet the six screening criteria laid out in the Settlement Agreement and Stipulated Final Order signed by New Mexico Environment Department, U.S. Department of Energy, and Los Alamos National Security on June 14, 2007. To meet the requirements in criteria 1, 3, and 4, the report calls out data that are the first exceedance of a standard, data that are the first exceedance of one-half a standard, and, generally, new detections of organic compounds.

If you have questions, please contact Ardyth Simmons at (505) 665-3935 (asimmons@lanl.gov) or Mat Johansen at (505) 665-5046 (mjohansen@doeal.gov).

Sincerely,

Susan G. Stiger, Associate Director
Environmental Programs
Los Alamos National Laboratory

Sincerely,

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

SGS/DRG/TBA/DBR:am

Enclosure: Report and accompanying tables: "Summary of New Los Alamos National Laboratory Groundwater Data Loaded in June 2007" (EP2007-0446)

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