



DEPARTMENT OF ENERGY
Environmental Management Los Alamos Field Office (EM-LA)
Los Alamos, New Mexico 87544

EMLA-2020-1476-02-001

July 7, 2020

Mr. Kevin Pierard
Bureau Chief
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6313

Subject: Request for Certificates of Completion for Five Solid Waste Management Units in the Pueblo Canyon Aggregate Area

Dear Mr. Pierard:

In accordance with Section XXI of the 2016 Compliance Order on Consent (the 2016 Consent Order), the U.S. Department of Energy (DOE) Environmental Management Los Alamos Field Office (EM-LA) is requesting certificates of completion with controls for the following five solid waste management units (SWMUs) within the Pueblo Canyon Aggregate Area:

- SWMU 73-001(a), Landfill
- SWMU 73-001(b), Waste Oil Pit
- SWMU 73-001(c), Bunker Debris Disposal Areas
- SWMU 73-001(d), Landfill
- SWMU 73-004(d), Septic System

Corrective action requirements for SWMUs 73-001(a), 73-001(b), 73-001(c), 73-001(d), and 73-004(d) were established in Section VI.K of the 2005 Consent Order. That section of the Consent Order noted that DOE and Los Alamos National Laboratory (LANL) had submitted an interim measures plan for removal of debris associated with the Airport Landfill drainages in June 2003 ["Interim Measure Plan for Potential Release Site 73-001(a) Debris Removal"], which had been approved by the New Mexico Environment Department (NMED) in July 2003 and implemented by DOE and LANL. The Consent Order required submittal of an interim measures report describing debris removal. The "Interim Measures Completion Report, Solid Waste Management Unit 73-001(a), Technical Area 73" (ER2004-0094) was submitted to NMED in March 2004. NMED's letter "Approval with Modifications, Interim Measures Completion Report, SWMU 73-001(a)," dated April 17, 2007, approved the interim measures report and requested additional information related to the interim measures. DOE's and LANL's response to the approval with modifications and requested information was submitted to NMED on May 21, 2007 (LA-UR-07-3668). No further actions were required following submittal of the requested information.

In addition to interim measures, Section VI.K of the 2005 Consent Order also established requirements related to performance of a voluntary corrective measure (VCM) at SWMUs 73-001(a), 73-001(b), 73-001(c), 73-001(d), and 73-004(d). The 2005 Consent Order noted that DOE and LANL had submitted a Phase I VCM plan (LA-UR-02-4433, submitted October 18, 2002), which had been conditionally approved by NMED on April 1, 2003. The 2005 Consent Order required DOE and LANL to submit a

Phase II VCM Plan that would propose a final design and address construction of a cover for the SWMUs. The “Phase II Work Plan for Los Alamos Site Office TA-73 Airport Landfill” (NW-ID-2004-031) was submitted to NMED by DOE in April 2004 to meet this requirement. The scope of work in the Phase II work plan included installation of a cover over SWMU 73-001(a) (the main Airport Landfill site) and recontouring and reseeding of SWMU 73-001(d) (the debris disposal area [DDA]). NMED issued the “Notice of Disapproval of Phase II Work Plan for Los Alamos Site Office TA-73 Airport Landfill” on July 7, 2004. One of the comments in the notice of disapproval (NOD) indicated that the scope of the Phase II work plan was limited to SWMUs 73-001(a) and 73-001(d). The comment required DOE to explain in detail any work that will be conducted at SWMUs 73-001(b) and 73-001(c), and to provide justification if no work was planned. The comment also required DOE to describe all historical investigation or remediation work that had been performed at SWMU 73-004(d). The NOD also contained a number of comments related to technical design and construction details in the work plan.

DOE submitted a response to the NOD on July 30, 2004 (OPM:5BE-002). DOE’s response to the comment regarding SWMUs 73-001(b), 73-001(c), and 73-004(d) referred to the previously approved Phase I VCM plan, which noted the SWMU 73-004(d) septic tank was within the boundary of the SWMU 73-001(a) landfill, no longer identifiable as a discrete entity and indistinguishable from the SWMU 73-001(a) landfill. The response also noted that the SWMU 73-001(b) waste oil pit and SWMU 73-001(c) bunker debris pits were destroyed by the trenching for the SWMU 73-001(d) landfill and were indistinguishable from that site. Thus, DOE’s response indicated that the proposed actions at SWMUs 73-001(a) and 73-001(d) effectively addressed all five SWMUs. NMED’s letter “Notice of Approval with Modifications of Phase II Work Plan for Los Alamos Site Office TA-73 Airport Landfill,” dated September 2, 2004, did not contain any comments or requests for additional information related to SWMUs 73-001(b), 73-001(c), and 73-004(d). The approval with modifications, therefore, indicated NMED’s concurrence with DOE’s response that the corrective measures for SWMUs 73-001(a) and 73-001(d) included SWMUs 73-001(b), 73-001(c), and 73-004(d).

The Phase II work plan was replaced by the “Remedy Design Work Plan for the Los Alamos Site Office TA-73 Airport Landfill, Revision 1” (NW-ID-2004-031) submitted by DOE to NMED on June 30, 2005. The remedy design work plan presented a modified design for the SWMU 73-001(a) cover based on stakeholder comments and also addressed applicable requirements of the September 2004 approval with modifications. NMED’s letter “Notice of Disapproval, Remedy Design Work Plan for the Los Alamos Site Office TA-73 Airport Landfill, Revision 1,” dated January 4, 2006, contained numerous technical comments related to the remedy design and construction. DOE submitted a response to the NOD on January 27, 2006 (ES: 3DG-002) and submitted replacement pages addressing NMED’s comments on February 28, 2006 (NW-ID-2004-031, Revision 1). NMED’s letter “Approval with Modifications, Remedy Design Work Plan for the Los Alamos Site Office TA-73 Airport Landfill, Revision 1,” dated March 20, 2006, approved the revised remedy design work plan and required submittal of additional requested information. The “Remedy Design Work Plan for the Los Alamos Site Office TA-73 Airport Landfill, Revision 2,” (NW-ID-2004-031, Revision 2) was submitted by DOE to NMED on April 21, 2006, and contained revisions based on NMED’s approval with modification comments. The additional information requested by NMED in the approval with modifications was submitted by DOE on June 2, 2006 (ES: 2BE-020). NMED’s letter “Request for Additional Information, Remedy Design

Report for Los Alamos Site Office TA 73 Airport Landfill, Revision 2,” dated July 14, 2006, noted that the revised work plan and additional submittals generally addressed NMED’s approval with modification comments but required some additional technical information to be submitted. The requested information was submitted on August 15, 2006 (ES: 6BE-007).

Following submittal of all information required by the approval with modifications for the remedy design work plan, the remedy was implemented by DOE. The “Remedy Completion Report DOE LASO TA-73 Airport Landfill SWMUs 73-001(a) and 73-001(d)” (NWI-4212-001) was submitted by DOE to NMED on April 13, 2007. The remedy completion report was approved in NMED’s letter “Notice of Approval, Remedy Completion Report SWMUs 73-001(a) and 73-001(d),” dated August 8, 2007.

Following completion of the remedy, monitoring and inspection were performed in accordance with the “Post-closure Care and Monitoring Plan for the LASO TA-73 Airport Landfill,” which was an appendix to the NMED-approved April 2006 remedy design work plan, revision 2. Subsidence and cracking of the SWMU 73-001(a) cover system was noted beginning in 2009. The presence of methane at 100% of the lower explosive limit due to infiltration of water through the cover and into the waste was noted during monthly monitoring beginning in December 2013. Because of the deterioration of the cover, DOE chose to replace the SWMU 73-001(a) cover system rather than implement an active methane capture system, as required by the monitoring plan. The soil cover system at the SWMU 73 001(d) DDA was not affected and did not require replacement.

DOE submitted the “Pre-Design Work Plan Los Alamos County Airport Landfill” for a replacement evapotranspiration cover on September 26, 2014 (COR-EPO-9,18, 214-5941000). Following receipt of comments from NMED on the pre-design work plan on January 8, 2015, a work plan for the replacement cover was submitted by DOE to NMED on May 11, 2015 (EPO-32RM-763-624244). The work plan was disapproved in NMED’s letter “Disapproval, Work Plan for Los Alamos County Airport Landfill Cover Replacement,” dated July 17, 2015. The disapproval contained technical comments and required submittal of a revised work plan addressing these comments. The revised work plan was submitted in August 2015 (EPO-32RM-810-635369) and approved in NMED’s letter “Approval with Modifications, Work Plan for Los Alamos County Airport Landfill Cover Replacement,” dated August 14, 2015. Replacement pages requested in the approval with modifications were submitted by DOE to NMED on August 31, 2015 (EPO-32RM-831-640424).

Following approval of the work plan, the replacement cover was constructed and the “Remedy Completion Report, Los Alamos County Airport Landfill Cover Replacement” was submitted to NMED on October 19, 2016 (EM-LA-32RM-00071-700702). NMED’s letter “Approval with Modifications, Submittal of the Remedy Completion Report for Los Alamos County Airport Landfill Cover Replacement Solid Waste Management Unit 73-001(a),” dated December 22, 2016, requested several replacement pages and required DOE to submit a long-term monitoring plan (LTMP). DOE submitted the “Long-Term Monitoring Plan, Los Alamos County Airport Landfill Cover Replacement, Solid Waste Management Units 73-001(a,d), Technical Area 73” to NMED in March 2017 (EM-LA15RM-00128-725334).

The LTMP included monitoring the performance of the replacement cover system and inspecting and maintaining the replacement cover, storm water control system, fencing, retaining walls, erosion and

sedimentation control measures, site access, and the DDA cover system. NMED's letter "Approval, Long-Term Monitoring Plan for the Los Alamos County Airport Landfill Cover Replacement, Solid Waste Management Units 73-001(a,d) Technical Area 73," dated March 30, 2017, required submittal of annual reports documenting monitoring and inspection results. Annual long-term monitoring status reports were submitted by DOE in 2017, 2018, and 2019 (EM-LA15RM-00143, EM-LA-30CR-00215, and EM-LA-30AD-00479, respectively).

Section XXI.E of the 2016 Consent Order specifies that DOE may request certificates of completion with controls for SWMUs where operation, maintenance, and/or monitoring will be required after completion of corrective actions. As documented in the NMED-approved interim measures report, remedy completion report, and cover replacement remedy completion report, DOE has completed the corrective actions required by NMED at SWMUs 73-001(a), 73-001(b), 73-001(c), 73-001(d), and 73-004(d). EM-LA is now implementing long-term monitoring and maintenance in accordance with an NMED-approved LTMP. Therefore, EM-LA is requesting certificates of completion with controls for SWMUs 73-001(a), 73-001(b), 73-001(c), 73-001(d), and 73-004(d). The controls for these sites will be implementation of the monitoring, maintenance, and reporting required by the approved LTMP.

If you have any questions, please contact Emily Day at (505) 695-4243 (emily.day@em-la.doe.gov) or Cheryl Rodriguez at (505) 414-0450 (cheryl.rodriguez@em.doe.gov).

Sincerely,

Arturo Duran

Digitally signed by Arturo
Duran
Date: 2020.06.23 09:00:51
-06'00'

Arturo Q. Duran
Compliance and Permitting Manager
Environmental Management
Los Alamos Field Office

CC (letter emailed):

Laurie King, EPA Region 6, Dallas, TX
Chris Catechis, NMED-DOE-OB
Steve Yanicak, NMED-DOE-OB
William Alexander, N3B
Emily Day, N3B
David Diehl, N3B
Michael Erickson, N3B
Jeff Holland, N3B
Kim Lebak, N3B
Joseph Legare, N3B
Dana Lindsay, N3B
Frazer Lockhart, N3B

Pamela Maestas, N3B
Glenn Morgan, N3B
Joseph Murdock, N3B
M. Lee Bishop, EM-LA
Stephen Hoffman, EM-LA
Kirk D. Lachman, EM-LA
David Nickless, EM-LA
Cheryl Rodriguez, EM-LA
Ben Underwood, EM-LA
emla.docs@em.doe.gov
n3brecords@em-la.doe.gov
Public Reading Room (EPRR)
PRS Website

William Alexander

From: Martinez, Cynthia, NMENV <cynthia.martinez1@state.nm.us>
Sent: Wednesday, July 8, 2020 7:48 AM
To: William Alexander
Subject: RE: Submittal to NMED on 7/7/2020 COC Req Airport Landfill

Good Morning,
Received, thank you and stay safe.

From: William Alexander <William.Alexander@em-la.doe.gov>
Sent: Tuesday, July 7, 2020 3:35 PM
To: Pierard, Kevin, NMENV <Kevin.Pierard@state.nm.us>
Cc: Dhawan, Neelam, NMENV <neelam.dhawan@state.nm.us>; Emily M. Day <Emily.Day@em-la.doe.gov>; Martinez, Cynthia, NMENV <cynthia.martinez1@state.nm.us>; cheryl.rodriquez@em.doe.gov; Kent Rich <kent.rich@em-la.doe.gov>; Regulatory Documentation <RegDocs@EM-LA.DOE.GOV>
Subject: [EXT] RE: Submittal to NMED on 7/7/2020 COC Req Airport Landfill

Mr. Pierard,

Attached is an updated file with the date affixed. Please disregard the previous file.

Thanks,
William Alexander
Newport News Nuclear BWXT-Los Alamos "N3B"
RCRA Remediation Regulatory Documentation
Writer/Editor/Compositor/Database Admin
TA-00, Building 1237, Room 119
Phone: (505)551-2494 (cell)
Phone: (505)257-7449 (Desk)
E-Mail: william.alexander@em-la.doe.gov

From: William Alexander
Sent: Tuesday, July 7, 2020 3:11 PM
To: 'Kevin.Pierard@state.nm.us' <Kevin.Pierard@state.nm.us>
Cc: 'Dhawan, Neelam, NMENV' <neelam.dhawan@state.nm.us>; Emily M. Day <Emily.Day@em-la.doe.gov>; 'Martinez, Cynthia, NMENV'

<cynthia.martinez1@state.nm.us>; cheryl.rodriguez@em.doe.gov; Kent Rich <kent.rich@em-la.doe.gov>; Regulatory Documentation <RegDocs@EM-LA.DOE.GOV>

Subject: Submittal to NMED on 7/7/2020 COC Req Airport Landfill

Mr. Pierard,

Attached for submittal to NMED is the following:

- Request for Certificates of Completion for Five Solid Waste Management Units in the Pueblo Canyon Aggregate Area

Please acknowledge receipt of this submittal by responding to this email.

Let me know if you have any questions.

Thanks,

William Alexander

Newport News Nuclear BWXT-Los Alamos "N3B"

RCRA Remediation Regulatory Documentation

Writer/Editor/Compositor/Database Admin

TA-00, Building 1237, Room 119

Phone: (505)551-2494 (cell)

Phone: (505)257-7449 (Desk)

E-Mail: william.alexander@em-la.doe.gov