



October 4, 2023

Arturo Duran, Designated Agency Manager
U.S. Department of Energy
Environmental Management
Los Alamos Field Office
1200 Trinity Drive, Suite 400
Los Alamos, NM 87544

**RE: APPROVAL WITH MODIFICATIONS
FINAL INVESTIGATION WORK PLAN FOR MATERIAL DISPOSAL AREA T AT TECHNICAL
AREA 21
LOS ALAMOS NATIONAL LABORATORY
EPA ID#NM0890010515
HWB-LANL-23-043**

Dear Arturo Duran:

The New Mexico Environment Department (NMED) has received the United States Department of Energy's (DOE) (the Permittee) *Final Investigation Work Plan for Material Disposal Area T at Technical Area 21* (IWP) dated and received on June 15, 2023, and is referenced by EM2023-0261. NMED has reviewed the IWP and hereby issues this Approval with Modifications (AWM). The Permittees must implement the IWP with the Modification outlined below.

Specific Comments

1. Section 3.0, Site Conditions, pg. 7

DOE Statement: "Surface and subsurface features and geological characteristics of MDA T are described in detail in the approved MDA T Investigation Work Plan (LANL 2004, 085641; NMED 2005, 091694)."

NMED Comment: NMED notes that IWP does not include the information regarding site conditions from the referenced *Investigation Work Plan Material Disposal Area T, Solid Waste Management Unit 21-013(b)-99 at Technical Area 21*, dated February 2004. The IWP should include sufficient information to be a standalone document and must

include the referenced language that describes the existing site conditions. The IWP should have also included information on the surface and subsurface of the immediate and surrounding areas associated with Material Disposal Area T. In addition, it should have provided any updated information on the site that may have occurred since the submittal of the referenced document in 2004. Please include the referenced information in the investigation report.

2. Section 4.3, Proposed Investigation Activities at MDA T, pg. 17.

DOE Statement: “One round of pore-gas samples will be collected from the five established vapor wells at MDA T (21-25262, 21-603058, 21-603059, 21-25264, and 21-607955) to evaluate changes since the last subsurface vapor sampling in 2011 and assess the temporal variability of tritium and VOCs in pore gas.”

NMED Comment: Revise the IWP to include the collection of four rounds of pore-gas samples for the five established vapor wells at MDA T. NMED evaluated the results of the *Periodic Monitoring Report for Vapor-Sampling Activities at Material Disposal Area T, Consolidated Unit 21-016(a)-99, at Technical Area 21, Third Quarter Fiscal Year 2011*, which is the last periodic monitoring report submitted before discontinuing quarterly vapor sampling at MDA T. The results show a variation in results at the deepest sample depths for locations 21-25262, 21-25264, 21-603058, and 21-603059. Due to the variations observed in quarterly results for vapor sampling, collecting one round of pore-gas samples would not be sufficient to adequately evaluate temporal trends between the Phase III investigations and the final IWP. To address these observed fluctuations in quarterly samples, collect four (4) samples from each of the five established vapor wells at MDA T, with one round of pore-gas samples collected each quarter.

The IWP was submitted to fulfill Fiscal Year 2023 Milestone #7 of Appendix B of the 2016 Compliance Order on Consent. NMED hereby issues approval with modifications for the IWP for Material Disposal Area T.

If you have any questions regarding this letter, please contact Caitlin Martinez at (505) 690-4742.

Sincerely,

Rick Shean

Digitally signed by Rick Shean

Date: 2023.10.04 14:57:34

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Rick Shean
Designated Agency Manager
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New Mexico Environment Department

cc:

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