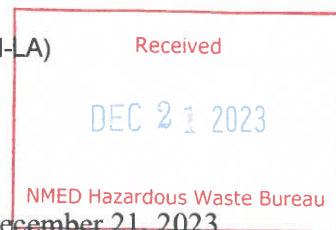




**DEPARTMENT OF ENERGY**  
 Environmental Management Los Alamos Field Office (EM-LA)  
 Los Alamos, New Mexico 87544



EMLA-24-BF063-2-1

Mr. Rick Shean  
 Designated Agency Manager  
 Hazardous Waste Bureau  
 New Mexico Environment Department  
 2905 Rodeo Park Drive East, Building 1  
 Santa Fe, NM 87505-6313

Subject: Fiscal Year 2023 Consent Order Deliverable Accomplishments

Dear Mr. Shean:

Enclosed is a summary of Milestones completed by the U.S. Department of Energy (DOE) Environmental Management Los Alamos Field Office (EM-LA) for fiscal year (FY) 2023 pursuant to the 2016 Compliance Order on Consent (Consent Order). In addition, enclosed is a summary of other Consent Order deliverables submitted to the New Mexico Environment Department (NMED) in FY 2023.

Enclosure 1 lists FY 2023 Milestones in Appendix B of the Consent Order, including their due and submittal dates. A total of 14 Appendix B Milestones were delivered to NMED in FY 2023. Of these 14 Milestones, 11 were submitted before their due dates, and 3 were submitted on their due dates.

In addition to Appendix B Milestones, EM-LA submitted 77 Consent Order deliverables. Enclosure 2 contains a list of these deliverables and their submittal dates.

If you have any questions, please contact me at (505) 257-7907 (arturo.duran@em.doe.gov).

Sincerely,

Digitally signed by  
 Brian G. Harcek  
 Date: 2023.12.21  
 11:09:18 -07'00'

Arturo Q. Duran For  
 Compliance and Permitting Manager  
 U.S. Department of Energy  
 Environmental Management  
 Los Alamos Field Office

Enclosure(s):

1. Fiscal Year 2023 Milestones in Appendix B of the 2016 Compliance Order on Consent (EM2023-0831)
2. Fiscal Year 2023 Other Deliverables to the New Mexico Environment Department and Submittal Dates (EM2023-0831)

CC (letter and enclosure[s] emailed):

Laurie King, EPA Region 6, Dallas, TX  
Raymond Martinez, San Ildefonso Pueblo, NM  
Dino Chavarria, Santa Clara Pueblo, NM  
Kai-T Blue-Sky, Pueblo of Cochiti, NM  
Clarice Madalena, Pueblo of Jemez, NM  
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**Enclosure 1**  
**Fiscal Year 2023 Milestones in Appendix B of the 2016 Compliance Order on Consent**

<b>FY 2023 Milestone</b>	<b>Title</b>	<b>Due Date</b>	<b>Submittal Date</b>
1	Interim Facility-Wide Groundwater Monitoring Plan for the 2024 Monitoring Year, October 2023–September 2024	6/30/2023	6/13/2023
2	Annual Progress Report on Chromium Plume Control Interim Measure Performance April 2022 through March 2023	6/30/2023	6/29/2023
3	Submittal of Fiscal Year 2023 Appendix B Milestone #3, Letter Report Documenting Start of the Drilling of Regional Aquifer Monitoring Well R-76	9/21/2023	9/21/2023
4	Drilling Work Plan for Groundwater Regional Aquifer Monitoring Well R-80	12/1/2022	11/29/2022
5	Drilling Work Plan for Groundwater Regional Aquifer Monitoring Well R-79	6/30/2023	4/17/2023
6	Final Investigation Work Plan for Material Disposal Area A at Technical Area 21	6/15/2023	5/25/2023
7	Final Investigation Work Plan for Material Disposal Area T at Technical Area 21	6/15/2023	6/15/2023
8	Phase II Investigation Report for North Ancho Canyon Aggregate Area	8/30/2023	8/30/2023
9	Progress Report for Phase II Investigation Report for Potrillo and Fence Canyons Aggregate Area	9/29/2023	9/25/2023
10	Twomile Canyon Aggregate Area Progress Report	9/29/2023	9/27/2023
11	Phase II Investigation Report for Threemile Canyon Aggregate Area	8/30/2023	8/14/2023
12	Starmer/Upper Pajarito Canyon Aggregate Area Progress Report	9/29/2023	9/25/2023
13	Corrective Measures Evaluation Report for Material Disposal Area H, Solid Waste Management Unit 54-004, at Technical Area 54, Revision 1	9/30/2023	9/29/2023
14	Periodic Monitoring Report for 2022 Vapor-Sampling and Soil-Vapor Extraction at Material Disposal Area L, Solid Waste Management Unit 54-006, at Technical Area 54	5/30/2023	4/20/2023

**Enclosure 2**  
**Fiscal Year 2023 Other Deliverables to the New Mexico Environment Department and Submittal Dates**

Item Number	Title	Submittal Date
1	Response to New Mexico Environment Department's Comments on the Plug and Abandonment of R-73 OSE File No. RG-A0308	10/5/2022
2	Monthly Notification of Groundwater Data Reviewed in October 2022 1-Day Notification of Exceedances	10/14/2022
3	Tritium Data as Requested in the NMED Review of 2022 Annual Periodic Monitoring Report for Material Disposal Area C Monitoring Group	10/20/2022
4	Monthly Notification of Groundwater Data Reviewed in October 2022	10/28/2022
5	Response to the Draft Comments on the Investigation Report for Lower Water/Indio Canyon Aggregate Area	11/8/2022
6	Monthly Notification of Groundwater Data Reviewed in November 2022 1-Day Notification of Exceedances	11/14/2022
7	Environmental Remediation Chromium Monitoring Well 14" Carbon Steel Drive Casing Separation Report	11/18/2022
8	Fiscal Year 2022 Deliverable Accomplishments	11/21/2022
9	Monthly Notification of Groundwater Data Reviewed in November 2022	11/23/2022
10	2022 Annual Progress Report for the Corrective Measures Evaluation for Royal Demolition Explosive in Deep Groundwater	11/23/2022
11	2022 Annual Periodic Monitoring Report for the Base-Flow Sampling: Los Alamos Canyon, Sandia Canyon, Water Canyon, White Rock Canyon, and Pajarito Canyon Watersheds	11/29/2022
12	2022 Annual Periodic Monitoring Report for the General Surveillance Monitoring Group: Los Alamos and Pueblo Canyon, Mortandad and Sandia Canyon, Water Canyon/Cañon de Valle, Ancho Canyon, White Rock Canyon, and Pajarito Canyon Watersheds	11/29/2022
13	Quarterly Status Report for Westbay Well R-25 Plugging and Abandonment Activities, August 18, 2022–November 8, 2022	11/29/2022
14	Second Response to New Mexico Environment Department Draft Comments on the Middle Los Alamos Canyon Phase II Investigation Report, Revision 2	11/29/2022
15	2022 Triennial Ordnance Survey Report, Solid Waste Management Units 00-011(a, d, and e), Guaje/Barrancas/Rendija Canyons Aggregate Area	11/30/2022

**Enclosure 2**  
**Fiscal Year 2023 Other Deliverables to the New Mexico Environment Department and Submittal Dates**

Item Number	Title	Submittal Date
16	Second Response to Draft Comments on the Addendum to the Phase II Investigation Report for Middle Los Alamos Canyon Aggregate Area, Revision 1	12/6/2022
17	Biennial Inspection and Maintenance Report on Erosion Controls in Drainages to the 90s Line Pond at Technical Area 16	12/13/2022
18	Biennial Inspection and Maintenance Report on Erosion Controls Associated with Solid Waste Management Unit 16-003(o) within Fishladder Canyon	12/15/2022
19	Monthly Notification of Groundwater Data Reviewed in December 2022 1-Day Exceedance	12/16/2022
20	Demolition Notification For Quarter Ending March 30, 2023, and List of Buildings and Attachment of Hazardous Materials Descriptions, Hazardous Waste Facility Permit, Los Alamos National Laboratory	12/22/2022
21	Monthly Notification of Groundwater Data Reviewed in December 2022	12/23/2022
22	2022 Annual Transmittal of Estimated Completion Date for All Work Under the 2016 Compliance Order on Consent	12/28/2022
23	Monthly Notification of Groundwater Data Reviewed in January 2023	1/25/2023
24	Investigation Report for Solid Waste Management Unit 16-017(j)-99 in Upper Water Canyon Aggregate Area	2/16/2023
25	Transmittal of the Fiscal Year 2023 Appendix B, Revision 1, to the 2016 Compliance Order on Consent	2/21/2023
26	Monthly Notification of Groundwater Data Reviewed in February 2023	2/24/2023
27	2023 Annual Periodic Monitoring Report for the Technical Area 21 Monitoring Group, Los Alamos Canyon Watershed	2/27/2023
28	Quarterly Status Report for Westbay Well R-25 Plugging and Abandonment Activities November 9, 2022 – February 7, 2023	2/28/2023
29	Change in Status of Material Disposal Area C, Solid Waste Management Unit 50-009, at Technical Area 50	3/7/2023
30	Response to Draft Comments on the Investigation Report for South Ancho Canyon Aggregate Area	3/9/2023
31	Monthly Notification of Groundwater Data Reviewed in March 2023	3/21/2023

**Enclosure 2**  
**Fiscal Year 2023 Other Deliverables to the New Mexico Environment Department and Submittal Dates**

Item Number	Title	Submittal Date
32	Response to New Mexico Environment Department Comments on the 2022 Annual Periodic Monitoring Report for the TA-16 260 Monitoring Group, Pajarito Canyon and Water Canyon/Cañon de Valle Watersheds, Dated February 2, 2023	3/23/2023
33	Response to New Mexico Environment Department Comments on the 2022 Annual Periodic Monitoring Report for the TA-21 Monitoring Group, Los Alamos Canyon Watershed, Dated February 2023	3/23/2023
34	Response to New Mexico Environment Department Comments on the Review 2022 Annual Periodic Monitoring Report for Baseflow Sampling: Los Alamos Canyon, Sandia Canyon, Water Canyon, White Rock Canyon, and Pajarito Canyon Watershed, Los Alamos National Laboratory, EPA ID# NM0890010515, LANL-22-089, Dated February 7, 2023	3/27/2023
35	Request for Certificate of Completion for Area of Concern 00-027 in the Middle Los Alamos Canyon Aggregate Area	3/27/2023
36	2022 Sandia Wetland Performance Report	3/28/2023
37	Request for Certificate of Completion (without Controls) for Solid Waste Management Unit 00-030(g) in the Pueblo Canyon Aggregate Area	3/30/2023
38	Request for Certificate of Completion for One Solid Waste Management Unit (SWMU 31-001) and Three Areas of Concern [ AOCs 00-030(eS), 00-030(f), and 00-030(h)] in the Pueblo Canyon Aggregate Area	4/5/2023
39	Request for Certificate of Completion for Solid Waste Management Unit 00-019 in the Pueblo Canyon Aggregate Area	4/6/2023
40	Monthly Notification of Groundwater Data Reviewed in April 2023 Notification of 1-Day Exceedance	4/14/2023
41	Response to New Mexico Environment Department Comments on the 2022 Annual Periodic Monitoring Report for the General Surveillance Monitoring Group: Los Alamos and Pueblo Canyon, Mortandad and Sandia Canyon, Water Canyon/Cañon de Valle, Ancho Canyon, White Rock Canyon and Pajarito Canyon Watersheds, Dated March 15, 2023	4/17/2023
42	2022 Monitoring Report and 2023 Monitoring Plan for Los Alamos/Pueblo Watershed Sediment Transport Mitigation Project	4/17/2023
43	Phase II Investigation Report for Middle Los Alamos Canyon Aggregate Area, Revision 3	4/20/2023

**Enclosure 2**  
**Fiscal Year 2023 Other Deliverables to the New Mexico Environment Department and Submittal Dates**

Item Number	Title	Submittal Date
44	Addendum to the Phase II Investigation Report for Middle Los Alamos Canyon Aggregate Area, Revision 2	4/20/2023
45	Monthly Notification of Groundwater Data Reviewed in April 2023	4/27/2023
46	Plugging and Abandonment Report for Well R-25	4/27/2023
47	Investigation Report for Lower Water/Indio Canyons Aggregate Area, Revision 1	5/12/2023
48	Periodic Monitoring Report for 2022 Vapor-Sampling Activities at Material Disposal Area C, Solid Waste Management Unit 50-009, at Technical Area 50	5/16/2023
49	Monthly Notification of Groundwater Data Reviewed in May 2023	5/25/2023
50	2023 Annual Periodic Monitoring Report for the Chromium Investigation Monitoring Group, Mortandad Canyon and Sandia Canyon Watersheds	5/31/2023
51	Drilling Work Plan for Groundwater Regional Aquifer Monitoring Well R-76 (Replacement of Groundwater Regional Aquifer Monitoring Well R-28), Revision 2	5/31/2023
52	2023 Annual Periodic Monitoring Report for Material Disposal Area C Monitoring Group, Mortandad Canyon Watershed	5/31/2023
53	Submittal of the 2022 Annual Periodic Monitoring Report for the Chromium Investigation Monitoring Group, Revision 1, and the Response to the New Mexico Environment Department Review of the 2022 Annual Periodic Monitoring Report for the Chromium Investigation Monitoring Group	6/23/2023
54	Request to Reduce Frequency of Monitoring for the Los Alamos County Airport Landfill Cover System, Solid Waste Management Units 73-001(a,d) in Technical Area 73	6/27/2023
55	Investigation Report for South Ancho Canyon Aggregate Area, Revision 1	6/29/2023
56	Monthly Notification of Groundwater Data Reviewed in June 2023	6/30/2023
57	Response to the New Mexico Environment Department Review of the Annual Progress Report on Chromium Plume Control Interim Measure Performance, July 2021 to March 2022 (June 2022), Los Alamos National Laboratory, EPA ID#NM890010515, HWB-LANL-22-045, Dated May 31, 2023	7/14/2023
58	Request for Certificates of Completion (without Controls) for One Solid Waste Management Unit and Thirteen Areas of Concern in the Cañon de Valle Aggregate Area	7/24/2023

**Enclosure 2**  
**Fiscal Year 2023 Other Deliverables to the New Mexico Environment Department and Submittal Dates**

Item Number	Title	Submittal Date
59	2022–2023 Annual Long-Term Monitoring Status Report (July 2022 through June 2023) Los Alamos County Airport Landfill Cover System Replacement, Solid Waste Management Units 73-001(a,d) in Technical Area 73	7/28/2023
60	Transmittal of Proposed Consent Order Appendix B for Fiscal Year 2024	7/28/2023
61	Monthly Notification of Groundwater Data Reviewed in July 2023	7/28/2023
62	EM-LA Response to the Notice of Disapproval, Chromium Interim Measures and Characterization Work Plan	7/31/2023
63	Response to New Mexico Environment Department Comments on the 2022 Annual Long-Term Monitoring and Maintenance Report for the Corrective Measures Implementation at Former 260 Outfall Area	8/17/2023
64	Response to the New Mexico Environment Department Draft Comments for Phase II Investigation Report for Chaquehui Canyon Aggregate Area (August 2021), HWB-LANL-21-047, Dated February 16, 2022	8/17/2023
65	Response to NMED Draft Comments for Investigation Report for Solid Waste Management Unit 16-017(j)-99 in Upper Water Canyon Aggregate Area (February 2023), HWB-LANL-23-005, Dated June 28, 2023	8/21/2023
66	Notification to the New Mexico Environment Department Hazardous Waste Bureau of Erroneous R-35a Data in IntellusNM Database	8/23/2023
67	Monthly Notification of Groundwater Data Reviewed in August 2023	8/24/2023
68	Response to the New Mexico Environment Department Draft Comments for Addendum to the Investigation Report for Chaquehui Canyon Aggregate Area for Material Disposal Area K, at Technical Area 33 (October 2021), HWB-LANL-20-070, Dated February 8, 2022	8/31/2023
69	2023 Annual Periodic Monitoring Report for the TA-16 260 Monitoring Group, Pajarito Canyon and Water Canyon/Cañon de Valle Watersheds	8/31/2023
70	2023 Annual Periodic Monitoring Report for the Technical Area 54 Monitoring Group, Pajarito Canyon and Mortandad Canyon Watersheds	8/31/2023
71	2023 Annual PMR for the Material Disposal Area AB Monitoring Group, Ancho Canyon and Water Canyon Watersheds	8/31/2023
72	Data Summary Report for Sediment Sampling at Solid Waste Management Unit 16-008(a) Technical Area 16	8/31/2023



**Enclosure 2**  
**Fiscal Year 2023 Other Deliverables to the New Mexico Environment Department and Submittal Dates**

Item Number	Title	Submittal Date
73	Plugging and Abandonment Summary Report for Alluvial Wells and Groundwater Observation Wells in North Ancho Canyon for Fiscal Year 2023	9/12/2023
74	Phase III Investigation Work Plan for Chaquehui Canyon Aggregate Area	9/14/2023
75	1-Day Notification of Exceedance Groundwater Data Reviewed in September 2023	9/14/2023
76	2023 Annual Long-Term Monitoring and Maintenance Report for the Corrective Measures Implementation at Former 260 Outfall Area	9/29/2023
77	Monthly Notification of Groundwater Data Reviewed in September 2023	9/29/2023