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**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

June 12, 2019

Doug Hintze, Manager  
Environmental Management  
U.S. Department of Energy  
Los Alamos Field Office  
P.O. Box 1663 MS M984  
Los Alamos, NM 87545

**RE: APPROVAL  
CERTIFICATES OF COMPLETION WITHOUT CONTROLS FOR  
SOLID WASTE MANAGEMENT UNITS 21-013(B), 21-018(A), AND 21-023(C),  
AND AREA OF CONCERN 21-013(G)  
MATERIAL DISPOSAL AREA V, TECHNICAL AREA 21  
LOS ALAMOS NATIONAL LABORATORY  
EPA ID #NM0890010515  
HWB-LANL-19-006**

Dear Mr. Hintze:

The New Mexico Environment Department (NMED) has received the United States Department of Energy (DOE) *Request for Certificates of Completion Without Controls for Solid Waste Management Units 21-013(b), 21-018(a), and 21-023(c), and Area of Concern 21-013(g)* (Request) dated and received February 6, 2019, and referenced by EM-LA-40AD-00393. These sites were investigated together as consolidated unit 21-018(a)-99 and the risk was evaluated for the entire consolidated unit. The results of investigations were presented in MDA V Supplemental Investigation Report submitted in 2008.

**Solid Water Management Unit (SWMU) 21-013(b)** was a surface debris disposal site located immediately south of Material Disposal Area (MDA) V which received waste from the demolition of a laundry facility (SWMU-21-018(b)), and a waste water treatment laboratory

(Area of Concern (AOC) 21-009). The debris was removed in 2005 and investigations were conducted between 2005 and 2007 to define the nature and extent of contamination. Human health and ecological risk were evaluated and presented in the 2008 Supplemental Investigation Report that indicated that SWMU 21-013(b) does not pose unacceptable risk to human health under the residential land use scenario and to the environment.

**SWMU 21-018(a)**, more commonly referred to as MDA V, received liquid waste from a laundry facility building 21-20 (SWMU 21-018(b)). SWMU 21-018(a) consisted of three interconnected liquid waste adsorption beds. MDA V was constructed to receive radioactive liquid waste water from the laundry facility and was designed to enhance the infiltration of liquids into the tuff bedrock. The adsorption beds were constructed in 1945 and operated until 1961. The absorption beds remained on stand-by status until 1963 when they were permanently removed from service. All absorption bed material and associated piping was removed, and investigations were conducted between 2005 and 2007 to define the nature and extent of contamination. Human health and ecological risks were evaluated and presented in the Supplemental Investigation Report in 2008 that SWMU 21-018(a) does not pose unacceptable risk to human health under the residential land use scenario and to the environment.

NMED does not regulate radionuclides. However, tritium was detected in the vapor-phase in the subsurface at this site. At NMED's direction four quarters of pore-gas sampling was completed in 2009-2010. The highest concentrations were at the depth of 300-305 feet below ground surface, and ranged from 46,830 to 68,612 pCi/L. Potential sources of subsurface tritium contamination from MDA V and MDA B have been remediated.

**SWMU 21-023(c)** was a septic system that consisted of a tank, inlet, and outlet lines, and an outfall that served a waste treatment laboratory (building 21-33 (AOC 21-009)). The septic tank was located immediately west of the MDA V absorption beds and was constructed of reinforced concrete. The waste treatment laboratory was put into service in 1948 and received wastewater which was pumped from a sump in building 21-33 through the septic system and into the tank. The tank was removed in 1965 and taken to MDA G. Investigations were conducted between 2005 and 2007 to define the nature and extent of contamination. SWMU 21-023(c) does not pose unacceptable risk to human health under the residential land use scenario and to the environment.

**AOC 21-013(g)** was a surface debris disposal site located south of SWMU 21-018(a) (commonly referred to as MDA V). It is not known how long the site historically received building debris, but it stopped receiving waste after 1994. AOC 21-013(g) consisted of two discarded drain lines and miscellaneous building material of unknown origin. The debris were removed in 2005 and investigations were conducted between 2005 and 2007 to define the nature and extent of contamination. AOC 21-013(g) does not pose unacceptable risk to human health under the residential land use scenario and to the environment.

NMED issued certificates of completion (COC) with controls for SWMUs 21-013(b), 21-018(a), and 21-023(c), and AOC 21-013-(g) on June 3, 2011. The controls were to monitor for storm water discharge, accomplished under the National Pollutant Discharge Elimination System

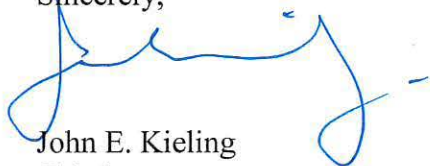
(NPDES) Permit.

SWMUs 21-013(b), 21-018(a), and 21-023(c), and AOC 21-013(g) are listed on Appendix A of DOE's 2010 NPDES Individual Permit. The COC with controls was issued under the 2005 Compliance Order on Consent (Consent Order), that was superseded by a Consent Order issued on June 2016. Section VII.H of the 2016 Consent Order states that "This Consent Order shall establish no requirements for releases of Contaminants from SWMUs or AOCs to storm water runoff that: 1) Are permitted under DOE's National Pollutant Discharge Elimination System (NPDES) Individual Permit for storm water discharges from SWMUs and AOCs (Individual Permit) (NM0030759 or as reissued)...". The *Supplemental Investigation Report for Consolidated Unit 21-018(a)-99, Material Disposal Area V, at Technical Area 21, Revision 1* (LA-UR-108-2315) demonstrated that SWMUs 21-013(b), 21-018(a), and 21-023(c), and AOC 21-013(g) do not pose unacceptable risk to human health under the residential land use scenario or the environment. NMED evaluated the risk to a construction work from residual contamination and determined that the sites also do not pose an unacceptable risk to a construction worker.

In accordance with the 2016 Consent Order, NMED hereby issues COC without controls for SWMUs 21-013(b), 21-023(c), and AOC 21-013(g). NMED did not evaluate the vapor intrusion pathway for tritium at the site, since NMED does not regulate radionuclides. Although corrective action is complete under the Consent Order, the DOE must continue to comply with all other applicable state and federal regulations.

If new information becomes available that indicates that the sites may pose an unacceptable risk to human health or the environment, NMED may require the DOE to conduct additional corrective action at these sites. If you have any questions regarding this letter, please contact Siona Briley at (505) 476-6049.

Sincerely,



John E. Kieling  
Chief  
Hazardous Waste Bureau

cc:

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File: 2019 LANL, Certificate of Completion, 21-013(b), 21-018(a), 21-023(c) and 21-013(g),  
Material Disposal Area V, Technical Area 21  
LANL-19-006