

Environmental Programs
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Date: APR 1 5 2010 Refer To: EP2010-0140

James Bearzi, Bureau Chief Hazardous Waste Bureau New Mexico Environment Department 2905 Rodeo Park Drive East, Building 1 Santa Fe, NM 87505-6303

Subject: Submittal of the Periodic Monitoring Report for Vapor-Sampling Activities at Material Disposal Area H, Solid Waste Management Unit 54-004, at Technical Area 54, First Quarter Fiscal Year 2010

Dear Mr. Bearzi:

Enclosed please find two hard copies with electronic files of the Periodic Monitoring Report for Vapor-Sampling Activities at Material Disposal Area H, Solid Waste Management Unit 54-004, at Technical Area 54, First Quarter Fiscal Year 2010.

The analytical results continue to confirm the presence of low concentrations of volatile organic compounds (VOCs) in pore-vapor samples. All VOCs detected during the first quarter of fiscal year (FY) 2010 as well as the previous eight quarters of sampling were at concentrations less than those needed to exceed groundwater screening levels. Given the consistent nature of the VOC concentrations in pore-gas samples collected over time, Los Alamos National Laboratory (the Laboratory) proposes a change in the sampling and reporting requirements for VOCs at Material Disposal Area (MDA) H. The Laboratory proposes to provide the second quarter FY2010 periodic monitoring report as scheduled in May 2010 and then move to an annual sampling and reporting cycle to be performed in the second quarter of each fiscal year until the final remedy for MDA H has been agreed upon. The proposed annual sampling is for VOCs only at the existing monitoring ports.

The tritium activities for borehole 54-01023 were generally an order of magnitude (a factor of 10) less than previous sampling events. The Laboratory has reviewed the field logs and laboratory quality assurance documentation and has identified nothing to indicate a discrepancy. It should be noted that a new stainless-steel sampling system was installed as a replacement for a Flexible Liner Underground Technology (FLUTe) sampling membrane before sampling was conducted. No tritium was detected in the newly drilled borehole 54-609985. Because of the change in tritium activities observed in borehole 54-01023, the Laboratory will not change the current tritium pore-vapor sampling schedule, conducted each quarter.

If you have any questions, please contact Jarrett Rice at (505) 665-3874 (wjrice@lanl.gov) or Ed Worth at (505) 606-0398 (eworth@doeal.gov).

Sincerely,

Michael A Graham, Associate Director

Environmental Programs

Los Alamos National Laboratory

Sincerely,

David R. Gregory, Project Direct

Environmental Operations Los Alamos Site Office

MG/DG/AB/JR:sm

Enclosures: Two hard copies with electronic files – Periodic Monitoring Report for Vapor-Sampling

Activities at Material Disposal Area H, Solid Waste Management Unit 54-004, at Technical

Area 54, First Quarter Fiscal Year 2010 (LA-UR-10-2178)

Cy: (w/enc.)

Neil Weber, San Ildefonso Pueblo

Jarrett Rice, EP-TA-54 Closure Project, MS M991

Ed Worth, DOE-LASO, MS A316 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

Beth Norris, North Wind, Inc. (w/ MS Word files on CD)

Kristine Smeltz, EP-WES, MS M992

Cy: (w/o enc.)

Tom Skibitski, NMED-OB, Santa Fe, NM

Annette Russell, DOE-LASO (date-stamped letter emailed)

Andy Baumer, EP-TA-54 Closure Project, MS C348

Michael J. Graham, ADEP, MS M991

IRM-RMMSO, MS A150 (date-stamped letter emailed)