



Associate Director for ESH
Environment, Safety, and Health
P.O. Box 1663, MS K491
Los Alamos, New Mexico 87545
505-667-4218/Fax 505-665-3811

RECEIVED

JUN 15 2015

NMED
Hazardous Waste Bureau



Environmental Management
Los Alamos Field Office, MS A316
3747 West Jemez Road
Los Alamos, New Mexico 87544
(505) 667-4255/FAX (505) 606-2132

Date: JUN 15 2015

Refer To: ADESH-15-086

LAUR: N/A

Locates Action No.: N/A

John Kieling, Bureau Chief
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6303

Subject: Request for Certificates of Completion for Three Areas of Concern and Twenty-Six Solid Waste Management Units in the Bayo Canyon Aggregate Area

Dear Mr. Kieling:

In accordance with Section VII.E.6.b of the Compliance Order on Consent (the Consent Order), the U.S. Department of Energy (DOE) and Los Alamos National Security, LLC (LANS) are requesting Certificates of Completion without Controls for the following solid waste management units (SWMUs) and areas of concern (AOCs) within the Bayo Canyon Aggregate Area:

- SWMU 10-001(a), Inactive Firing Site
- SWMU 10-001(b), Inactive Firing Site
- SWMU 10-001(c), Inactive Firing Site
- SWMU 10-001(d), Inactive Firing Site
- SWMU 10-002(a), Disposal Pit
- SWMU 10-002(b), Disposal Pit
- SWMU 10-003(a), Disposal Pit
- SWMU 10-003(b), Soil Contamination from Former Disposal Pit
- SWMU 10-003(c), Soil Contamination from Former Disposal Pit
- SWMU 10-003(d), Disposal Pit
- SWMU 10-003(e), Disposal Pit

- SWMU 10-003(f), Disposal Pit
- SWMU 10-003(g), Manholes
- SWMU 10-003(h), Soil Contamination from Former Manhole
- SWMU 10-003(i), Septic Tank
- SWMU 10-003(j), Tank
- SWMU 10-003(k), Soil Contamination from Former Tank
- SWMU 10-003(l), Tank
- SWMU 10-003(m), Soil Contamination from Former Waste Line
- SWMU 10-003(n), Soil Contamination from Former Leach Field
- SWMU 10-003(o), Soil Contamination from Decontamination Holes
- SWMU 10-004(a), Septic Tank
- SWMU 10-004(b), Septic System
- SWMU 10-005, Surface Disposal Site
- SWMU 10-006, Burn Site
- SWMU 10-007, Landfill
- AOC 10-008, Tree-Rimmed Firing Point
- AOC 10-009, Former Bayo Canyon Landfill
- AOC C-10-001, Radioactively Contaminated Soil

SWMUs 10-001(a–d), 10-002(a,b), 10-003(a–o), 10-004(a,b), 10-005, 10-006, and 10-007 and AOCs 10-008, 10-009, and C-10-001 were investigated during the Bayo Canyon Aggregate Area investigation. The results of this investigation were reported in the Investigation Report for Bayo Canyon Aggregate Area, Revision 1 (LA-UR-08-3202/EP2008-0226).

The investigation report (IR) confirms that the nature and extent of contamination are defined at SWMUs 10-001(a–d), 10-002(a,b), 10-003(a–o), 10-004(a,b), 10-005, 10-006, and 10-007 and AOCs 10-008, 10-009, and C-10-001. In addition, the IR demonstrates that these SWMUs and AOCs pose no potential unacceptable risks to human health under the recreational, construction worker, and residential scenarios and pose no potential risk to ecological receptors. Therefore, neither site controls nor additional future actions under the Consent Order are necessary at the 29 sites.

The IR also evaluated radiological dose for the recreational, construction worker, and residential scenarios. The IR demonstrates that none of the 29 SWMUs and AOCs poses an unacceptable dose under the recreational and construction worker scenarios. In addition, SWMUs 10-001(a–d), 10-004(a), 10-005, and 10-006 and AOCs 10-008, 10-009, and C-10-001 do not pose an unacceptable dose under the residential scenario. Consolidated Unit 10-002(a)-99, which consists of SWMUs 10-002(a,b), 10-003(a–o), 10-004(b) and 10-007, was shown to exceed dose guidelines

for the residential scenario. The IR recommended that DOE continue to maintain administrative control of the Central Area of Consolidated Unit 10-002(a)-99, where elevated levels of strontium-90 are present in the subsurface at SWMU 10-007, and that two isolated areas of elevated strontium-90 outside the Central Area be removed as a good stewardship practice.

The New Mexico Environment Department (NMED) issued a Direction to Modify [the] Investigation Report for Bayo Canyon Aggregate Area, Revision 1 (HWB-LANL-08-006) on May 27, 2008. NMED's direction to modify did not specifically approve the IR, but the letter directed DOE/LANS to prepare and submit a work plan to remove the two areas of contaminated soil where strontium-90 exceeded residential screening action levels. NMED's direction also required DOE/LANS to document proposed actions to be negotiated with Los Alamos County regarding corrective actions at the Central Area. It did not identify any deficiencies related to SWMUs 10-001(a-d), 10-002(a,b), 10-003(a-o), 10-004(a,b), 10-005, 10-006, and 10-007 and AOCs 10-008, 10-009, and C-10-001 and did not require any additional actions other than those related to the removal of areas of strontium-90 contamination. DOE/LANS responded to NMED's letter on August 18, 2008 (EP2008-0404) and explained that corrective actions involving radionuclides (e.g., strontium-90) were regulated solely by DOE and were beyond the authority of the March 5, 2005, Consent Order. DOE also indicated that it expected to coordinate removal of the two strontium-90 areas with Los Alamos County and would provide NMED with a copy of the work plan. The work plan was provided to NMED for informational purposes on August 31, 2009 (LA-UR-09-5162/EP2009-0387). DOE/LANS removed the two strontium-90 contaminated areas in September 2011. The response to NMED's direction to modify also reiterated DOE/LANS's commitment to work with Los Alamos County to ensure there are no near-term plans to change the current recreational use of Bayo Canyon.

Based on the results of the IR, SWMUs 10-001(a-d), 10-002(a,b), 10-003(a-o), 10-004(a,b), 10-005, 10-006, and 10-007 and AOCs 10-008, 10-009, and C-10-001 are appropriate for corrective action complete without controls under the Consent Order. Although further controls are appropriate for SWMU 10-007, these controls would be exclusively limited to radionuclides and, therefore, are not enforceable under the Consent Order.

If you have any questions, please contact Todd Haagenstad at (505) 665-2936 (hth@lanl.gov) or Cheryl Rodriguez at (505) 665-5330 (cheryl.rodriguez@em.doe.gov).

Sincerely,



Alison M. Dorries, Division Leader
Environmental Protection Division
Los Alamos National Laboratory

Sincerely,



Christine Gelles, Acting Manager
Environmental Management
Los Alamos Field Office

AD/CG/DM/TH:sm

Cy: (date-stamped letter emailed)
Laurie King, EPA Region 6, Dallas, TX
Steve Yanicak, NMED-DOE-OB, MS M894
lasomailbox@mnsa.doe.gov
Kimberly Davis Lebak, DOE-NA-LA
Peter Maggiore, DOE-NA-LA
Annette Russell, DOE-EM-LA
Cheryl Rodriguez, DOE-EM-LA
David Rhodes, DOE-EM-LA
Todd Haagenstad, ADEP ER Program
Dave McInroy, ADEP ER Program
Randy Erickson, ADEP
Jocelyn Buckley, ADESH-ENV-CP
Mike Saladen, ADESH-ENV-CP
Tony Grieggs, ADESH-ENV-CP
Alison Dorries, ADESH-ENV-DO
Michael Brandt, ADESH
Amy De Palma, PADOPS
Michael Lansing, PADOPS
PRS Database
Public Reading Room (EPRR)
ADESH Records