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RETURN RECEIPT REQUESTED

March 29, 2024

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
REQUEST FOR CERTIFICATES OF COMPLETION FOR TWO SOLID WASTE MANAGEMENT
UNITS AND FOUR AREAS OF CONCERN IN THE LOWER WATER/INDIO CANYONS
AGGREGATE AREA
EPA ID #NM0890010515
HWB-LANL-24-003**

Dear Arturo Duran:

The New Mexico Environment Department (NMED) has received the United States Department of Energy (DOE) Environmental Management Los Alamos Field Office (EM-LA) *Request for Certificates of Completion for Two Solid Waste Management Units and Four Areas of Concern in the Lower Water/Indio Canyons Aggregate Area* (Request) dated and received January 12, 2024, and referenced by EMLA-24-BF084-2-1.

Solid Waste Management Units (SWMUs) 15-009(g) and 15-014(l) and Areas of Concern (AOCs) 15-001, 15-004(h), C-15-011, and 15-014(d) were investigated and the results were included in the *Investigation Report for Lower Water/Indio Canyons Aggregate Area, Revision 1* (IR) that was submitted May 2023, referenced by EM2023-0182. The IR was approved by NMED on August 30, 2023. Following the approval of the IR, the Permittees submitted the Request for Certificates of Completion (COCs) on January 12, 2024 requesting COCs without controls for SWMU 15-009(g) and AOCs 15-001, 15-004(h), and C-15-011, and COCs with controls for AOC 15-014(d) and SWMU 15-014(l).

Technical Area 15 (TA-15), also known as R-Site, occupies portions of Threemile Mesa on the Pajarito Plateau near the southwestern boundary of the Laboratory. TA-15 is currently used for High Explosive (HE) research, development, and testing, primarily through hydrodynamic

testing and dynamic experimentation. TA-15 contains the Pulsed High-Energy Radiographic Machine Emitting X-Rays (PHERMEX) facility and the Dual-Axis Radiographic Hydrodynamic Test (DARHT) facility, both of which are or were formally used for testing weapons under development. The PHERMEX facility has been inactive since 2011, but the DARHT is still in use for this purpose and is deferred from final remediation.

AOC 15-001 consists of a storage area, located just northeast of a former firing bunker (structure 15-9) and is adjacent to inactive Firing Site [SWMU 15-009(g)] at TA-15. The area was used to store equipment and materials associated with activities at the DARHT and PHERMEX facilities, including steel, experimental vessels, and construction debris. Equipment and materials were stored in the open on the ground surface, and within transportainers and small storage sheds. The area is currently used to store equipment associated with ongoing activities.

Investigations were conducted in 1997 and 2021, with the 2021 data used to define the nature and extent of contamination. The results presented in the IR indicated that **AOC 15-001** does not pose any unacceptable risk to human health under the industrial, construction worker, and residential scenarios, and no potential ecological risks exist.

NMED hereby issues this **certificate of completion without controls** for AOC 15-001.

AOC 15-004(h) is inactive Firing Site H located northeast of the PHERMEX facility at TA-15. The explosive testing firing site was constructed in 1948 and consists of a protective berm and concrete barricade, an x-unit instrument chamber (structure 15-17), a pull box (structure 15-156), and a camera chamber (structure 15-92). The exact nature of the materials used during tests is not known but may have included depleted uranium (DU), beryllium, lead, and HE. Firing site operations were discontinued in approximately 1953.

Investigations were conducted in 1996 and 2021, with the 2021 data used to define the nature and extent of contamination. The results presented in the IR indicated that **AOC 15-004(h)** does not pose any unacceptable risk to human health under the industrial, construction worker and residential scenarios, and that no potential ecological risks exist.

NMED hereby issues this **certificate of completion without controls** for AOC 15-014(h).

SWMU 15-009(g) consists of an inactive septic system that served the PHERMEX facility and is located south of the chamber building (building 15-184) at TA-15. The septic system was installed in 1960 and consists of a 605-gal. 4 ft × 8 ft × 5 ft reinforced concrete septic tank (structure 15-205), a leach field, and inlet and outlet drainlines. The septic system received sanitary wastes from restrooms, sinks, and a water fountain within the power control building (building 15-185) and from floor drains, a restroom, and a hot-water heater within the detection chamber (structure 15-186). Beginning in 1987, the septic system began receiving discharges from restrooms within the PHERMEX Multi-diagnostic Operations Building (building 15-310), and in 1996 the septic system began receiving the noncontact cooling-water discharges from building 15-184.

Investigations were conducted in 2020-2021 to define the nature and extent of contamination. The results presented in the SIR indicated that **SWMU 15-009(g)** does not pose any unacceptable risk to human health under the industrial, construction worker, and residential scenarios, and that no potential ecological risks exist.

NMED hereby issues this **certificate of completion without controls** for SWMU 15-009(g).

AOC C-15-011 consists of a former underground fuel storage tank (former structure 15-274) that was located at the PHERMEX facility in the southeast portion of TA-15. The galvanized steel underground storage tank (UST) was installed in 1973 and was located immediately south of the power control building (building 15-185). The UST had a capacity of 218 gal., and the bottom of the tank was reported to be 6.0 ft bgs. The UST was removed in 1987. The surface of the former UST location is now an asphalt parking lot.

Investigations were conducted in 2010 to define the nature and extent of contamination. The results presented in the SIR indicated that **AOC C-15-011** does not pose any unacceptable risk to human health under the industrial, construction worker, and residential scenarios, and that no potential ecological risks exist.

NMED hereby issues this **certificate of completion without controls** for AOC C-15-011.

AOC 15-014(d) consists of a drainline and outfall located of the PHERMEX facility in the southeast portion of TA-15. The outfall received storm water from roof drains on the power control building (building 15-185) and discharge from the SWMU 15-014(l) outfall. Prior to the installation of the corrugated metal pipe (CMP) outfall in 1969, the roof drain and floor drains from building 15-185 discharged to the paved area behind the building and flowed to a drainage channel adjacent to the roadway south of PHERMEX. The outfall is located at the head of the drainage channel that flows to Water Canyon and still receives storm water from the roof drains on building 15-185, as well as any storm water entering the SWMU 15-014(l) drop inlet.

Investigations were conducted in 2020-2021 to define the nature and extent of contamination. The results presented in the IR indicated that **AOC 15-014(d)** does not pose any unacceptable risk to human health under the industrial, construction worker, however, there is a potential unacceptable cancer risk for the residential scenarios, but no potential unacceptable noncarcinogenic risk or dose. The results indicated that no potential ecological risks exist.

NMED hereby issues this **certificate of completion with controls** for AOC 15-014(d), and land use will remain industrial for the foreseeable future.

SWMU 15-014(I) consists of a drainline and formerly permitted outfall for a cooling tower (building 15-202) located at the PHERMEX facility in TA-15. The drainline and outfall received blowdown discharge from the cooling tower, which was installed in 1961. Cooling water was piped to the building 15-185 and blowdown discharged to a basement floor drain. The basement floor drain originally discharged to a concrete gutter in the paved area south of building 15-185 and into a culvert that drained to the ground surface south of the roadway. This culvert also received discharges from the floor drains in building 15-184. In 1969, a CMP was installed to convey discharges from the SWMU 15-014(I) outfall to a new outfall [AOC 15-014(d)] south of the parking area and roadway. The SWMU 15-014(I) outfall is currently located within a drop inlet in a paved area outside the southeast corner of building 15-185. The outfall currently receives only stormwater discharges from the paved area around the drop inlet.

Investigations were conducted in 2020-2021 to define the nature and extent of contamination. The results presented in the IR indicated that **SWMU 15-014(I)** does not pose any unacceptable risk to human health under the industrial, construction worker, however, there is a potential unacceptable cancer risk for the residential scenarios, but no potential unacceptable noncarcinogenic risk or dose. The results indicated that no potential ecological risks exist.

NMED hereby issues this **certificate of completion with controls** for SWMU 15-014(I), and land use will remain industrial for the foreseeable future.

If new information becomes available that indicates that the site may pose an unacceptable risk to human health or the environment, NMED may require additional investigations and/or corrective action at this site.

NMED has reviewed the document and hereby approves of the Request. If you have any questions, please contact Mitchell Schatz at 505-690-5910.

Sincerely,

Rick Shean

Digitally signed by Rick
Shean
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10:01:21 -06'00'

Rick Shean
Designated Agency Manager
Director, Resource Protection Division
New Mexico Environment Department

cc: N. Dhawan, NMED HWB
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