Los Alamos
NATIONAL LABORATORY
EST. 1943

Environmental Programs
P.O. Box 1663, MS M991
Los Alamos, New Mexico 87545
(505) 606-2337FAX (505) 665-1812

National Nuclear Security Administration
Los Alamos Site Office, MS A316
Environmental Restoration Program
Los Alamos, New Mexico 87544
(505) 667-4255/FAX (505) 606-2132

Date: November 30, 2007
Refer To: EP2007-0715

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 October 2007 Groundwater Data

Dear Mr. Bearzi:

The Los Alamos National Laboratory (LANL) Water Stewardship Project (LWSP) met on November 15, 2007, to review new groundwater data received in September 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 November 15, 2007, and followed up with an email on the same day. The 27 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 before June 14, 2007, at these locations contained the same contaminant at concentrations above a standard with the following four exceptions.

- The concentration of ammonia as nitrogen at Sandia Canyon alluvial well SCA-1 of 0.414 mg/L was above the U. S.Environmental Protection Agency (EPA) tap water screening level of 0.20857 mg/L.

- Five of the 15 polycyclic aromatic hydrocarbon compounds detected at Mortandad Canyon alluvial well MCO-7.5 were at concentrations above either the respective EPA primary drinking water standard or the EPA tap water screening level (at an excess cancer risk of 10^{-5}). These compounds were found only in one of the field duplicate samples and not in a field blank, suggesting their source is analytical laboratory contamination.

- At Mortandad Canyon intermediate well MCOI-4 dioxane[1,4-] was measured by the volatile organic method at 61.3 µg/L, for the first time above the EPA tap water screening level (at an excess cancer risk of 10^{-5}) of 61.1 µg/L. The companion result by the more accurate semivolatile organic method was 37.6 µg/L, which is the first measurement above one-half the EPA tap water screening level by this method at this well.

- The filtered aluminum concentration from Pajarito Canyon intermediate groundwater location Homestead Spring was 5.6 mg/L, the first above the New Mexico groundwater standard of 5 mg/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 Settlement Agreement and Stipulated Final Order signed by the New Mexico Environment Department, U.S. Department of Energy, and Los Alamos National Security, LLC, on June 14, 2007. 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 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

SG/DR/PR/AM/DB:sm

Enclosure: Report and accompanying tables: "Summary of New Los Alamos National Laboratory Groundwater Data Loaded in October 2007" (EP2007-0715)

Cy: (w/enc.)
Neil Weber, San Ildefonso Pueblo
Laurie King, EPA Region 6, Dallas, TX
Tom Skibitski, NMED-OB, Santa Fe, NM
Steve Yanicak, NMED-OB, White Rock, NM
Bonita Eichorst, DOE-LASO, MS A316 (date-stamped copy emailed)
Susan G. Stiger, ADEP, MS M991
Carolyn Mangeng, ADEP, MS M991
Ardyth Simmons, EP-LWSP, MS M992
Armand Groffman, EP-LWSP, MS M992
David Rogers, EP-LWSP, MS M992
Paul Huber, EP-LWSP, MS M992
Tina Behr-Andres, EP-LWSP, MS M992
Alison M. Dorries, EP-ERSS, MS M992
Peggy Reneau, EP-ERSS, MS M992
Mei Ding, EES-6, MS J514
Florie Caporuscio, EES-6, MS J514
Public Reading Room, MS M992
EP-LWSP File, MS M992
RPF, MS M707
IRM-RMMSO, MS A150