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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

July 11, 2019

Doug Hintze, Manager
Environmental Management
U.S. Department of Energy
Los Alamos Field Office
P.O. Box 1663 MS M984
Los Alamos, NM 87545

RE: APPROVAL
2018 MONITORING REPORT FOR LOS ALAMOS/PUEBLO WATERSHED SEDIMENT TRANSPORT MITIGATION PROJECT
LOS ALAMOS NATIONAL LABORATORY
EPA ID #NM0890010515
HWB-LANL-19-016

Dear Mr. Hintze:

The New Mexico Environment Department (NMED) has received the United States Department of Energy (DOE) *2018 Monitoring Report for Los Alamos/Pueblo Watershed Sediment Transport Mitigation Project* (2018 Monitoring Report), dated and received April 29, 2019, and referenced by EM2019-0106. This document satisfies milestone #3 of Appendix B, Milestones and Targets, of the 2016 Consent Order, for fiscal year 2019.

In accordance with the 2016 Compliance Order on Consent, NMED and DOE had a pre-submittal meeting on February 6, 2019, to discuss preliminary results from the 2018 Monitoring year.

NMED has completed its review and hereby approves the 2018 Monitoring Report, with the following comments:

Comments:

1. **Section 2.1, page 3**
   DOE Statement: "[T]he log check damns installed in 2017 caused the channel bed to fluctuate significantly through 2017. In March 2018, the gage station at E055.5 was relocated to a more stable location."

   NMED Comment: It is unclear from the description how far the sampler was moved from its original location. In the forthcoming 2019 Monitoring Report, if a gage station is relocated, its relocation should be described, the distance moved (*e.g.,* 5 feet), general direction within the stream (*e.g., upstream*), and/or include figures indicating relocation.

2. **Section 4.1, page 12**
   DOE Statement: "Until December 2018, the national acute aquatic life criteria was 750 µg/L and the chronic aquatic life criteria was 87 µg/L. In December 2018, EPA updated its recommended criteria for aluminum in freshwater to reflect aluminum's bioavailability to living organisms like fish and invertebrate species. The bioavailability and associated toxicity of aluminum are calculated using a multiple linear regression model using pH, dissolved organic carbon, and total hardness."

   NMED Comment: Please include in the 2019 Monitoring Report a reference for the linear regression model used to calculate the bioavailability of aluminum. NMED notes that some of aluminum exceedances reported in Table 4.1-1, are now above the new acute and chronic aquatic life values.

3. **Section 5.0, page 15**
   DOE Statement: "In 2018, there was no runoff event larger than 5 cfs at either E050.1 or E060.1, and neither of the stations collected a sample, therefore it was not possible to analyze total metals or to analyze TAL metals in the samples-sediment fraction on a dry-weight basis.

   NMED Comments: In NMED's Response to 2015 Monitoring Report, NMED agreed that the DOE could discontinue analyzing for total suspended solid (TSS) and use the results from suspended sediment concentration (SSC) analysis to calculate the TSS, provided that the DOE continue to verify the expected results with TSS analysis at two gaging stations. As stated in DOE's 2016 Monitoring Plan (dated April 28, 2016) "collect storm water in two 1-L bottles from each storm event at E050.1 and E060.1." The DOE has attempted to verify these results in 2016, 2017, and 2018 but was unsuccessful due to low discharge volumes at E050.1 and E060.1. NMED recommends that the DOE utilize different locations to demonstrate that the relationship between TSS and SSC continues to be valid.

4. **Figure 3.2-4, page 43**
   NMED Comment: It is unclear from this figure if the SSC values reported from 2016 to 2018 are measured or calculated values. Please include a footnote to clarify in the forthcoming 2019 Report.

5. **Attachment B, Photo B-4.7-3, page B-27**
   NMED Comment: NMED concurs that the DOE should continue to monitor broken gabion wires.

The next annual monitoring report must be submitted to NMED no later than **April 30, 2020.** Should you have any questions or comments, please contact Siona Briley at (505) 476-6049.

Sincerely,

John E. Kieling
Chief
Hazardous Waste Bureau

cc:

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