



# U.S. DEPARTMENT OF ENERGY

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Date: JAN 11 2019

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

**Subject: Response to First Independent External Triennial Review Corrective Actions**

Dear Mr. Kieling:

In accordance with the January 22, 2016, Settlement Agreement and Stipulated Final Order, the U.S. Department of Energy (DOE) funded an independent, external triennial review of environmental regulatory compliance and operations to identify any regulatory deficiencies at Los Alamos National Laboratory (LANL). The first triennial review was conducted by Enterprise Construction Management Services, who identified a number of operational deficiencies and potential environmental regulatory violations in the final review report titled "Supplemental Environmental Project: Independent External Triennial Review," dated September 14, 2018. Pursuant to the January 22, 2016, Settlement Agreement and Stipulated Final Order, DOE is required to correct deficiencies within 60 calendar days of finalization of the triennial review report. On November 13, 2018, DOE sent the New Mexico Environment Department (NMED) a "Request for Extension of Time to Supplemental Environmental Project (SEP) Independent External Triennial Review Corrective Actions," requesting additional time to correct specific deficiencies. NMED approved DOE's extension request in the "Extension Request Supplemental Environmental Project Independent External Triennial Review Corrective Actions Los Alamos National Laboratory EPA ID #NM0890010515," dated November 16, 2018.

Table 1 presents the remaining deficiencies and potential violations identified for groundwater in the executive summary (Table ES-1, Pre-decisional Observations) of the "Supplemental Environmental Project: Independent External Triennial Review" final report. The table also includes DOE's response to the identified deficiencies and potential violations.



Table 1  
Supplemental Environmental Project Independent External Triennial Pre-Decisional Observations

No.	Reference	Observation Type	Short Description	Response
16	Hazardous Waste Facility Permit (HWFP) Section 11.10.2.7.i: Ground Water Levels	I – Operational Deficiency (not following LANL procedure)	The permit requires that all water levels be collected when monitoring activities begin. However, the 2018 Interim Facility-Wide Groundwater Monitoring Plan (IFGMP), Section 1.8, indicates that groundwater levels will be measured within a 21-day sampling event rather than the 14-day timeframe specified in the HWFP.	Per the Compliance Order on Consent (Consent Order), Section I.B.5c (Groundwater Sampling), all monitoring wells within a watershed or area-specific monitoring group should be sampled within 21 days of the start of the groundwater sampling event. The HWFP states a 14-day timeframe. The Permittees will submit to NMED a proposal to modify the HWFP either in the upcoming application or through a permit modification request to match the Consent Order and IFGMP requirement of a 21-day timeframe.
17	HWFP Sections 11.10.2.8.ii and 11.10.2.13	I – Operational Deficiency	On-site interviews and a review of waste management standard operating procedures (SOPs) in the IFGMP indicate that purged groundwater is not transferred to temporary satellite accumulation areas, transfer stations, or 90-day storage areas.	The HWFP requires that “all purged groundwater and decontamination water shall be temporarily stored at satellite accumulation areas, transfer stations, or less-than-90-day storage areas in labeled 55-gallon drums or other containers approved by the Department until proper characterization and disposal can be arranged.” Newport News Nuclear BWXT–Los Alamos (N3B) currently manages purged groundwater near the wellhead until the water can be characterized to determine the proper disposition path. The Permittees will submit to NMED a proposal to modify the HWFP either in the upcoming application or through a permit modification request to reflect the DOE/N3B management strategy for purged groundwater and decontamination water.
18	HWFP Section 11.10.2.8.iv: Ground Water and Surface Water Sample Types	II – Potential Environmental Regulatory Violation	A Permit requirement specifies that field blanks will be obtained at a frequency of no less than one per day per site or unit. The 2018 IFGMP, Appendix D, indicates that field blanks are collected at a minimum frequency of 10% of all samples collected in a sampling campaign. Neither the HWFP nor the IFGMP stipulations were met.	The Permittees will submit to NMED a proposal to modify the HWFP either in the upcoming application or through a permit modification request to reflect the requirements in the Consent Order and IFGMP. N3B management strategy is to require that at least 1 field blank be taken for every 10 samples collected.
19	HWFP Section 11.12.4.12 (3): Periodic Monitoring Report Figures	II – Potential Environmental Regulatory Violation	None of the periodic monitoring reports or IFGMP reports reviewed include a figure that denotes groundwater flow direction, either related to a specific monitoring group or facility-wide.	In accordance with the Consent Order and the HWFP, groundwater surface maps with groundwater flow directions will be included in all future periodic monitoring reports and IFGMP reports.

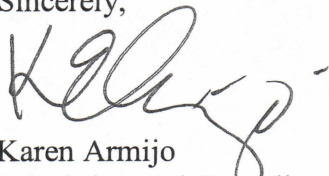


No.	Reference	Observation Type	Short Description	Response
20	HWFP Section 11.12.4.12 (4): Periodic Monitoring Report Figures	II – Potential Environmental Regulatory Violation	The 2016 and 2017 “Annual Periodic Monitoring Report for the General Surveillance Monitoring Group” showed groundwater and surface water analytical results exceeding applicable screen values that are not represented on maps.	Contaminant maps showing analytical results in excess of any of the screening criteria established in the IFGMP will be provided in all future periodic monitoring reports as required by Section IV(n)(4) of the Consent Order.
21	HWFP section 11.12.4.13.i: Field Methods and Section 11.12.4.13.ii: Analytical Program	I – Operational Deficiency (not following LANL procedure)	Periodic monitoring reports did not include a field methods appendix for the field measurement and sampling procedures. Periodic monitoring report appendices did not have specific narratives for the analytical methods, data quality objectives, or data quality review procedures.	Periodic monitoring reports will include all appendices required by the HFWP in Sections 11.12.4.13.i and 11.12.4.13.ii.

DOE is requesting a written response from NMED on concurrence of DOE’s response to the observations provided in the “Supplemental Environmental Project: Independent External Triennial Review” final report.

If you have any questions, please contact Karen Armijo at (505) 665-7314 (karen.armijo@nnsa.doe.gov) or David Rhodes at (505) 665-5325 (david.rhodes@em.doe.gov).

Sincerely,



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Sincerely,



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