



**Associate Directorate for Environmental Management**

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Permit



ENTERED

**Environmental Management**

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Date: DEC 04 2017

Refer To: ADEM-17-0317

LAUR: 17-30847

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

**Subject: Fiscal Year 2017 Deliverables Accomplishments and Fiscal Year 2018 Deliverables List**

Dear Mr. Kieling:

Los Alamos National Security, LLC (LANS) and the U.S. Department of Energy (DOE) Environmental Management (EM) summarize herein the completion of milestones for fiscal year (FY) 2017 required under the 2016 Compliance Order on Consent (Consent Order) as well as other notable deliverables. Also included is a list of deliverables due to the New Mexico Environment Department (NMED) in FY2018.

Attachment 1 lists FY2017 Milestones in Appendix B of the Consent Order, including their due, submittal, and approval dates. All Appendix B Milestones were submitted on or before their due dates. All submitted FY2017 Milestones have been approved by NMED with the exception of four Supplemental Investigation Reports. Reviews of these documents by NMED were delayed by an identified need to conduct a study investigating the background concentrations of chromium in soils, the results of which will impact the review. This chromium background study was conducted in FY2017, with subsequent review and approval by NMED on October 12, 2017.

Note that on February 20, 2017, NMED granted an extension request for Milestone Number 15, the Final Corrective Measures Evaluation (CME) report for RDX, to allow Los Alamos National Laboratory to install a new regional aquifer well, R-68, north of Cañon de Valle. Drilling this well, along with acquiring data from ongoing studies, would provide additional characterization to evaluate the feasibility of remedial alternatives for the final CME report. In this year's Annual Planning Process, this deliverable was reintroduced as a target for March 30, 2020.

**SCANNED**



In addition to Appendix B Milestones, LANS/DOE delivered several other deliverables required by NMED. Attachment 2 contains a list of these deliverables and their submittal dates to NMED.

On November 14, 2017, DOE/LANS submitted to NMED the list of Appendix B Milestones for FY2018 and Targets for FY2019 and FY2020. Attachment 3 lists additional FY2018 individual and recurring deliverables required under the Consent Order. These deliverables are in addition to the Appendix B FY2018 Milestones.

If you have any questions, please contact Bruce Robinson at (505) 667-1910 (robinson@lanl.gov) or David Rhodes at (505) 665-5325 (david.rhodes@em.doe.gov).

Sincerely,



Bruce Robinson, Program Director  
Environmental Remediation Program  
Los Alamos National Laboratory

Sincerely,



David S. Rhodes, Director  
Office of Quality and Regulatory Compliance  
Environmental Management  
Los Alamos Field Office

BR/DR:sm

- (1) Attachment 1 FY2017 Milestones in Appendix B of the Consent Order
- (2) Attachment 2 FY2017 Other Deliverables to NMED and Submittal Dates
- (3) Attachment 3 Additional FY2018 Individual and Recurring Deliverables under the Consent Order

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**Attachment 1: FY2017 Milestones in Appendix B of the Consent Order**

Title	Due Date	Submittal Date	NMED-Approval Date
<b>(Milestone 1)</b> Supplemental Investigation Report TA-49 Aggregate Area - Inside NES	10/31/2016	8/9/2016	
<b>(Milestone 2)</b> Supplemental Investigation Report TA-49 Aggregate Area - Outside NES	10/31/2016	8/9/2016	
<b>(Milestone 3)</b> Supplemental Investigation Report Canon de Valle Aggregate Area TA-14	12/31/2016	12/13/2016	
<b>(Milestone 4)</b> RDX Tracer Deployment Test Complete: Status Report for the Tracer Test at CU 16-021(c)-99, TA-16	2/14/2017	2/13/2017	3/15/2017
<b>(Milestone 5)</b> Chromium Injection Well (4) Completion Reports for FY2016: Well Completion Report for Chromium Plume Control Interim Measure and Plume-Center Characterization Injection Wells CrIN-1, CrIN-2, CrIN-3, CrIN-4, and CrIN-5	3/31/2017	3/28/2017	5/12/2017
<b>(Milestone 6)</b> CdV-9-1(i) Aquifer Test Complete and Report Submitted to NMED-HWB: Summary Report for Intermediate Groundwater System Characterization Activities at Consolidated Unit 16-012(c)-99	4/7/2017	4/7/2017	6/12/2017
<b>(Milestone 7)</b> Annual Monitoring Report for the Completed FY and Plan for the upcoming FY for Los Alamos/Pueblo Watershed Sediment Transport Mitigation Project: 2017 Monitoring PLAN for Los Alamos/Pueblo Watershed Sediment Transport Mitigation Project AND 2016 Monitoring REPORT for Los Alamos/Pueblo Watershed Sediment Transport Mitigation Project	4/30/2017	4/27/2017	7/11/2017
<b>(Milestone 8)</b> Supplemental Investigation Report for North Ancho Aggregate Area	4/30/2017	4/27/2017	5/24/2017
<b>(Milestone 9)</b> Sandia Wetland Performance Report, Performance Period April 2016 - December 2016 (2017)	4/30/2017	4/27/2017	9/11/2017
<b>(Milestone 10)</b> Chromium Extraction Well Evaluation Report and Recommendations on CrEX-2	5/1/2017	4/25/2017	7/17/2017
<b>(Milestone 11)</b> Annual Update to the Interim Facility-Wide Groundwater Monitoring Plan (IFGMP) for MY2018 (October 2017-September 2018): 2018 Interim Facility-Wide Groundwater Monitoring Plan, October 2017-September 2018	5/30/2017	5/25/2017	11/9/2017
<b>(Milestone 12)</b> Status Report for the Cleanup of Townsite SWMUs and AOCs (Historical Activities): 2016 Fieldwork Completion Status Report for SWMU 01-001(g), 01-006(b), 01-007(a), 01-007(b), AOC 01-003(b) Upper Los Alamos Canyon Aggregate Area	6/30/2017	6/27/2017	9/11/2017
<b>(Milestone 13)</b> Initial Operation of Chromium Interim Measures for Plume Control	9/30/2017	4/7/2017	10/2/2017
<b>(Milestone 14)</b> Middle Los Alamos Canyon Aggregate Area Cleanups Field Completion: Fiscal Year 2017 Fieldwork Completion Status Report for Middle Los Alamos Canyon Aggregate Area	9/30/2017	9/28/2017	10/12/2017
<b>(Milestone 16)</b> Supplemental Investigation Report for Lower Sandia Cyn Aggregate Area	9/30/2017	7/21/2017	



**Attachment 2: FY2017 Other Deliverables to NMED and Submittal Dates**

Item Number	Title	Due Date	Submittal Date
1	Los Alamos County Airport Landfill Cover Replacement Remedy Completion Report	10/30/2016	10/19/2016
2	Groundwater Background Investigation Report, Revision 5	10/28/2016	10/27/2016
3	Inspection and Maintenance of Erosion Controls in Drainages to the 90s Line Pond at TA-16 [2016]	11/30/2016	11/16/2016
4	SWMU Assessment Rpt Los Alamos Cyn Borrow Pit, Rev 1	11/21/2016	11/21/2016
5	Annual Progress Report CMS/CME Implementation for CU 16-021(c)-99 the 260 Outfall	11/30/2016	11/28/2016
6	Annual PMR for the General Surveillance Monitoring Group aka PMR General Surveillance Monitoring Group (includes results for LA/Pueblo watersheds-Qtrs 1, 3, MY2016 & Mortandad/Sandia watersheds-Qtrs 1, 2, 3 MY2016)	11/30/2016	11/28/2016
7	2016 Triennial Ordnance Survey Report (SWMUs 00-011(a, d, and e) Guaje/Barrancas/Rendija Canyons Agg Area	12/16/2016	12/13/2016
8	Inspection and Maintenance of Erosion Controls Associated with Solid Waste Management Unit 16-003(o) within Fishladder Canyon [2016]	12/21/2016	12/13/2016
9	Drilling Work Plan for Chromium Plume Control Interim Measure and Plume-Center Characterization Injection Well CrIN-6	12/16/2016	12/13/2016
10	Investigation Report for the Former Los Alamos Inn Property Sites within the Upper Los Alamos Canyon Agg Area	1/31/2017	1/30/2017
11	Field Summary Report for Alluvial Piezometers in Sandia Canyon	1/30/2017	1/30/2017
12	Drilling Wk Plan for Groundwater Extraction Well CrEX-2	2/24/2017	2/13/2017
13	Annual Periodic Monitoring Report for TA-21, Qtrs 2, 4 MY2016	2/28/2017	2/16/2017
14	Additional Sampling at TA-33-0375 Septic Tank and Leachfield	3/8/2017	3/8/2017
15	Long-Term Monitoring Inspection Plan for Los Alamos County Airport Landfill Cover	3/30/2017	3/23/2017
16	Fact Sheets for R-68	4/7/2017	3/29/2017
17	Solid Waste Management Unit Assessment Report for Los Alamos Canyon Borrow Pit	4/7/2017	4/7/2017

**Attachment 2: FY2017 Other Deliverables to NMED and Submittal Dates**

Item Number	Title	Due Date	Submittal Date
18	Request for Approval of the Sediment Management Decision Tree Guidance	4/30/2017	4/25/2017
19	2016 Annual Long-Term Monitoring Status Report for Los Alamos County Airport Landfill Replacement, TA-73	5/31/2017	5/10/2017
20	Annual Periodic Monitoring Report for Chromium Investigation-Qtrs 3, 4 MY2016 Qtr 1 MY2017	5/31/2017	5/15/2017
21	Annual Periodic Monitoring Report for MDA C, Qtr 3 MY2016 Qtr 1 MY2017	5/31/2017	5/15/2017
22	Annual Periodic Monitoring Report for the Technical Area 54 Monitoring Group	5/31/2017	5/15/2017
23	Chromium Background Study Work Plan	5/31/2017	5/22/2017
24	Response NOD and Rev 1, IR for Former LA Inn Property Sites with Upper LA Cyn	5/26/2017	5/25/2017
25	Fact Sheets for CrEX-2	6/1/2017	6/1/2017
26	Request for Certificates of Completion without Controls for Nine Solid Waste Management Units and One Area of Concern in the Upper Los Alamos Canyon Aggregate Area	6/30/2017	6/15/2017
27	Req Cert Comp w/o Ctrlrs SWMU 01-001(s3) Upper LA Cyn Agg	6/30/2017	6/22/2017
28	Supplemental Historical Investigation Report and Supplemental Investigation Work Plan for Technical Area 57 Agg Area-[Fenton Hill]	7/31/2017	6/30/2017
29	Pilot-Scale Amendments Testing Work Plan for Chromium in Groundwater beneath Mortandad Canyon	7/14/2017	7/11/2017
30	Completion Report for Regional Aquifer Well R-68	7/27/2017	7/27/2017
31	Fact Sheets for CrIN-6	8/1/2017	7/27/2017
32	Annual Periodic Monitoring Report for the Technical Area 16 260 Monitoring Group	8/31/2017	8/29/2017
33	Annual Periodic Monitoring Report for the Material Disposal Area AB Monitoring Group	8/31/2017	8/29/2017
34	Technical Approach for Calculating Recreational Soil Screening Levels for Chemicals, Revision 5	9/29/2017	8/29/2017



**Attachment 2: FY2017 Other Deliverables to NMED and Submittal Dates**

Item Number	Title	Due Date	Submittal Date
35	Completion Report for Groundwater Extraction Well CrEX-2	9/29/2017	9/5/2017
36	Drilling Work Plan for Groundwater Extraction Well CrEX-4	9/29/2017	9/5/2017
37	Remedy Comp Rpt Surface CMI CU 16-021(c)-99 once all surface CMI closure activities completed	9/15/2017	9/8/2017
38	Summary Report for R-68 and Drilling Work Plan for R-69, Revision 1	9/29/2017	9/28/2017
39	Completion Report for Injection Well CrIN-6	9/29/2017	9/28/2017
40	Screening Level Ecological Risk Assessment Methods, Revision 5	9/29/2017	9/29/2017
41	Chromium Background Study Report	9/29/2017	9/29/2017
42	Monthly Notification of Groundwater Data	each month	each month

**Attachment 3: Additional FY2018 Individual and Recurring Deliverables under the Consent Order**

Requirement	Title	Due Date
	ECORISK Database, Release 4.1	10/30/2017 (submitted 10/19/2017)
	Response to Supplemental Information for the 2018 Interim Facility-Wide Groundwater Monitoring Plan, October 2017-September 2018	10/30/2017 (submitted 10/24/2017)
Continued deliverable	Monthly Notification of Groundwater Data Reviewed in November 2017	11/22/2017
Continued deliverable	Annual Progress Report Corrective Measures Implementation and Deep Groundwater Investigations for CU 16-021(c)-99	11/30/2017
Continued deliverable	Annual PMR for the General Surveillance Monitoring Group	11/30/2017
Req'd Final 2016 CO, eff. 6/24/2016	2017 Biennial Asphalt Monitoring and Removal Report AOC C-00-041, Guaje/Barrancas/Rendija Canyons Agg Area	12/15/2017
Req'd Final 2016 CO, eff. 6/24/2016	Accelerated Corrective Action Report for North Ancho Canyon Aggregate Area	12/15/2017
Continued deliverable	Performance Monitoring Plan for the Interim Measure for Chromium Plume Control	12/15/2017
Continued deliverable	MDA L SVE IM Final Report	12/22/2017
Continued deliverable	Monthly Notification of Groundwater Data Reviewed in December 2017	12/25/2017
Continued deliverable	Monthly Notification of Groundwater Data Reviewed in January 2018	1/25/2018
	Long-Term Monitoring Report for the Airport Landfill	2/14/2018
Continued deliverable	Monthly Notification of Groundwater Data Reviewed in February 2018	2/23/2018
	DP Site Aggregate Area Building 21-257, Footprint Letter Work Plan, Revision 1	2/28/2018
	Annual PMR for the TA-21 Monitoring Group	2/28/2018
Continued deliverable	Monthly Notification of Groundwater Data Reviewed in March 2018	3/23/2018
Continued deliverable	Monthly Notification of Groundwater Data Reviewed in April 2018	4/25/2018

**Attachment 3: Additional FY2018 Individual and Recurring Deliverables under the Consent Order**

Requirement	Title	Due Date
Continued deliverable	Monthly Notification of Groundwater Data Reviewed in May 2018	5/25/2018
	Annual PMR for the Chromium Investigation Monitoring Group	5/31/2018
	Annual PMR for the MDA C Monitoring Group	5/31/2018
	Annual PMR for the TA-54 Monitoring Group	5/31/2018
Continued deliverable	Monthly Notification of Groundwater Data Reviewed in June 2018	6/25/2018
Continued deliverable	Monthly Notification of Groundwater Data Reviewed in July 2018	7/25/2018
Continued deliverable	Monthly Notification of Groundwater Data Reviewed in August 2018	8/24/2018
	Annual PMR for the TA-16 260 Monitoring Group	8/31/2018
	Annual PMR for the MDA AB Monitoring Group	8/31/2018
Continued deliverable	Monthly Notification of Groundwater Data Reviewed in September 2018	9/25/2018