



April 17, 2023

Arturo Duran
Designated Agency Manager
Department of Energy-EM
1200 Trinity Drive, Suite 400
Los Alamos, New Mexico 87544

**RE: REQUEST FOR SUPPLEMENTAL INFORMATION
EVALUATION OF GEOCHEMICAL AND HYDROLOGIC CONDITIONS IN MONITORING WELL R-42
LOS ALAMOS NATIONAL LABORATORY
EPA ID#NM0890010515
HWB-LANL-21-038**

Dear Arturo Duran,

The New Mexico Environment Department (NMED) has received the United States Department of Energy (DOE) *Evaluation of Geochemical and Hydrologic Conditions in Monitoring Well R-42* (Report) dated and received on June 2, 2022 and referenced as EM2022-0297.

NMED and DOE met on December 13, 2022 to discuss the data submitted in the Report for geochemical criteria. NMED agrees that monitoring well R-42 has responded to pre-amendment conditions with respect to the geochemical criteria. However, NMED did not receive the necessary information to review hydrologic conditions. Please respond within 180 days (October 10, 2023) with information for the following criteria:

- Repeat of the aquifer performance test conducted on June 17th, 2013, at well R-42, for a minimum of 24 hr. at a constant extraction rate of 9 gal. per minute (gpm), for comparison with the previous test results, including both hydraulic and water quality responses.
 - NMED understands that the water level at well R-42 has declined and an aquifer performance test at 9 gpm for 24 hr is no longer feasible. NMED will allow an aquifer performance test at a lower extraction rate that will stay constant for 24 hours. DOE is required to create a workplan for this test to be reviewed and approved by NMED prior to the test using the guidance: *Aquifer Performance Test Procedures for Hazardous Waste Facilities in New Mexico (November 2022)* available at <https://www.env.nm.gov/hazardous-waste/guidance-documents/>.
- Spinner log, heat-pulse flowmeter, or similar logging to verify that flow has been restored along the entire screen length below the static water level. Verify flow logging technology with NMED in the aquifer test workplan.

If you have any questions regarding this letter, please contact Michael Petersen (505) 690-5107.

Sincerely,

Rick Shean

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Shean
Date: 2023.04.17
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Rick Shean
Director
Resource Protection Division

cc: N. Dhawan, NMED HWB
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File: 2023 LANL, Evaluation of Geochemical and Hydrologic Conditions in Monitoring Well R-42
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