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Date: September 18, 2009
Refer To: EP2009-0469

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 August 2009 Groundwater Data

Dear Mr. Bearzi:

The Los Alamos National Laboratory (LANL) Water Stewardship Project (LWSP) met on September 14, 2009, to review new groundwater data received in August 2009. At that time, several groundwater samples were identified with contaminant concentrations above the New Mexico or federal water quality standards.

The LWSP program manager notified the New Mexico Environment Department (NMED) Hazardous Waste Bureau about these findings by telephone on September 14, 2009, and followed up with an email on the same day.

The 15 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. Samples collected at seven of these locations before June 14, 2007, also contained the same contaminants at concentrations above a standard. The other eight instances are:

- Manganese was found in a filtered sample collected from Pueblo Canyon intermediate monitoring well Test Well 2A at 828 µg/L; the New Mexico groundwater standard is 200 µg/L.
- Indeno(1,2,3-cd)pyrene, benzo(b)fluoranthene, and benzo(a)pyrene were detected in an unfiltered sample collected from Los Alamos Canyon intermediate monitoring well R-6i at concentrations of 0.837 µg/L, 3.68 µg/L, and 2.12 µg/L, respectively. The U. S. Environmental Protection Agency (EPA) human health tap water screening level for indeno(1,2,3-cd)pyrene and benzo(b)fluoranthene is 0.29 µg/L; the Maximum Contaminant Level (MCL) for benzo(a)pyrene is 0.2 µg/L.
- Bis(2-ethylhexyl)phthalate was detected in duplicate unfiltered samples collected from Los Alamos Canyon intermediate monitoring well TA-53i at 15.6 µg/L and 16.3 µg/L; the MCL is 6 µg/L.

- Manganese was found in a filtered sample collected from Pajarito Canyon regional aquifer monitoring well R-40 at 209 µg/L; the New Mexico groundwater standard is 200 µg/L.
- RDX was found in an unfiltered sample collected from Water Canyon intermediate monitoring well R-25b at 10.2 µg/L; the EPA human health tap water screening level is 6.1 µg/L.

This letter is our written submission that indicates in the accompanying report and tables the chemical constituents that meet the seven screening criteria laid out in the Compliance Order on Consent, modified on May 13, 2008.

If you have questions, please contact Ardyth Simmons at (505) 665-3935 (asimmons@lanl.gov) or David Gregory at (505) 667-5808 (dgregory@doeal.gov).

Sincerely,

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

Sincerely,

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

MG/DG/PH/AS/DR:sm

Enclosure: Two hard copies with electronic files – Summary of New Los Alamos National Laboratory Groundwater Data Loaded in August 2009 (LA-UR-09-5773)

Cy: (w/enc.)
RPF, MS M707 (with two CDs)
Public Reading Room, MS M992

Cy: (Letter and CD only)
Ardyth Simmons, EP-LWSP, MS M992
Kristine Smeltz, EP-WES, MS M992

Cy: (w/o enc.)
Laurie King, EPA Region 6, Dallas, TX
Neil Weber, San Ildefonso Pueblo
Tom Skibitski, NMED-OB, Santa Fe, NM
Steve Yanicak, NMED-DOE-OB, MS M894
Keyana DeAguero, DOE-LASO (date-stamped letter emailed)
Michael J. Graham, ADEP, MS M991
Paul R. Huber, EP-LWSP, MS M992
David Rogers, EP-LWSP, MS M992
Mei Ding, EES-6, MS J514
Florie Caporuscio, EES-6, MS J514
Alison M. Dorries, EP-WES, MS M996
IRM-RMMSO, MS A150 (date-stamped letter emailed)