

**Environmental Programs**

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**National Nuclear Security Administration**

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Date: **NOV 15 2012**

Refer To: EP2012-0278

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

Jerry Schoeppner, Bureau Chief
 Groundwater Quality Bureau
 New Mexico Environment Department
 Harold Runnels Building, Room N2261
 1190 St. Francis St.
 Santa Fe, NM 87502

Subject: Use of Potable Water for Dust Suppression during Disposal of Bulk Low-Level Waste at Technical Area 54

Dear Messrs. Kieling and Schoeppner:

The purpose of this letter is to provide the New Mexico Environment Department (NMED) with additional information regarding the use of potable water for dust suppression during the disposal of bulk low-level wastes (LLW) at Technical Area 54 (TA-54), specifically at Pits 37 and 38 (Figure 1). Pit 37 is listed as one of the pits within Solid Waste Management Unit (SWMU) 54-018 in the 1990 Solid Waste Management Units Report, Volume IV (TA-51 through TA-74) (LA-UR-90-3400). SWMU 54-018 was included in the 1990 SWMU Report because of its history of solid and potentially hazardous waste disposal. SWMU 54-018 and eight other SWMUs make up Consolidated Unit 54-013(b)-99 (i.e., Material Disposal Area [MDA] G), which is subject to the requirements of the March 2005 Compliance Order on Consent. Pit 38 is used exclusively for the disposal of LLW.

In January 2011, the Los Alamos National Laboratory's Radiation Protection Division revised the bulk LLW disposal approach to require the use of water to suppress the generation of dust containing radionuclides that could adversely affect worker health and safety. This approach requires the use of water spray to control dust generation when bulk waste is placed in a disposal pit and to prevent track out by removing residual material from bins and trucks. The U.S. Department of Energy (DOE) and Los Alamos National Security, LLC (LANS) performed an extent-of-condition review of water use in bulk LLW disposal operations at TA-54 under the new disposal requirement. This review, which was completed on November 1, 2012, determined that

approximately 100,000 to 350,000 gal. of potable water was used for dust suppression at Pit 37 from January 2011 to May 2011. Approximately 400,000 gal. of potable water was used for dust suppression at Pit 38 during two periods (i.e., June–August 2011 and July 2012). DOE/LANS are continuing to revise these estimates.

DOE/LANS are in receipt of the October 1, 2012, letter from the Hazardous Waste Bureau and the October 15, 2012, letter from the Groundwater Quality Bureau. DOE/LANS will respond to both letters. Additionally, because Pit 37 is one of the SWMUs addressed in the Corrective Measures Evaluation Report for Material Disposal Area G, Consolidated Unit 54-013(b)-99, at Technical Area 54, Revision 3 (LA-UR-11-4910/EP2011-0284) (MDA G CME), DOE/LANS will evaluate the potential for the dust suppression water used at and in the vicinity of Pit 37 to affect the conceptual site model in the MDA G CME. The results of this evaluation will be reported separately to NMED.

As stated in the August 13, 2012, notice of intent (NOI) to discharge, DOE/LANS have paused these types of water applications associated with LLW disposal in pits at TA-54 pending the Groundwater Quality Bureau's response to the NOI.

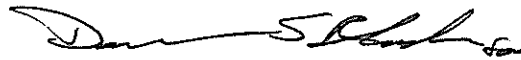
If you have any questions, please contact Kathryn Roberts at (505) 665-0006 (kroberts@lanl.gov) or Gene Turner at (505) 667-5794 (gene.turner@nnsa.doe.gov).

Sincerely,



Jeff Mousseau, Associate Director
Environmental Programs
Los Alamos National Laboratory

Sincerely,



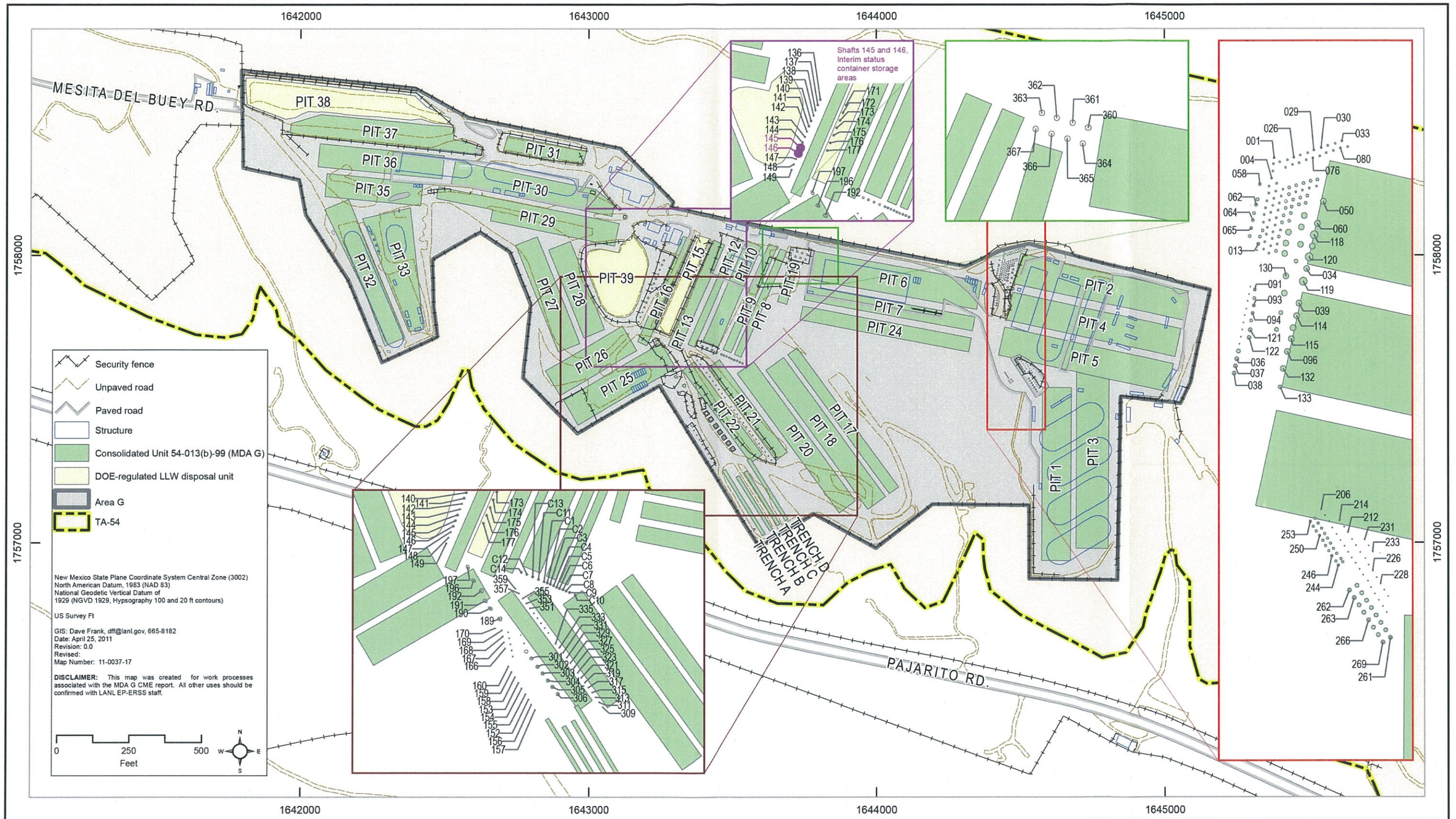
Peter Maggiore, Assistant Manager
Environmental Projects Office
Los Alamos Site Office

JM/PM/DM/CD:sm

Attachment: Figure 1. MDA G and Area G waste disposal units (LA-UR-11-4910)

Cy: (w/att.)

Laurie King, EPA Region 6, Dallas, TX
Steve Yanicak, NMED-DOE-OB, MS M894
Tom Skibitski, NMED-OB (date-stamped letter emailed)
Jennifer Fullam, NMED-WQB (date-stamped letter emailed)
Annette Russell, DOE-LASO (date-stamped letter emailed)
Roberto Torres, DOE-LASO (date-stamped letter emailed)
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Ed Worth, DOE-LASO (date-stamped letter emailed)
Gene Turner, DOE-LASO (date-stamped letter emailed)
David Rhodes, DOE-LASO (date-stamped letter emailed)
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Source: Corrective Measures Evaluation Report for Material Disposal Area G, Consolidated Unit 54-013(b)-99, at Technical Area 54, Revision 3, LA-UR-11-4910.

Figure 1 MDA G and Area G waste disposal units