



September 20, 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 A AT TECHNICAL  
AREA 21  
LOS ALAMOS NATIONAL LABORATORY  
EPA ID#NM0890010515  
HWB-LANL-23-035**

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 A at Technical Area 21* (IWP) dated and received on May 25, 2023 and is referenced by EM2023-0245. NMED has reviewed the Work Plan and hereby issues this Approval with Modifications (Approval). The Permittees must implement the Work Plan with the Modification outlined below.

### **Specific Comments**

**1. Section 4.1.4.1, Results DP Canyon Slope and Mesa Top, pg.8.**

**DOE Statements:** Human-health risk for the DP Canyon slope was evaluated under the recreational and residential scenarios. There was no potential unacceptable risk or dose under either scenario.

**DOE Statement:** Human-health risk for the mesa top slope was evaluated under the industrial, construction worker, and residential scenarios. There was no potential unacceptable risk or dose under these scenarios.

**NMED Comment:** Based on the *Investigation Report for Material Disposal Area A, Solid Waste Management Unit 21-014, at Technical Area 21* (IR), received November 9, 2006, Human Health Risk for residential scenario was never fully assessed. It is not stated in the IR in *Section 7.3.1, Human Health Risk Screening* or *Appendix I, I-4.0 Human Health Screening Risk Assessment*, that no potential unacceptable risk or dose exists under the residential scenarios. While the data might show that no potential unacceptable risk exists under the residential scenarios, it must be defined in your final risk assessment in the final IR for MDA A.

**2. Section 4.3, Proposed Investigation Activities for Material Disposal Area A, pg. 12.**

**DOE Statement:** “One round of pore-gas samples will be collected from existing borehole location 21-26593 to evaluate the temporal variability of tritium and VOCs in pore gas. All samples will be analyzed for VOCs and tritium. The results will be used to evaluate the extent to which the subsurface vapor pathway must be evaluated in the CME. The proposed sampling location is shown in Figure 4.3-1. A description of the sampling effort is presented in section 5.2.”

**NMED Comment:** The *Approval with Modifications for the Investigation Report for Material Disposal Area A at Technical Area 21, Solid Waste Management Unit 21-014* issued by NMED on February 12, 2007 specified that the pore gas samples must be collected at 20-foot intervals and begin at 35 feet below ground surface (fbgs). When evaluating Table 4.1-8, *Summary of Tritium Activities in Subsurface Vapor at MDA A (2007 Investigation Report)*, results are presented for the depth interval ranges 15-16 fbgs, 34-35 fbgs (for Sample IDs MD21-07-6981 and MD21-07-6979), 54-55 fbgs, 94-95 fbgs, and 114-115 fbgs. The pore-gas samples must be collected from existing borehole location 21-26593 in 20-foot intervals beginning at 35 fbgs and must include the interval from 74-75 fbgs.

The IWP was submitted to fulfill Fiscal Year 2023 Milestone #6 of Appendix B of the 2016 Compliance Order on Consent. NMED hereby issues approval of the IWP for Material Disposal Area A.

If you have any questions regarding this letter, please contact Mitchell Schatz at (505) 690-5910.

Sincerely,

**Rick Shean** Digitally signed by Rick Shean  
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Rick Shean  
Designated Agency Manager  
Director, Resource Protection Division  
New Mexico Environment Department

cc:

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LANL-23-035