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NEW MEXICO
ENVIRONMENT DEPARTMENT

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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

February 25, 2009

Donald L. Winchell, Jr., Manager
Los Alamos Site Office-Department of Energy
528 35th Street, Mail Stop A316
Los Alamos, NM 87544

Richard Watkins, Director
Environment, Safety, Health, & Quality
Los Alamos National Security, LLC
Los Alamos Research Park
4200 Jemez Road, Suite 400
Los Alamos, NM 87545

RE: INTENT TO ASSESS STIPULATED PENALTIES FOR PERIODIC MONITORING REPORT FOR VAPOR-SAMPLING ACTIVITIES AT MATERIAL DISPOSAL AREA T, CONSOLIDATED UNIT 21-016(a)-99, TECHNICAL AREA 21
LOS ALAMOS NATIONAL LABORATORY
EPA ID #NM0890010515
HWB-LANL-09-003

Dear Messrs. Winchell and Watkins:

The New Mexico Environment Department (Department) is in receipt of the U.S. Department of Energy (DOE) and the Los Alamos National Security, L.L.C.'s (LANS) (collectively, the Permittees) *Periodic Monitoring Report for Vapor-Sampling Activities at Material Disposal Area T (MDA-T), Consolidated Unit 21-016(a)-99, Technical Area 21, Fiscal Year 2008* (Report), referenced by LA-UR-09-0791/EP2009-0077 and dated February 14, 2009.

The Department has conducted a preliminary review of the Report and finds that it does not substantially comply with the specifications set forth in the March 1, 2005 Order on Consent (Order). This letter constitutes written notification of the Department's intention to assess stipulated penalties pursuant to Section III.G.2 of the Order.

The Report for MDA-T is not in substantial compliance with the Order because it does not include: 1) four quarters of sampling results for borehole locations 21-25262 and 21-

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25263; 2) collection of samples from Port #2 at 21-25262 that were intended to substitute for samples to be collected from Port #2 at 21-603059; and 3) the fourth quarter (December 2008) sampling results for the remaining three borehole locations (21-25264, 21-603058, and 21-603059).

1) Four Quarterly Sampling Events at Boreholes 21-25262 and 21-25263

The Permittees inaccurately state on page 1 of the Report that "[c]ompletion of the pore-gas sampling activities fulfills the requirements outlined in the New Mexico Environment Department's (Department) 'Phase II Investigation Workplan Approval with Modifications' letter..." In fact, the Report did not fulfill the requirements of the "Phase II Investigation Workplan Approval with Modifications[1]" because the Permittees did not follow the direction, stated on page 2, regarding borehole locations 21-25262 and 21-25263: "[t]he Permittees must remove the slough from all three pore-gas sampling locations (21-25262, 21-25263, 21-25264) and install permanent pore-gas monitoring wells." The Permittees failed to complete this activity, even after concurring with this directive in a letter dated June 17, 2007[2]:

> LANL has reviewed all of the volatile organic compound (VOC) and tritium borehole data for MDA-T and agrees that permanent vapor-monitoring wells are needed at MDA-T as part of the monitoring requirements at TA-21. Accordingly, LANL agrees to remove the slough and install three permanent vapor-monitoring wells in the three deepest boreholes (sample locations 21-25262, 21-25263, and 21-25264).

The Permittees state in the Report that deviations from the MDA-T vapor monitoring plan are summarized in the "Phase II Investigation Report[3]". However, the Department's "Approval with Modifications Phase II Investigation Report[4]" explains that the Permittees did not adequately justify or explain the need for the borehole replacement deviation originally requested by the Permittees[5, 6]. The "Approval with Modifications[4]" therefore directed the Permittees to "...collect pore-gas samples from all five borehole locations (21-25262, 21-25263, 21-25264, 21-603058, and 21-603059) for the remainder of the quarterly sampling events" (*see* item #3).

The Permittees' assertion on page 4 of the Report that "[t]he analytical results obtained from these wells [21-603058 and 21-603059] effectively replaces any additional data originally requested by the Department for borehole locations 21-25262 and 21-25263" is incorrect. The Department required[4] installation of the two permanent vapor monitoring wells (21-25262 and 21-25263) and instructed the Permittees to collect quarterly samples (June 2008, September 2008, and December 2008) at all five boreholes (21-25262, 21-25263, 21-25264, 21-603058 and 21-603059).

The Department's requirements concerning boreholes 21-25262 and 21-25263 have been repeated in numerous correspondences. The Permittees failed to follow the Department's directive by not collecting samples at these boreholes.

2) Port #2 at Borehole 21-25262

The Permittees state on page 4 of the Report that, "[p]ore-gas sampling port #2, installed at depth 112.5 – 117.5 feet below ground surface in monitoring well location 21-603059, did not produce pore-gas vapor upon installation. Therefore no analytical data could be collected at this depth during any sampling round." The Department addressed this issue in the "Approval with Modifications[4]" by stating in comment #5 (page 3) that "[t]he Permittees must collect samples from port #2 in the original borehole (21-25262) for the final three quarters since collection of samples from port #2 in borehole 21-603059 is not possible." The Permittees failed to follow the Department's direction by not collecting samples from port #2 at borehole 21-25262.

3) 4th Quarter Sampling Event

The Permittees inaccurately state on page 1 of the Report that "[c]ompletion of the pore-gas sampling activities fulfills the requirements outlined in…all approved deviations." Had the Report fulfilled the requirements of the deviation stated in the "Approval with Modifications[4]" concerning the quarterly vapor sampling timeframes, the Permittees would have included in the Report the data collected during the fourth quarter (December 2008); in fact, the Permittees failed to do so.

The Permittees state on page 1 (Section 2.0) of the Report that "[m]onitoring was completed…in October 2007 (round 1); February 2008 (round 2); May 2008 (round 3); and September 2008 (round 4)"; this schedule is not in compliance with the Department's required extended schedule of June 2008 (round 2), September 2008 (round three), and December 2008 (round 4) as required in the "Approval with Modifications[4]." The quarterly sampling schedule included in the "Approval with Modifications[4]" was extended to afford the Permittees enough time to conduct and submit a Safety Basis report for the required work of installing permanent vapor monitoring wells at sample locations 21-25262 and 21-25263. The Department readdressed this issue in a letter dated October 20, 2008[8]. The Permittees failed to follow the Department-approved schedule by not conducting and reporting on the fourth quarter (i.e., December 2008) sampling event.

The Department reserves the right to seek another form of relief, in lieu of assessing stipulated penalties, for all or part of the penalties for noncompliance. If the Department decides to assess stipulated penalties pursuant to Section III.G, the Department will not seek a separate penalty for the deficiencies identified in this notice. The Department's demand for stipulated penalties will be sent in accordance with Section III.G.5 of the Order.

Please do not hesitate to contact me at 505-476-6016 should you have any questions.

Sincerely,

James P. Bearzi
Chief
Hazardous Waste Bureau

cc: C. de Saillan, NMED-OGC
R. Kay, NMED-HWB
D. Cobrain, NMED-HWB
J. Kieling, NMED-HWB
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S. Yanicak, NMED-DOEOB, MS J993
L. King, EPA 6PD-N
G. Rael, DOE OLASO, MS A316
file: Reading and LANL '09 TA-21 (Consolidated Unit: 21-016(a)-99)

References

1. NMED, 2007. Approval with Modifications Phase II Investigation Work Plan for Consolidated Unit 21-016(a)-99, Material Disposal Area T, at Technical Area 21. April 9, 2007.

2. LANL, 2007. Response to the "Approval with Modifications Phase II Investigation Work Plan for Consolidated Unit 21-016(a)-99, Material Disposal Area T, at Technical Area 21. June 17, 2007. LA-UR-07-3844/EP2007-0354.

3. LANL, 2007. Phase II Investigation Report for Material Disposal Area T at Technical Area 21. November 15, 2007. LA-UR-07-7692/EP2007-0700.

4. NMED, 2008. Approval with Modifications Phase II Investigation Report, Material Disposal Area (MDA) T at Technical Area 21, Revision 1.0. March 28, 2008.

5. LANL, 2007. Email: from Bruce Wedgeworth (LANL) to Darlene Goering (NMED); Subject: MDA-T Request. October 24, 2007.

6. NMED, 2007. Email: from Darlene Goering (NMED) to Bruce Wedgeworth (LANL); Subject: RE: MDA-T Request. October 26, 2007.

7. NMED, 2007. Response to Permittees' Response to the Approval with Modifications Phase II Investigation Work Plan fro Consolidated Unit 21-016(a)-99, Material Disposal Area T. August 17, 2007.

8. NMED, 2008. NMED Comments on the Response to the Approval with Modifications, Phase II Investigation Report, Material Disposal Area (MDA) T, at Technical Area 21, Revision 1.0 (March 28, 2008) September 5, 2008. October 20, 2008.