

DEPARTMENT OF ENERGY

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

EMLA-26-BF028-2-1 November 21, 2025

Justin Ball, Chief Ground Water Quality Bureau New Mexico Environment Department 1190 S. St. Francis Drive Santa Fe, NM 87502-5469

Subject: U.S. Department of Energy Environmental Management Los Alamos Field Office

> Response to the New Mexico Environment Department Ground Water Quality Bureau, Notification of Withdrawal of the Temporary Authorization for Partial Operation of

Discharge Permit 1835 (Chromium)

Reference(s): 1. Letter New Mexico Environment Department Ground Water Quality Bureau, J. Ball to J. Kunkle and B. Harcek, "Withdrawal of the Temporary Authorization for Partial Operation of Discharge Permit 1835 (DP-1835)," dated November 18, 2025

> 2. Batu, V., F. Day-Lewis, I. Demirkanli, J.F. Devlin, S. Ellinger, J.A. Hakala, B.B. Looney, C.J. Newell, S. Panday, M.J. Rigali, D.B. Stephens, M. Tonkin, I. Triay, H. Wainwright, and D. Wilson, "Independent Review of the Chromium Interim Measures Remediation System in Mortandad Canyon in Los Alamos, New Mexico," EMID-703545, dated December 2024

Dear Mr. Ball:

The U.S. Department of Energy (DOE) is in receipt of the New Mexico Environment Department's (NMED's) letter, "Withdrawal of the Temporary Authorization for Partial Operation of Discharge Permit 1835 (DP-1835)," received November 18, 2025 (Reference 1). DOE ceased operation of the hexavalent chromium Interim Measure (IM) on November 18, 2025. Given the design of the IM and limitation of alternative water discharge options, ceasing injection under the IM necessarily drives cessation of IM operations.

DOE disagrees with NMED's direction to cease injection and many of the assertions and conclusions contained within your letter. DOE has long sought to maintain a collaborative relationship with NMED¹. In the spirit of that relationship, DOE offers the following:

1. SIMR-3 Design Approval, Completion, and Data Gathering. DOE is moving forward with Pueblo de San Ildefonso on the approval, completion, and operation of SIMR-3. While the initial data from SIMR-3 was unexpected, it reaffirms the importance of our mutual agreement to complete SIMR-3. This will allow for important data to be gathered and used in continued development of the conceptual site model and operation of the IM.

¹ See, e.g., https://www.env.nm.gov/hazardous-waste/chromium-groundwater-contamination/

2. Restart the IM and Optimize Operations.

Injection operations are integral to IM operations under the hexavalent chromium campaign pursuant to the 2016 Compliance Order on Consent, as revised in 2024 (Consent Order). Groundwater monitoring data gathered during operation of the IM, and since the restart of the IM in 2024, clearly demonstrate operation of the IM reduces chromium in groundwater at IM performance monitoring locations. The Expert Review Team recognized this impact in their final report². This acknowledgement contributed to the Expert Review Team's unanimous recommendation to restart the IM with the following statement (Reference 2, p. ES-2):

The rate of chromium plume expansion with the IM turned off could be on the order of hundreds of feet per year in some places. Therefore, increasing areas and regions of the aquifer appear to be impacted following the cessation of the IM pumping, bringing a sense of urgency to renewing the IM abatement procedures. For this reason, the single most important recommendation ... is to restart the IM—using a portion of the original system—while other studies and field investigations move forward.

Restarting the IM will avoid increasing chromium concentrations at performance monitoring and injection well locations near the Los Alamos National Laboratory (LANL)/Pueblo de San Ildefonso boundary, which was observed following the shutdown of the IM in March 2023 to September 2024.

This matter is a technical dispute within the "Dispute Resolution" provision of Section 25 of the Consent Order. DOE disputes NMED's direction to cease all injection operations. Pursuant to Section 25 of the Consent Order:

1. Description of the Disputed Issue: NMED's decision to cease injection operations of the IM will increase chromium concentrations at performance monitoring and injection well locations near the LANL/Pueblo de San Ildefonso boundary and prevent effective execution of the Hexavalent Chromium Campaign under Appendix C of the Consent Order. As stated in Appendix C, Section C.3.2.A (Hexavalent Chromium Campaign – In Progress) of the Consent Order:

> This Campaign involves a hexavalent chromium groundwater plume. It consists of: (1) installing and operating wells and associated equipment to provide Interim Measures to prevent migration of the hexavalent chromium plume beyond the Laboratory boundary....

2. Basis and Significance of the Dispute: These effects will impact remediation efforts.

² See, "Independent Review of the Chromium Interim Measures Remediation System in Mortandad Canyon in Los Alamos, New Mexico," dated December 2024 (Reference 2)

3. Proposed Resolution:

- a) Restart the IM as soon as possible.
- b) Collaboratively explore and evaluate IM operations after restart with the aim of informed and adaptive operations, consistent with the "Purpose and Scope of the Consent Order" in Section 2 of the Consent Order.
- c) Complete installation of SIMR-3 and collection of groundwater data while operating the IM to further enhance our understanding of the regional groundwater aquifer.
- d) Building upon our shared commitment to adaptive site management, establish a framework to define procedural steps to ensure technical exchange and mutual agreement prior to subsequent modification or cessation of IM operations.

DOE looks forward to working collaboratively with NMED to resolve this matter.

If you have questions, please contact Christian Maupin at (505) 695-4281 (christian.maupin@emla.doe.gov) or me at (202) 739-1389 (jessica.kunkle@em.doe.gov).

Sincerely,

JESSICA Digitally signed by JESSICA KUNKLE Date: 2025.11.21 09:49:39 -07'00'

Jessica Kunkle, Manager

U.S. Department of Energy

Environmental Management

Los Alamos Field Office

cc (letter and enclosure[s] emailed):

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Raymond Martinez, San Ildefonso Pueblo, NM

Christopher Moquino, San Ildefonso Pueblo, NM

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