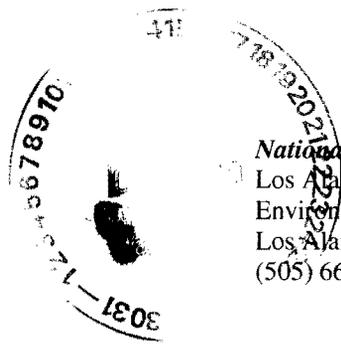


Environmental Programs
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T400



National Nuclear Security Administration
Los Alamos Site Office, MS A316
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Date: **OCT 15 2010**
Refer To: EP2010-0424

John Kieling, Program Manager
Permits Management Program
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6303

Subject: Submittal of the Response to the Review of the Periodic Monitoring Reports for Ancho Watershed, March 31–April 8, 2009, and October 21–October 28, 2009

Dear Mr. Kieling:

This letter provides responses to New Mexico Environment Department review of subject reports.

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

Sincerely,

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:sm

Enclosures: Two hard copies with electronic files – Response to the Review of the Periodic Monitoring Reports for Ancho Watershed, March 31–April 8, 2009, and October 21–October 28, 2009 (LA-UR-10-6340)

Cy: (w/enc.)

James Bearzi, NMED-HWB, 2905 Rodeo Park Drive East, Building 1
Neil Weber, San Ildefonso Pueblo
Hai Shen, DOE-LASO, MS A316
Steve Paris, EP-CAP, MS M992
RPF, MS M707 (w/ two CDs)
Public Reading Room, MS M992

Cy: (Letter and CD and/or DVD only)

Laurie King, EPA Region 6, Dallas, TX
Steve Yanicak, NMED-DOE-OB, MS M894
David Rogers, EP-ET, MS M992
Kristine Smeltz, EP-BPS, MS M992

Cy: (w/o enc.)

Tom Skibitski, NMED-OB, Santa Fe, NM
Annette Russell, DOE-LASO (date-stamped letter emailed)
Craig Douglass, EP-CAP, MS M992
Michael J. Graham, ADEP, MS M991

**Response to the Review of Periodic Monitoring Reports for Ancho Watershed,
March 31–April 8, 2009, and October 21–October 28, 2009, Los Alamos National Laboratory
EPA ID #NM0890010515 HWB-LANL-09-041 AND HWB-LANL-I0-017,
Dated August 27, 2010**

INTRODUCTION

To facilitate review of this response, the New Mexico Environment Department's (NMED's) comments are included verbatim. Los Alamos National Laboratory's (LANL's or the Laboratory's) responses follow each NMED comment.

COMMENTS FOR MARCH 31–APRIL 8, 2009, REPORT

NMED Comment

1. *The third sentence of the first paragraph in Section 4.2 on page 3 states, "The screening levels with which the results are compared are shown in Table 4.2-1." However, Table 4.2-1 lists the sources of the screening levels, not the actual screening levels. For clarification, the statement cited above and also found in the first paragraph following bulleted items in Section 4 on page 4 must be revised to state that the Table lists the source of screening levels in future reports.*

LANL Response

1. Beginning with the November 2010 periodic monitoring report submittal, this sentence will read "The sources of screening levels with which the results are compared are listed in Table 4.2-1."

NMED Comment

2. *It is unclear which port, Port MP2A or MP2B, in Well R-31 is used for groundwater sampling for field parameters, collection of samples and for determining groundwater-level measurements. For example, Table 2.0-1, Monitoring Locations and General Information, on page 9 indicated that Port MP2A in Monitoring Well R-31 is positioned at 532.2 feet. However, groundwater-level measurements presented in Appendix C indicated that Port MP2B is located at 532.2 feet. Analytical results presented in Appendix D indicate that groundwater for tritium analysis was collected from 542.5 feet. The Permittees must clearly indicate which ports are used to collect samples and measure parameters.*

LANL Response

2. R-31 is a five-screen well equipped with a Westbay sampling system. In each screen there are two sampling ports and one pumping port; screen 2 has an additional sampling port. Sampling ports MP2A (532.5 ft) and MP2B (542.5 ft) are located in screen 2 between 515 ft and 545.7 ft, which intersects the regional aquifer. Additional sample ports are provided within a single screen as backup measurement locations in case the water level drops below a port in the screen or mechanical problems prevent a port from being sampled.

The port depths provided in the periodic monitoring report are intended to indicate the screen from which the sample was taken. Table 2.0-1, Monitoring Locations and General Information, gives the screened interval and top and bottom screen depths.

COMMENTS FOR OCTOBER 21–28, 2009, REPORT

NMED Comment

3. *The third sentence of the first paragraph in Section 4.2 on page 3 states, "The screening levels with which the results are compared are shown in Table 4.2-1." However, Table 4.2-1 lists the sources of the screening levels, not the actual screening levels. For clarification, the statement cited above, and also found in the first paragraph following bulleted items in Section 4 on page 4, should be revised to state that the Table lists the source of screening levels in future reports.*

LANL Response

3. Beginning with the November 2010 periodic monitoring report submittal, this sentence will read "The sources of screening levels with which the results are compared are listed in Table 4.2-1."

NMED Comment

4. *A section discussing investigation-derived waste (IDW) and an Appendix discussing the management of wastes produced during the periodic monitoring event (PME) are not included with this Report. The Permittees must include a description of the management of IDW as specified in Section XLD.5 of the Consent Order in future reports.*

LANL Response

4. This section is no longer included in the periodic monitoring reports according to an agreement with NMED during a meeting in October 2009 (Kulis 2009, 110695).

NMED Comment

5. *Information presented in Table 2.0-1 indicated that R-31 was sampled on October 26, 2009 from port MP2B at 542.5 feet. Groundwater-Elevation Measurements presented in Appendix B indicated that R-31 port MP2B is located at 532.2 feet. The Permittees must resolve the discrepancy in the reported depths for port MP2B and indicate the correct depth in future reports.*

LANL Response

5. R-31 is a five-screen well equipped with a Westbay sampling system. In each screen there are two sampling ports and one pumping port; screen 2 has an additional sampling port. Sampling ports MP2A (532.5 ft) and MP2B (542.5 ft) are located in screen 2 between 515 ft and 545.7 ft, which intersects the regional aquifer. Additional sample ports are provided within a single screen as backup measurement locations in case the water level drops below a port in the screen or mechanical problems prevent a port from being sampled.

The port depths provided in the periodic monitoring report are intended to indicate the screen from which the sample was taken. Table 2.0-1, Monitoring Locations and General Information, gives the screened interval and top and bottom screen depths.

NMED Comment

6. *NMED noted a substantial increase in pH in groundwater sampled from port 1562 at 542.5 feet in monitoring well R-31. The pH was reported as 6.78 in April 2009 and reported as 11.05 in the October 2009 periodic monitoring event.*

LANL Response

6. Field notes for the R-31 samples collected on October 26, 2009, from two ports indicate that the pH meter was not functioning correctly.

Because the pH results were collected from a meter that could not be properly calibrated, LANL removed them from the database and indicated that none were collected.

Reference

Kulis, J., November 9, 2009. RE: Suggestions for future PMRs. E-mail message to A.M. Simmons (LANL), D. Cobrain (NMED), and M. Dale (NMED) from J. Kulis (NMED), Santa Fe, New Mexico. (Kulis 2009, 110695)