

MICHELLE LUJAN GRISHAM GOVERNOR EMID-703768 Rec'd 3/31/25

JAMES C. KENNEY CABINET SECRETARY

MAIL CERTIFIED-RETURN RECEIPT

March 31, 2025

Brian Harcek Designated Agency Manager U.S. Department of Energy Environmental Management Los Alamos Field Office 1200 Trinity Drive, Suite 400 Los Alamos, NM 87544

RE: REVIEW

2024 ANNUAL PERIODIC MONITORING REPORT FOR BASE-FLOW SAMPLING: LOS ALAMOS CANYON, SANDIA CANYON, WATER CANYON, WHITE ROCK CANYON, AND PAJARITO CANYON WATERSHEDS LOS ALAMOS NATIONAL LABORATORY EPA ID#NM0890010515 HWB-LANL-25-008

Dear Brian Harcek:

The New Mexico Environment Department (NMED) has received the United States Department of Energy's (DOE) 2024 Annual Periodic Monitoring Report for Base-Flow Sampling: Los Alamos Canyon, Sandia Canyon, Water Canyon, White Rock Canyon, and Pajarito Canyon Watersheds (Report), as referenced by EM2024-0769, on December 6, 2024.

Summary

NMED notes that in monitoring year (MY) 2023 quarter 4 and in the first three quarters of MY 2024, DOE was only able to collect a total of 10 samples out of the 20 baseflow samples attempted due to sites being dry or having insufficient water to sample (see Table 2.0-1 in the Report). NMED notes that thus far in MY2023 quarter 4 and MY2024 DOE has not been able to collect either semi-annual sample for Los Alamos Canyon and has only been able to collect two (2) of the planned samples for Water Canyon and to date, no plans to improve the sample collection frequency have been proposed by DOE in the interim facility wide ground water monitoring plan.

The DOE reported a total of seven analytical results in this Report that were detected at or exceeded applicable surface water screening values, four of which were for unfiltered aluminum (ranging from 962 to 4,092.96 μ g/L) and three of which were for unfiltered iron (ranging from 1,010 to 4,300 μ g/L). Aluminum exceedances were detected at the Pajarito below S&N Ancho East Basin Confluence location

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Hazardous Waste Bureau - 2905 Rodeo Park Drive Bldg. 1, Santa Fe, New Mexico 87505 - (505) 476-6000 www.env.nm.gov Brian Harcek March 31, 2025 Page 2 of 3

and the Rio Grande at Otowi Bridge location. Iron exceedances were detected at the Rio Grande at Otowi Bridge sampling location and the Rio Grande at Frijoles location.

NMED reviewed the revised Report and has the following comments:

 Section 5.2.1, Surface Water (Base-Flow) Screening Value Exceedances, page 9. DOE Statement: "The previous range of unfiltered aluminum from September 2010 to June 2023 is 165 ug/L to 9440 ug/L. Unfiltered aluminum is continues to decrease in concentration after reaching its 3-yr year peak in March of 2022."

NMED Comment: Since this site is only scheduled for sampling once per year, it is unclear how the DOE determines a decreasing trend with an insufficient sample size to perform a statistical analysis. For example, when there is a peak detection in 2022, the DOE should also consider if this is driven by precipitation and runoff cofactors. Since aluminum is a naturally occurring metal found in volcanic tuff, elevated levels may be due to significant run-off events and the DOE should evaluate if the sample results have corresponding elevated levels of suspended sediments that may be skewing these results. Future submissions of the Report must either remove references to these trends or must provide additional statistical information to support the trend observations.

Should you have any questions regarding this correspondence, please contact Kylian Robinson at (505) 231-5423.

Sincerely,

JohnDavid Nance Date: 2025.03.31 14:44:58 -06'00'

JohnDavid Nance Designated Agency Manager Chief, Hazardous Waste Bureau New Mexico Environment Department

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File: LANL 2025, Review, Annual Periodic Monitoring Report for Base-Flow Sampling: Los Alamos Canyon, Sandia Canyon, Water Canyon, White Rock Canyon, and Pajarito Canyon Watersheds LANL-25-008