



April 1, 2026

VIA EMAIL

Brian G. Harcek, Designated Agency Manager
Department of Energy
Environmental Management - Los Alamos Field Office
1200 Trinity Drive
Los Alamos, NM 87544
brian.harcek@em.doe.gov

**Re: Response to March 18, 2026, Unsupported Invocation of Consent Order
Technical Dispute Provisions**

Dear Brian G. Harcek,

This letter is sent in response to the March 18, 2026, letter, subject line: Initiation of Consent Order Technical Dispute Resolution, sent by the U.S. Department of Energy, which includes its Emergency Management (“EM”) and EM-Los Alamos Offices (collectively, “DOE”), with Attachments 1 and 2 (“March 18, 2026 DOE letter”),¹ addressed to Hazardous Waste Bureau Chief JohnDavid Nance. In the March 18, 2026, DOE letter to Hazardous Waste Bureau Chief Nance, DOE challenges the November 18, 2025 letter that Ground Water Quality Bureau (“GWQB”) Chief Justin Ball issued, directing DOE to cease Discharge Permit 1835 injection operations (“November 18, 2025 GWQB letter”).²

After reviewing the March 18, 2026, DOE letter, NMED finds DOE’s invocation to be unsupported by the language of the Compliance Order on Consent, as modified in September

¹ The March 18, 2026 letter is linked here:

<https://www.energy.gov/sites/default/files/2026-03/EMLA-26-156-2-1%20Initiation%20of%20Consent%20Order%20Technical%20Dispute%20Resolution%20FINAL.pdf>. The attachments to the letter are linked here:

<https://www.energy.gov/sites/default/files/2026-03/Attachments%201%20and%202%20-%20Additional%20Details%20Supporting%20EM-LA's%20Position%20FINAL.pdf>.

² The November 18, 2025 GWQB letter is linked here: <https://www.env.nm.gov/hazardous-waste/wp-content/uploads/sites/10/2026/02/Attachment-54-November-18-2025.pdf>.

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2024 (“Consent Order”).³ DOE cannot invoke the Consent Order Technical Dispute provisions to dispute the directive in the November 18, 2025, GWQB letter.

A. The Consent Order Does Not Apply to Matters Arising Under the Water Quality Act or Administered by the Ground Water Quality Bureau; The Consent Order Applies Only to Matters Administered by the Hazardous Waste Bureau

In the March 18, 2026, DOE letter, DOE seeks to invoke the Consent Order and its dispute resolution procedures to challenge the directive in the November 18, 2025 letter that Ground Water Quality Bureau Chief Justin Ball issued under the authority of the Water Quality Act, Sections 74-6-1 through 74-6-17 NMSA 1978. The Consent Order does not apply to the Ground Water Quality Bureau.

The Consent Order explicitly states that it was issued under Section 74-4-10 NMSA 1978 of the Hazardous Waste Act (Sections 74-4-1 through 74-4-14 NMSA 1978). See Consent Order, Section 1 (“Jurisdiction”), Paragraph A. The Consent Order also specifies that it was issued under Section 74-9-36(D) NMSA 1978, of the Solid Waste Act (Sections 74-9-1 through 74-9-43 NMSA 1978) and solid waste regulation 20.9.9.14 in the New Mexico Administrative Code (“NMAC”). See Consent Order, Section 1, Paragraph A. In contrast, the Water Quality Act is not cited as a governing authority in the Consent Order. If the Parties had intended for the Ground Water Quality Bureau to be bound by the Consent Order, then the parties would have spelled out in the Consent Order that it was being issued under the authority of the Water Quality Act.

“The Parties to [the] Consent Order are NMED and DOE, as defined in Section III.CC (Definitions).” See Consent Order, Section 5. The execution of the Consent Order by the Secretary does not render it applicable to all NMED bureaus and programs. In the March 18, 2026 DOE letter, DOE broadly claimed that the Consent Order applies to all bureaus in the New Mexico Environment Department (“NMED”), with this leap: “the Secretary of [NMED] executed the Consent Order for NMED (emphasis in bold and italics omitted); “[i]t was not executed by (or for) a particular bureau within NMED ...; and, “[a]s a result, NMED bureaus are subject to the Consent Order.” See March 18, 2026, DOE letter, Attachment 1, Paragraph 1.

³ The Consent Order is linked here: https://www.env.nm.gov/hazardous-waste/wp-content/uploads/sites/10/2024/10/Compliance-Order-on-Consent-Modified-September-2024_Fully-Executed.pdf.

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The Department of Environment Act gives the Secretary “every power expressly enumerated in the laws, whether granted to the secretary, the department or any division of the department, except where authority conferred upon any division is explicitly exempt from the secretary’s authority by statute. Section 9-7A-6(B) NMSA 1978. Section 9-7A-6(B)(3) NMSA 1978 expressly states the Secretary is given the authority to “organize the department into organizational units he deems will enable it to function most efficiently, subject to any provisions of law requiring or establishing specific organizational units.” As a result, the Secretary is authorized by law to execute agreements which apply to individual divisions or bureaus.

Imagining that the Consent Order applies to all of NMED, including all of the statutory schemes and bureaus not named in the Consent Order, including the Water Quality Act and the Ground Water Quality Bureau, invites the corollary that the Consent Order applies to all of DOE, including all of its statutory schemes and organizational units, ignoring the fact that they were unnamed in the Consent Order.⁴ NMED disagrees with DOE’s inferences and asserts that the Consent Order does not govern the regulatory actions of every bureau in NMED and every statutory scheme under which NMED operates, any more than the Consent Order governs the regulatory actions of every organizational unit of DOE and every statutory scheme under which DOE operates in the State.

The Consent Order concerns itself solely with the disposition of hazardous waste. The Consent Order identifies two guiding documents for corrective actions for hazardous waste and hazardous waste constituents, as required by RCRA and the Hazardous Waste Act: The Consent Order and the Hazardous Waste Facility Permit. See Consent Order, Section 7, Paragraph A.

Hazardous Waste is regulated by the Hazardous Waste Bureau under the authority of the Hazardous Waste Act and the implementing regulations adopted by the Environmental Improvement Board. The reach and authority of the Environmental Improvement Board is separate and distinct from the reach and authority of the Water Quality Control Commission, which adopts regulations that implement the Water Quality Act.

⁴ Excepting the regulations explicitly excluded in the Consent Order, i.e., “radionuclides, including but not limited to, source, special nuclear, or byproduct material as defined in the AEA, or the radioactive portion of mixed waste.” Consent Order, Section I, Paragraph C, page 4.

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B. The Inclusion of References to New Mexico’s Water Quality Regulations Does Not Subject the Actions of the Ground Water Quality Bureau to the Consent Order; DOE Submitted to the Separate Authority of the Ground Water Quality Bureau under the Water Quality Act

The Consent Order applies to matters “under RCRA” and the Hazardous Waste Act. See Consent Order, Section 1, Paragraph B. DOE claims that the Consent Order’s incorporation of specific and limited provisions of New Mexico’s Water Quality regulations at Title 20, Chapter 6, Part 2 NMAC causes the Ground Water Quality Bureau to be governed by the Consent Order. See March 18, 2026, DOE letter, Attachment 1, Paragraph 2. This is incorrect. DOE’s claim ignores the “under RCRA” (and Hazardous Waste Act) context of all directives in the Consent Order.⁵ The Consent Order is replete with references to the Hazardous Waste Act, the Hazardous Waste Bureau, the Hazardous Waste Regulations, and RCRA.⁶ The Consent Order does not name the Water Quality Act or the Ground Water Quality Bureau.⁷

In the context of regulating hazardous waste, DOE had latitude in choosing which path it took to remediate the contamination for which it was responsible. In this case, DOE chose a pump-and-treat system comprised of underground extraction and injection wells. To move forward with its chosen path, DOE submitted an application for a discharge permit to be issued by the Ground Water Quality Bureau under the authority of the Water Quality Act⁸ The Ground Water Quality Bureau issued Discharge Permit 1835 to regulate DOE’s ongoing re-injection of

⁵ See Consent Order, Section 9, Paragraph G (clarifying that the WQCC regulations cited in the Consent Order are to be used for the purpose of establishing applicable standards RCRA correction action activities).

⁶ For example, Section 1, Paragraph C, of the Consent Order discusses mixed waste and states that the Consent Order applies to hazardous waste; Appendix A lists all legacy hazardous waste sites that require or have completed remediation under the Consent Order and are also listed on the Hazardous Waste Permit, Attachment K; the Hazardous Waste Bureau and DOE meet every year to schedule work for the next 3-5 years and to host a public meeting, and no other NMED bureau has ever participated in these meetings; the Consent Order refers to Designated Agency Managers, which for NMED is the Hazardous Waste Bureau Chief (see Consent Order, Section XXIV); stipulated penalties are to be sent to the Hazardous Waste Bureau Chief, and no other bureau is mentioned; and the Enforceability Section XXXVI also only mentions RCRA and the Hazardous Waste Act.

⁷ As searched using the Ctrl+F function.

⁸ DOE is conducting hazardous waste remediation under Hazardous Waste Act jurisdiction executed through the Consent Order’s interim measures provisions. Such remediation includes the abatement of water pollution originating from legacy waste operations. The water pollution cleanup subjects DOE to the requirements in the Water Quality Act. In the February, 2023 DOE “Initial Five-Year Evaluation of the Interim Measures for Chromium Plume Control with an Assessment of Potential Modifications to Operations,” Section 2.1.1, page 3, DOE stated, “[h]ence, the injection of treated water was established as a critical component of the IM. However, the injection of clean [sic] water requires a discharge permit from GWQB for Class V underground injection control wells.” See <https://ext.em-la.doe.gov/GovFTPFiles/api/GetFiles/GetFile?fileName=EMID-702597.pdf>.

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treated water into the aquifer via injection wells and to ensure that discharges authorized by Discharge Permit 1835 are consistent with laws, regulations, and permit terms and conditions.

The distinction must be made here that the Hazardous Waste Bureau regulates DOE's chosen remediation method to remove hazardous waste from the environment, which in this case is extraction via extraction wells and treatment of hexavalent chromium-contaminated water. Having chosen to inject the treated water into the aquifer via injection wells, DOE applied for and consented to the authority of the Ground Water Quality Bureau operating under the Water Quality Act, which is a regulatory scheme separate from the Hazardous Waste Act and is not subject to the Consent Order.

C. DOE Failed to Contain the Boundaries and Concentration Levels of the Hexavalent Chromium Contamination

In disputing the direction to cease injections causing the spread of the hexavalent chromium plume at contaminant concentration levels in excess of regulatory standards, DOE omits these facts:

1. The monitoring well data collected since the installation of the pump-and-treat system shows that DOE did not know the hexavalent chromium plume boundaries at the time it applied to the Ground Water Quality Bureau for a discharge permit. DOE still does not know the hexavalent chromium plume depth.⁹
2. During the application for Discharge Permit 1835, DOE proposed injections as part of a pump-and-treat system to meet regulatory standards for hexavalent chromium contaminant concentrations and containment.¹⁰ The Ground Water Quality Bureau's approval of DOE's application was conditioned upon DOE's performance of discharge permit conditions, such as meeting regulatory requirements for hexavalent chromium contaminant concentration levels and containment.

⁹ See September, 2022 DOE Hexavalent "Chromium Interim Measures and Characterization Work Plan" (<https://ext.em-la.doe.gov/GovFTPFiles/api/GetFiles/GetFile?fileName=EMID-702352.pdf>) Section 4.2.1 (pg. 15 of the document); see also, December 17, 2025 Environmental Management Forum Presentation by N3B at <https://www.youtube.com/watch?v=DhFVP6bBFzE> (1:48:37 - 1:49:06).

¹⁰ See the May, 2015 "Interim Measures Work Plan for Chromium Plume Control" that DOE submitted to support to its application to the Ground Water Quality Bureau for Discharge Permit 1835, linked here: <https://srorgreen.lanl.gov/object/tr?what=info:lanl-repo/epr/ESHID-600458>.

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3. Groundwater sampling data trends have not aligned with DOE's modeling predictions and hexavalent chromium plume boundary expectations, including DOE's unfulfilled expectations for a hydraulic barrier to contain the plume; and hexavalent chromium concentration trends in certain monitoring wells have increased over time.¹¹ In DOE's February, 2023 "Initial Five-Year Evaluation of the Interim Measures for Chromium Plume Control with an Assessment of Potential Modifications to Operations,"¹² DOE states:
 - a. "The evidence at the time the [interim measures, "IM"] system was designed suggested that the chromium plume was located predominantly in the upper 50 ft of the aquifer, and the IM injection and extraction wells were designed accordingly. Assessment of the system response after more than 5 years of sustained operations and the installation of additional monitoring wells indicates that while the conceptual site model (CSM) for chromium at shallow depths has been confirmed for the southern plume area, chromium plume concentrations in the eastern plume area have shown an opposite trend, with relatively high chromium concentrations at depths greater than 50 ft below the water table. This shift in the CSM plays an important role in conclusions and recommendations." Executive Summary, page iii.
 - b. "In contrast, data from new wells R-70 and CrEX-5, along with recent trends at R-45, have led to a new plume depiction in the eastern plume area, with a deep component of the plume extending further east than was originally thought. Other new wells and measurements to the west (wells CrEX-2 and CrEX-4) have led to a more complete picture of the presence or absence of deep contamination—deeper contamination likely extends from the centroid of the plume to at least as far east as R-70 but does not appear to be present in the southern plume area, as evidenced by the low concentrations in the deep screens of R-50 and R-44. Residual uncertainties on the nature and extent of chromium remain and can be closed either by the drilling of additional monitoring wells or with extraction wells to greater depths as part of a final remedy." Section 3.4, page 7.
 - c. "Two assumptions were not realized in specific regions of the plume. In the northeastern region of the plume, initial CrIN-6 chromium concentrations of 250–

¹¹ See December 12, 2022 GWQB letter December 12, 2022 GWQB letter, linked here: <https://www.env.nm.gov/hazardous-waste/wp-content/uploads/sites/10/2026/02/Attachment-43-December-1...>, and November 14, 2025 GWQB letter, linked here: <https://www.env.nm.gov/hazardous-waste/wp-content/uploads/sites/10/2026/02/Attachment-54-November-18-2025.pdf>.

¹² The February, 2023 DOE "Initial Five-Year Evaluation of the Interim Measures for Chromium Plume Control with an Assessment of Potential Modifications to Operations" is linked here: <https://ext.em-la.doe.gov/GovFTPFiles/api/GetFiles/GetFile?fileName=EMID-702597.pdf>.

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300 ppb indicated that the plume extended further east. In response to this finding, CrIN-6 and associated surface infrastructure was converted to a fifth extraction well, CrEX-5 ... Section 4.2, page 9.

- d. "Because of the lack of deeper monitoring points in the centroid of the plume, the depth of groundwater capture is unknown. Also unknown is whether chromium mass escapes the capture zones of the extraction wells and flood zones of the injection wells." Section 5.2, page 16.
 - e. "Some chromium mass was likely present to the south of CrIN-4 and CrIN-5 before IM operation began, and it has probably transported away from the zone of influence to the south towards SIMR-2. Chromium mass near CrIN-5 and to the north and west is also likely to be driven away from CrIN-5 and toward CrEX-2, which may explain, in part, the rise in concentration at R-61 screen 1 during the IM. Regarding the chromium mass south of the injection wells, there is uncertainty in concentrations because of the unknown amount of attenuation due to injection relative to the amount of mass captured by extraction wells. Given the sparse well network, the 50-ppb contour drawn is notional and could be an overestimate or underestimate of the actual concentrations at that location." Section 5.5.2, page 27.
4. The Ground Water Quality Bureau initially directed DOE to cease injections in 2023 due to increased hexavalent chromium concentration levels in excess of regulatory standards and in violation of Discharge Permit 1835.¹³
 5. DOE has consistently rejected and resisted regulatory direction to modify the pump-and-treat system to contain the hexavalent chromium plume and to prevent contaminant concentration exceedances.¹⁴ For example, DOE balked at the Ground Water Quality Bureau's requirement of an alternative disposal location for injection of treated water at least 1,200 feet from the outer boundary of the plume and demanded evidentiary justification.¹⁵

¹³ See December 12, 2022 GWQB letter December 12, 2022 GWQB letter, linked here:

<https://www.env.nm.gov/hazardous-waste/wp-content/uploads/sites/10/2026/02/Attachment-43-December-1...>

¹⁴ See November 14, 2025 GWQB letter, linked here: <https://www.env.nm.gov/hazardous-waste/wp-content/uploads/sites/10/2026/02/Attachment-54-November-18-2025.pdf>.

¹⁵ See the top bullet point on Page 2 in the April 10, 2024 DOE letter linked here:

<https://www.env.nm.gov/hazardous-waste/wp-content/uploads/sites/10/2026/02/Attachment-47-%E2%80%93...>

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6. The Independent Review Team Report (“IRT Report”)¹⁶ issued in December 2024 had noted the inadequacy of DOE’s modeling and recommended that data be used to inform pump-and-treat system operations.¹⁷
7. The Ground Water Quality Bureau issued a second directive to cease injections in November, 2025¹⁸ after screening level groundwater sampling data from October 2025 proved that:
 - a. the hexavalent chromium plume had migrated laterally from LANL land to Pueblo de San Ildefonso land.
 - b. the hexavalent chromium plume had migrated into the Pueblo’s aquifer; and
 - c. the hexavalent chromium contaminant levels in the Pueblo’s aquifer exceeded regulatory standards.

Without immediate adaptations to the existing pump-and-treat system, which will take concerted efforts to fund and implement data-based adaptations to the pump-and-treat system,¹⁹ resumption of the existing system without data-based adaptations could result in additional spread of the hexavalent chromium plume and contaminant concentration exceedances.

D. Conclusion

DOE is not entitled to use the Consent Order to dispute the Ground Water Quality Bureau’s directive to cease injections. The Ground Water Quality Bureau is not subject to the

¹⁶ The IRT Report is linked here: https://www.env.nm.gov/hazardous-waste/wp-content/uploads/sites/10/2025/01/Independent-Review-of-the-Chromium-Interim-Measures-Remediation-System-in-Mortandad-Canyon-Los-Alamos-NM_12.30.2024.pdf.

¹⁷ See IRT Report, 3.2.6 paragraph 5, page 53 (“The response to Question 5 is that simulations conducted using FEHM are currently accompanied by uncertainty and limitations in several areas, primarily resulting from questionable representation of aquifer parameters, partial knowledge of contaminant extents, and uncertainty regarding the degree and amount of vertical contaminant migration, among other factors. For this reason, while the FEHM model is currently the most capable tool available for comparative analysis of alternate configurations of injection and extraction for operation of the [interim measures] (i.e., flow and particle tracking simulations only), its use should be accompanied by simpler calculation methods and tools to provide assurance to NMED and others that the results are both plausible and reliable.”).

¹⁸ See November 14, 2025 GWQB letter, linked here: <https://www.env.nm.gov/hazardous-waste/wp-content/uploads/sites/10/2026/02/Attachment-54-November-18-2025.pdf>.

¹⁹ DOE has not invested the level of effort and funding required to contain the hexavalent chromium plume as it has invested in increasing plutonium pit production.

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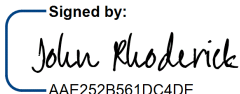
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Consent Order or its technical dispute resolutions. In any event, DOE's arguments to the contrary are legal arguments and not technical disputes.

Nonetheless, Ground Water Quality Bureau Chief Justin Ball may be reached at justin.ball@env.nm.gov or (505)231-3773 if you wish to schedule a discussion of data-informed actions DOE may take to remediate the hexavalent chromium contaminant trends that it caused. In addition, the resumption of regularly scheduled hexavalent chromium plume remediation workshops, which DOE canceled indefinitely on February 13, 2026, would provide more opportunities for collaborative discussions.

Sincerely,

Signed by:

AAE252B561DC4DE...

John Rhoderick

Deputy Secretary

New Mexico Environment Department

cc: Justin.ball@env.nm.gov
Jd.nance@env.nm.gov
Lisa.chail@env.nm.gov
Zachary.ogaz@env.nm.gov
Governor@sanipueblo.org
Rmartinez@sanipueblo.org
John.H.Evans@em.doe.gov
Robert.Reine@em.doe.gov