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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

March 20, 2019

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

**RE: REQUEST FOR CERTIFICATES OF COMPLETION FOR FOUR SOLID
WASTE MANAGEMENT UNITS IN THE LOWER MORTANDAD/CEDRO
CANYONS AGGREGATE AREA
LOS ALAMOS NATIONAL LABORATORY
EPA ID#NM0890010515
HWB-LANL-18-067**

Dear Mr. Hintze:

The New Mexico Environment Department (NMED) has received the United States Department of Energy's (DOE) *Request for Certificates of Completion for Four Solid Waste Management Units in the Lower Mortandad/Cedro Canyons Aggregate Area* (Request), dated and received December 17, 2018, and referenced by EM-LA-40AD-00365.

The DOE recommended four solid waste management units (SWMUs), 05-003, 05-004, 05-005(b), and 05-006(c), for corrective action complete without controls in the "*Investigation Report for Lower Mortandad/Cedro Canyons Aggregate Area, Revision 1* (Report), dated August 2012 (LA-UR-12-2397/EP2012-188). NMED issued an Approval with Modifications letter for the Report on September 10, 2012. The Approval letter directed the DOE to "conduct and submit a human health risk assessment which considers a construction worker scenario in the event of future development of sites located with Technical Area 5."

NMED received the DOE *Request for Certificates of Completion for Four Solid Waste Management Units in the Lower Mortandad/Cedro Canyons Aggregate Area* (Letter), on June

15, 2015 (ADESH-15-087). The Letter did not address the Approval with Modification request for the human health risk assessment for the construction worker scenario. The NMED response Letter, dated October 28, 2015 stated that the DOE “must submit results of the human health risk assessment for the construction worker scenario for these sites before NMED can evaluate whether these sites qualify for corrective action complete under the Consent Order.”

To satisfy NMED’s request, DOE evaluated human health risk for construction worker scenario for SWMUs 05-003, 05-004, 05-005(b), and 05-006(c). The results of the human health risk for the construction worker were included in the Request.

NMED hereby issues certificates of completion without controls for the following four SWMUs in accordance with Section XXI of the 2016 *Compliance Order of Consent* (Consent Order).

SWMU 05-003 is a former underground calibration facility located at the west end of Technical Area (TA) 05. The facility consisted of two structures, 05-0020 and 05-0021, an aboveground shed and underground chamber, respectively. The aboveground shed was constructed over a 35-ft-deep access shaft to provide facility personnel access to the calibration chamber (structure 05-0021), located belowground to the west of the access shaft. The belowground chamber was used to calibrate neutron detector systems for experiments at TA-49. The neutron source used in the calibration chamber was a critical assembly called Godiva. The assembly used highly enriched uranium and was used in the chamber for approximately one month from November to December 1959. A radiation survey of structure 05-0020 was conducted in May 1976. This survey showed no detectable radioactivity. Investigations were conducted in 1995 and 2011. Results of investigations done in 2011 indicate no potential risk or doses exist from residual contamination for construction worker and residential land use scenarios. No potential unacceptable risk or dose for ecological receptors is expected at the site because the contamination source was 35 ft below ground surface (bgs). NMED notes because the calibration chamber was located 35 ft bgs, no potential exposure pathway exists, samples were not collected between 0-1 ft bgs. Therefore, no risk-screening assessment was performed for the industrial scenario (see 2012 IR, revision 1).

SWMU 05-004 is a former septic tank, associated drain lines, and outfall that were located at the west end of TA-05. The tank was constructed in 1948 and received industrial waste from a laboratory (building 05-0001) it served. The outlet from the tank discharged into an unnamed tributary of the Mortandad Canyon. The laboratory was removed during the 1985 Los Alamos Site Characterization Program (LASCP). The tank and associated drain lines had been removed before the 1985 LASCP. Previous investigations include a 1995 Resource Conservation and Recovery Act (RCRA) facility investigation (RFI) and investigations conducted in 1998 and 2011. The 2011 investigations indicate that nature and extent are defined for all chemicals of potential concern (COPCs). No potential unacceptable risks or doses exist for the industrial, construction worker, and residential land use scenarios based on the 2011 investigation. The results of the ecological risk screening assessment indicate no potential risk to ecological receptors at this site

SWMU 05-005(b) is an area of potentially contaminated soil associated with a former outfall

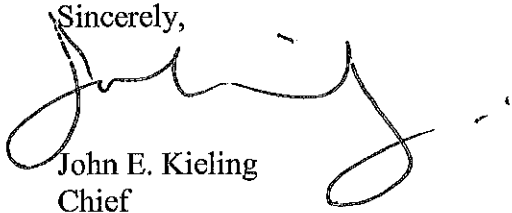
located in TA-05 at the edge of Mortandad Canyon. The outfall served a building (1944 to 1959) used as a shop and darkroom, and a for a brief period in 1952, for calibrating high range radiation meters. A Phase I RFI was performed in 1994 and 1995. The outfall was surveyed for high explosives (HE) contamination in 1995, no contamination was found. The 2011 investigations indicate that nature and extent is defined for all COPCs. No potential unacceptable risks and doses exist for the industrial, construction worker, and residential land use scenarios at this site. The results of the ecological risk screening assessment indicate no potential risk to ecological receptors at this site.

SWMU 05-006(c) is and area of potentially contaminated soil associated with the location of former building 05-0005, a shop and darkroom. The building operated from about 1944 to 1959. The building was originally used to support firing-site activities, including processing photographs of experiments. In 1952, the building was temporarily used to calibrate high-range radiation meters. A 1959 memorandum indicates that the building was contaminated with HE. The building was destroyed in 1960 by an intentional burning. Phase I RFI sampling was performed in 1995. The 2011 investigations indicate that the nature and extent is defined for all COPCs at this site. The investigation found no potential unacceptable risks and doses for the industrial, construction worker, and residential land uses scenarios at this site. The results of the ecological risk screening assessment indicate no potential risk to ecological receptors at this site.

NMED has determined that the above-mentioned sites qualify for certificates of completion without controls. Although corrective action is complete under the 2016 Consent Order, DOE must continue to comply with all applicable state and federal regulations. If new information becomes available that indicates that these sites potentially pose a risk to human health or the environment, NMED may require additional corrective action at these sites.

If you have any questions regarding this letter, please contact Mitchell Schatz (505) 476-6051.

Sincerely,



John E. Kieling
Chief
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in the Lower Mortandad/Cedro Canyons Aggregate Area
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