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Date: NOV 01 2011
Refer To: EP2011-0360

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

Subject: Request to Discontinue Quarterly Vapor Sampling at Material Disposal Area L

Dear Mr. Kieling:

The U.S. Department of Energy (DOE) and Los Alamos National Security (LANS), LLC, request approval from the New Mexico Environment Department (NMED) to discontinue quarterly vapor sampling at Material Disposal Area (MDA) L. Vapor sampling (e.g., pore-gas monitoring) at MDA L has been performed since 1985; the current quarterly sampling program has been in place since 2008.

The nature and extent of volatile organic compounds (VOCs) in the vadose zone have been defined at MDA L through the investigation activities performed pursuant to the Compliance Order on Consent and subsequent vapor-monitoring activities. Under the current sampling program, VOC and tritium samples are collected on a quarterly basis from 86 sampling ports in 25 vapor-monitoring wells. The data collected to date are sufficient to support the remedy selection process for MDA L. The corrective measures evaluation report for MDA L (LA-UR-11-4798, EP2011-0249) determined that the vapor data indicate an ongoing VOC source and that there is uncertainty related to the potential for VOCs to impact groundwater in the future. While the VOC vapor concentrations are elevated, the data suggest the subsurface vapor plumes are stable and contained between the surface and approximately 250 ft below the surface. To address the VOC source area and the potential pathway of the vapors to groundwater, the recommended alternative for MDA L includes soil-vapor extraction to remove VOC vapor mass from the subsurface, which would break the transport pathway and protect groundwater.

DOE/LANS will submit the periodic monitoring report (PMR) for the most recent vapor samples collected during the fourth quarter of fiscal year (FY) 2011 in December 2011. DOE/LANS propose to discontinue quarterly vapor sampling at MDA L beginning in the first quarter of FY2012 and instead monitor the current approved sampling ports on a biannual basis. The next samples would be collected between July and September 2013, and a PMR will be submitted 120 days after sampling is complete until a remedy is implemented at the site. Once NMED approves a final remedy, a performance vapor-monitoring approach will be presented in the corrective measures implementation plan and implemented during the remedial phase.

If you have any questions, please contact Jarrett Rice at (505) 665-3874 (wjrice@lanl.gov) or Peter Maggiore at (505) 665-5658 (peter.maggiore@nnsa.doe.gov).

Sincerely,

B. G Schappell for MJG

Michael J. Graham, Associate Director
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Los Alamos National Laboratory

Sincerely,

George J. Rael, Assistant Manager
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MG/GR/TG:sm

Cy: Laurie King, EPA Region 6, Dallas, TX
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Jim Davis, NMED-Resource Protection, Santa Fe, NM (date-stamped letter emailed)
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