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Date: OCT 19 2010
Refer To: EP2010-0466

James 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 September 2010 Groundwater Data

Dear Mr. Bearzi:

Members of the Los Alamos National Laboratory Environmental Programs staff met on October 14, 2010, to review new groundwater data received in September 2010. At that time, several groundwater samples were identified with contaminant concentrations above the New Mexico or federal water quality standards.

An Environmental Programs staff member notified the New Mexico Environment Department Hazardous Waste Bureau about these findings by telephone on October 14, 2010, and followed up with an email on the same day.

The seven instances of a contaminant above a standard for the first time (based on samples collected since June 14, 2007) are tabulated in the attached report. These instances are the following:

- Nitrate + nitrite (as nitrogen) was found in primary and field duplicate filtered samples at Pajarito Canyon intermediate well PCI-2 at 810 mg/L and 735 mg/L; the U.S. Environmental Protection Agency (EPA) maximum contaminant level (MCL) is 10 mg/L. The total dissolved solids measurement for these samples was 120 mg/L; the nitrate + nitrite (as nitrogen) results were caused by improper sample preservation.
- Benzo(a)pyrene and pentachlorophenol were detected in an unfiltered field duplicate sample (but not the primary sample) at Pajarito Canyon intermediate well PCI-2 at 0.293 µg/L and 7.01 µg/L, respectively; the respective EPA MCL values are 0.2 µg/L and 1 µg/L.
- Nitrate + nitrite (as nitrogen) was found in a filtered sample from the 904-ft regional aquifer port of Pajarito Canyon well R-20 at 748 mg/L; the EPA MCL is 10 mg/L. The total dissolved solids measurement for this sample was 145 mg/L; the nitrate + nitrite (as nitrogen) result was caused by improper sample preservation.

- RDX (hexahydro-1,3,5-trinitro-1,3,5-triazine)was found in an unfiltered sample at Water Canyon intermediate well CdV-16-4ip at 265 µg/L; the EPA tap water screening level is 6.1 µg/L.
- Manganese was found in a filtered sample from the 1350-ft regional aquifer port of Water Canyon well CdV-R-15-3 at 313 µg/L; the New Mexico Groundwater Standard is 200 µg/L.

This letter is our written submission that meets notification requirements laid out in Section IV.A.3.g of the Compliance Order on Consent, modified on May 13, 2008. The required information for the chemical constituents that meet the seven screening criteria contained in that section is given in the accompanying report and table.

If you have questions, please contact Steve Paris at (505) 606-0915 (smparis@lanl.gov) or Hai Shen at (505) 665-5046 (hshen@doeal.gov).

Sincerely,

David R Cox for MJG

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

Sincerely,

George J. Rael, Manager
Environmental Projects Office
Los Alamos Site Office

MG/GR/DM/SP/DR:sm

Enclosure: Two hard copies with electronic files – Summary of New Los Alamos National Laboratory Groundwater Data Loaded in September 2010 (LA-UR-10-6816)

Cy: (w/enc.)
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