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CERTIFIED MAIL – RETURN RECEIPT REQUESTED

July 15, 2016

David S. Rhodes, Director
Office of Quality and Regulator Compliance
Environmental Management
Los Alamos Field Office
3747 West Jemez Rd, MS A316
Los Alamos, NM 87544

John. P. McCann, Acting Division Leader
Environmental Protection and Compliance
Los Alamos National Laboratory
P.O. Box 1663, MS M991
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RE: APPROVAL
2015 MONITORING REPORT FOR LOS ALAMOS/PUEBLO WATERSHED SEDIMENT TRANSPORT MITIGATION PROJECT
LOS ALAMOS NATIONAL LABORATORY
EPA ID#NM0890010515
HWB-LANL-16-021

Dear Messrs. Rhodes and McCann:

The New Mexico Environment Department (NMED) has received the United States Department of Energy (DOE) and the Los Alamos National Security, L.L.C.'s (LANS) (collectively, the Permittees) *2015 Monitoring Report for Los Alamos/Pueblo Watershed Sediment Transportation Mitigation Project* (Report) dated and received April 28, 2016, and referenced by LA-UR-16-22705/EP2016-0036. NMED has reviewed this Report and issues this Approval with the following comments:

General Comment:

NMED previously requested that the Permittees provide a summary table reporting constituents that exceed the New Mexico Water Quality Control Commission (NMWQCC) Surface Water Standards titled 'Constituents Exceeding NMWQCC Surface Water Standards, which would facilitate the review of Section 5.0 (Conclusions). The

Permittees did not provide the requested summary table in this Report. Similar to the tables provided in Periodic Monitoring Reports (*See* Periodic Monitoring Report for TA-16-260, Table 3.4-2), the Permittees must include a separate table of exceedances with gage station number, sample date, analyte concentrations compared with their respective screening level value, method detection limit (MDL) practical quantitation limit (PQL), and Los Alamos National Laboratory (LANL) background values for sediments in future revisions of this Report.

Specific Comments:

1. Section 2.3, Sampling at the Gaging Stations in the LA/P Watershed, page 4:
The Permittees state that "in 2015, the threshold discharge at a station was reached 81 times, and sampling was conducted 47 of these times, resulting in an overall sampling efficiency of ~58%". Table 2.3-2 provides details of sampling operational issues encountered during the 2015 field season. NMED notes that 12 out of the 28 sampling event issues listed were due to personnel availability (~43%), six of which occurred during the work week. For instance, Gaging Station E039.1 was triggered Friday July 31, 2015 between 13:14 and 14:44, but a sample was not collected that day. When a storm subsequently occurred on August 1, 2015 the sampler was already full and failed to collect water from that storm event. NMED also notes that samples were not collected at Gaging Station E055.5 during this sampling season due to operator error "because the trigger height was set too high due to an out of date rating curve". The Permittees must correct or mitigate these factors in the future to improve the overall sampling efficiency in this watershed.

2. Section 3.1, Drainage Areas and Impervious Surfaces, page 6:
The Permittees state that "[t]he Las Conchas fire affected this relationship because of soil hydrophobicity (infiltration decreases), lack of vegetation (through fall increases and evapotranspiration decreases), and lack of litter (infiltration decreases) following medium-to high-intensity forest fire leading to an increase in run off as occurred after the Cerro Grande fire (Geller and Koch 2004)". Currently the relationship between fire affected areas and impervious surfaces is qualitatively measured using frequency of discharge at gage stations and field inspections. NMED suggests that the Permittees consider using Light Detection and Ranging (LiDAR) to create map layers (including historic burn layers) utilizing Normalized Difference Vegetation Index (NDVI) software to quantify and visually display the relationship between impervious surfaces and burn areas or areas of reduced vegetative cover. LiDAR NDVI layers could also be used to graphically display areas where the wetland restoration has been effective.

3. Section 4.3, Relationships between Discharge and SSC, page 13:
The Permittees state that the "[t]his comparison shows the information obtained from analysis of unfiltered metals and radionuclides in storm water is available from analysis of canyon sediments. As a result of this redundancy, further analysis of unfiltered metals and radionuclides in storm water will be discontinued where applicable segment-specific New Mexico water quality standards for surface water do not exist."

NMED has reviewed the data presented in this Report and the proposed sampling described in the *2016 Monitoring Plan for Los Alamos/Pueblo Watershed Sediment Transport Mitigation Project* (Plan) dated April 28, 2016 and referenced by LA-UR-16-22543/ADESH-16-058. NMED concurs with the Permittees' justification to discontinue this analysis. The Permittees may discontinue this type of analysis provided they continue to verify their expected results in accordance with the approved Plan to "collect storm water in two 1-L bottles from each storm event at E050.1 and E060.1".

Should you have any questions or comments, please contact Siona Briley at (505)-476-6049.

Sincerely,

John E. Kieling
Chief
Hazardous Waste Bureau

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File: Reading and LANL 2016, Los Alamos/Pueblo Watershed
2015 Monitoring Report