

Environmental Programs
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Date: January 30, 2009 Refer To: EP2009-0018

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 December 2008 Groundwater Data

Dear Mr. Bearzi:



The Los Alamos National Laboratory (LANL) Water Stewardship Project (LWSP) met on January 15, 2009, to review new groundwater data received in December 2008. At that time, several groundwater samples were identified with contaminant concentrations above the New Mexico or federal water quality standards.

The LWSP project leader notified the New Mexico Environment Department (NMED) Hazardous Waste Bureau about these findings by telephone on January 15, 2009, and followed up with an email on the same day.

The 16 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 these locations before June 14, 2007, also contained the same contaminants at concentrations above a standard, with the following exceptions:

- Chromium was detected at 563 μg/L in a filtered sample collected at Sandia Canyon intermediate well SCI-2; the New Mexico groundwater standard is 50 μg/L.
- Chromium was detected at 848 µg/L in a filtered sample collected at Mortandad Canyon regional aquifer well R-42; the New Mexico groundwater standard is 50 µg/L.
- Dioxane[1,4-] was detected at 61.4 μg/L in an unfiltered sample collected at Pajarito
 Canyon regional aquifer well R-20; the U.S. Environmental Protection Agency (EPA)
 Region 6 tap water screening level is 61.12 μg/L. This compound was not detected in
 analysis by the more accurate semivolatile organic method.

- Ammonia (as nitrogen) was detected at 2.66 μg/L in a filtered sample collected from the sump for the 1063 ft. screen [sampled to assess possible inflow of perched groundwater during drilling of nearby R-25(c)] at Cañon de Valle regional aquifer well R-25; the EPA Region 6 tap water screening level is 0.209 μg/L.
- Phenol was detected at 38.3 μg/L in an unfiltered sample collected from the sump for the 1063 ft. screen [sampled to assess possible inflow of perched groundwater during drilling of nearby R-25(c)] at Cañon de Valle regional aquifer well R-25; the New Mexico groundwater standard is 5 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. The report identifies data collected since June 14, 2007, that meet these criteria.

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,

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/PH/AS/DR:sm

Enclosure: Report and accompanying tables: "Summary of New Los Alamos National Laboratory Groundwater Data Loaded in December 2008" (LA-UR-09-0220)

Cy: (w/enc.)

Neil Weber, San Ildefonso Pueblo David Rogers, EP-LWSP, MS M992 RPF, MS M707 (with two CDs) Public Reading Room, MS M992

Cy: (Letter and CD only)

Laurie King, EPA Region 6, Dallas, TX Steve Yanicak, NMED-OB, White Rock, NM Ardyth Simmons, EP-LWSP, MS M992 Mei Ding, EES-6, MS J514 Florie Caporuscio, EES-6, MS J514 Kristine Smeltz, WES-DO, MS M992 EP-LWSP File, MS M992

Cy: (w/o enc.)

Tom Skibitski, NMED-OB, Santa Fe, NM Keyana DeAguero, DOE-LASO (date-stamped letter emailed) Michael Graham, ADEP, MS M991 Alison M. Dorries, WES-DO, MS M992 Paul R. Huber, EP-LWSP, MS M992 IRM-RMMSO, MS A150 (date-stamped letter emailed)