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Date: June 25, 2007
Refer To: EP2007-0391

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 May 2007 Groundwater Data

Dear Mr. Bearzi:

The Los Alamos National Laboratory (LANL) Water Stewardship Project (LWSP) met on June 11, 2007, to review new groundwater data received in May 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 11, 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:

- In Los Alamos Canyon alluvial well LAUZ-1, the total dissolved solids (TDS) value was measured at 1160 mg/L, above the New Mexico groundwater standard of 1000 mg/L.

- In Los Alamos Canyon alluvial well LAO-0.6, perchlorate was measured at 7.3 µg/L, above the Consent Order screening level of 4 µg/L. Perchlorate was not detected in the only prior sample from August 2006.

- In Los Alamos Canyon intermediate well LAOI-3.2, perchlorate was measured at 6.65 µg/L, above the Consent Order screening level of 4 µg/L.

- In Pueblo Canyon intermediate well APCO-1, perchlorate was measured at 8.3 µg/L, above the Consent Order screening level of 4 µg/L. The results are questionable: duplicate sample measurements by a more sensitive method were nondetect, in line with previous results from the well.

- In Bulldog Spring in Pajarito Canyon, dissolved iron was measured at 2200 µg/L, above the New Mexico groundwater standard of 1000 µg/L.

- In Pajarito Canyon Kieling Spring, dissolved aluminum was measured at 12,800 µg/L, above the New Mexico groundwater standard of 5000 µg/L.

- At Anderson Spring in Pajarito Canyon in April 2007, six polycyclic aromatic hydrocarbons (PAHs) were detected for the first time, above the U.S. Environmental Protection Agency (EPA) maximum contaminant level (MCL) or risk levels. One compound, benzo(a)pyrene, was detected at a concentration 1.7 times the EPA MCL. Three other PAHs were above screening levels: benzo(b)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene are respectively at 1.0, 107, and 9.1 times the 10^{-5} excess cancer risk EPA Region 6 tap screening levels.

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 for the Notice of Violation issued by NMED to DOE and LANS on September 15, 2006. To meet 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/AG:sm

Enclosure: Report and accompanying tables: "Summary of New Los Alamos National Laboratory Groundwater Data Loaded in May 2007" (EP2007-0391)

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