



VIA EMAIL

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RE: Response to DOE April 10, 2024, Letter Response to New Mexico Environment Department Letter of February 6, 2024, Regarding Resumption of injection associated with the Interim Measures Associated with the Chromium Plume

Dear Elizabeth Gilbertson and Arturo Duran:

This letter responds to the Department of Energy (DOE) Office of Environmental Management, Los Alamos Field Office (EM-LA) correspondence from April 10, 2024, regarding the New Mexico Environment Department's (NMED) second proposal towards a path forward allowing for the resumption of the Chromium Plume Control Interim Measures (IM).

DOE continues to request approval to resume partial operation of the IM and continues to disregard regulatory direction to propose an expansion of the IM pump-and-treat system through the addition of an injection location outside the extent of contamination.

NMED, including both the Groundwater Quality Bureau (GWQB) and Hazardous Waste Bureau (HWB), appreciates EM-LA's commitment to incorporate the results of the expert review after completion. However, NMED maintains that immediate action is necessary.

EM-LA stated that the conditions presented in our previous correspondence regarding the proposed timeline for installation of the alternative injection location and the minimum distance requirements were arbitrary and lacking scientific basis. NMED asserts that EM-LA has not attempted communication aimed at clarification and understanding of our position or towards action focused solutions. EM-LA was presumptuous in their analysis of the proposed conditions and must reevaluate a strategy for constructive communication with regulators. However, NMED is providing a succinct explanation of the proposed conditions to demonstrate our collaboration.

NMED first clarifies that approval of locations for the injection wells in the interim measures work plan, which were proposed utilizing modeling, was completed before the installation and subsequent sampling that informed the extent of contamination. To ensure the alternative injection location is installed outside the boundary of contamination, NMED applied a conservative approach to require a minimum distance of 1,200 feet from the current known plume boundary. NMED notes that the approximate distances from the current furthest extent of contamination in the eastern region of the plume with nearby regional aquifer monitoring wells demonstrate feasibility for compliance with the proposed condition. Furthermore, NMED selected this distance to ensure that the condition wouldn't prevent the opportunity for consideration of the conversion of regional aquifer monitoring well R-13 to an alternative injection location, based on the distance between the contamination at R-45 being approximately 1,279 feet away.

The NMED recommendation for locating and installing an alternate disposal well within two years is based on the EM-LA proposed annual planning as required by the CO. In the Fiscal Year 2024 Appendix B to the 2016 Compliance Order on Consent¹, EM-LA proposed the completion of regional aquifer monitoring well R-80 as a target and included targets for two monitoring wells in undetermined locations with proposed completions in September 2025 and April 2026. EM-LA has committed to fulfill the installation of SIMR-3 to both the Pueblo de San Ildefonso and NMED, though that is not reflected on the finalized Appendix B. By selecting the two-year implementation timeline NMED ensured that the proposed annual planning allowed for flexibility to utilize either proposed wells in undetermined locations, R-81 and R-82, or a reprioritization of activities to accommodate the regulatory requirement. Furthermore, NMED clarifies that the approval to continue injection operations during the two-year period was not intended to curtail operations after that time period but was a proposed timeline that allowed adequate time for the completion of the required corrective actions and the conclusion of the Independent Technical Review. Once the Independent Technical Review concludes and provides its recommendations, NMED is amenable to revisiting proposed alternative injection locations.

Although NMED continues to necessitate EM-LA compliance with regulatory direction, the potential risks to groundwater safety of the sole source aquifer and the contamination risk to the Pueblo de San Ildefonso resulting from the lack of action outweighs the deadlock we have reached. Therefore, NMED is authorizing operation of injection wells CrIN-3, CrIN-4, and CrIN-5 in order facilitate the restart of extraction and treatment of contaminated groundwater immediately. NMED requires continued monitoring of chromium concentrations at all regional aquifer monitoring wells in the plume area. If chromium concentration data in monitoring wells along the periphery of the current known plume extent, both upgradient and downgradient of injection operations, indicate concerning trends, NMED will reevaluate this

¹ DOE, 2024. Transmittal of Updated Fiscal Year 2024 Appendix B to the 2016 Compliance Order on Consent, March 25, 2024. https://ext.em-la.doe.gov/GovFTPFiles/api/GetFiles/GetFile?fileName=EMID-703138_EMLA-24-BF195-2-1_FY2024_Consent_Order_App%20B_032524.pdf

authorization. Furthermore, operation of the injection wells causing any violation of the conditions in the underground injection control discharge permit (DP-1835) may be subject to civil penalties pursuant to New Mexico Water Quality Act 74-6-10(C) and 74-6-10.1. NMED is also requiring that the groundwater quality analysis for regional aquifer monitoring wells R-61 and R-70, located near the plume extent, be included with requirements of Condition 14 in the DP-1835 permit during this authorization. NMED will use analytical data to consider adjustments or an expansion of the authorization and will continue to pursue compliance with the requirement to modify the IM.

Please note that nothing in this letter shall be construed as relieving the Permittees of the obligation to comply with all requirements of DP-1835 and all other applicable state and federal laws, regulations, permits, and orders.

If you have any questions, please contact Justin Ball, GWQB Chief, at (505) 231-3773 or JD Nance, HWB Chief, at (505) 629-6764.

Sincerely,

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Water Protection Division

Rick Shean, Director
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